Motor vehicle accidents are the leading cause of employee deaths and injuries in the workplace and have been for the past several years. Not long ago, motor vehicle fatalities were not even one of the top five causes of fatalities in the workplace.

Traditional workplace activities such as slips and falls, fires and explosions and contact with objects and equipment were always among the leaders in this area. Workplace violence began to appear on the list in the past decade as a new factor. However, all of these tragic events have been supplanted by transportation-related incidents, which accounted for 43% of all fatal occupational injuries in 2005 (Bureau of Labor Statistics (BLS)). Figure 1 represents more than the next three categories combined.

Motor vehicle accidents, both on and off the job, have far-reaching financial and psychological effects on employers, employees, coworkers and affected family members. Developing and maintaining a comprehensive fleet safety program should be a vital part of your company’s safety culture. The program must work to keep employees and those with whom they share the road safe.

The program must include efforts to change driver attitudes, improve behavior and increase skills to build a safe culture within the organization. Instructing employees in safe driving practices will help a company avoid unnecessary tragedy. The goals of a fleet safety program are simple:

- Save lives and to reduce the risk of life-altering injuries within the workplace.
- Protect the organization’s human and financial resources.
- Guard against potential company and personal liabilities associated with crash-es involving employees driving company-owned or leased vehicles on company business.

"Best in Class" Fleet Safety Program Components
The Network of Employers for Traffic Safety (NETS) has developed a 10-step program for various size commercial sales organizations and light vans and trucks under 26,000 lb GWT. Implementing and following these steps will help protect a company’s employees and assets as well as control its vehicle insurance costs.
1) senior management commitment and employee involvement;
2) written fleet safety policies and procedures;
3) driver selection and agreements;
4) motor vehicle record (MVR) checks;
5) timely accident reporting and investigation;
6) vehicle selection, maintenance and inspections;
7) disciplinary action process;
8) safe driver rewards and incentives;
9) driver safety training and communications;

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10) regulatory compliance.
This article focuses on driver selection and training, and provides a glimpse of the costs of accidents and emerging fleet safety regulations.

Driver Selection & Agreements
A thorough examination of driving records of all potential new hires and employees who drive company vehicles is an important component of a fleet safety program. Establishing and managing this process is often contracted out to a third-party provider. A company must screen out drivers who have poor driving records since they are most likely to cause problems and have accidents in the future. An MVR should be obtained and reviewed before hire and periodically thereafter to ensure that a company’s drivers maintain an acceptable driving record. The fleet safety program must clearly define the number of violations an employee can have and the related point values for each before losing the privilege of driving a company vehicle. Loss of this privilege can also result in termination for an inability to perform an employee’s job function, which is particularly true in sales organizations.

Employers should also establish a contract with all employees who drive company-owned or leased vehicles. By signing an agreement, employees acknowledge their awareness and understanding of the company’s fleet safety program, including its requirements and expectations regarding driver performance, following vehicle maintenance and timely reporting of accidents and moving violations.

A sample criteria is provided in Table 1 that can be used to screen both new hires and employees. The proper amount of care and planning used in selecting and retaining employee drivers will have a definite affect on a company’s bottom line regarding preventable accidents and unnecessary losses. It is very important to take the time to identify and remove unsuitable drivers from the fleet.

Driver Safety Training & Communications
Providing continuous and comprehensive driver safety training and communications are vital to a successful fleet safety program. Even experienced drivers benefit from periodic training and reminders of safe driving practices and skills. Statistics show that drivers under the age of 25, especially males, including those who drive company vehicles and untrained employee drivers of any age are the two most likely groups to have a preventable motor vehicle accident. Untrained drivers typically are responsible for over 60% of all fleet accidents.

Furthermore, employees are most susceptible to having an accident during the first 5 years of their employment (Figure 2). These facts underscore the critical need to provide training to employees as soon as possible, especially to younger, entry-level drivers.

The training challenges facing most fleet businesses are three-fold: 1) verifying the driving history and safety record of newly hired drivers; 2) providing quality training and proper documentation at the time they are hired; and 3) providing yearly refresher training/communications.

Several components to driver safety training must be considered when developing a company’s specific program. These include initial training for new hires, refresher training for all drivers, risk-level change training, training for authorized nonemployee drivers and manager training for employee observation rides.

Initial Training
New employee drivers should receive formal safety training as soon as possible, preferably before being issued a vehicle. This training should include program requirements, the company fleet service program and behind-the-wheel instruction. In extenuating circumstances where this timing is not possible, the new hire’s…

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FIGURE 1: BLS Statistics (2006)

![Pie chart showing the distribution of workplace fatalities by cause.]

TABLE 1: New Hire Driving Record Acceptability Criteria

<table>
<thead>
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<th>Unacceptable Driving History</th>
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<tr>
<td>Currently suspended license due to moving violations.</td>
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<tr>
<td>2 or more moving violations in the past 24 months.</td>
</tr>
<tr>
<td>2 or more preventable accidents in the past 24 months.</td>
</tr>
<tr>
<td>Gross or willful negligence* within the past 24 months.</td>
</tr>
</tbody>
</table>

*Includes, but not limited to, DUl/DWI, felony while driving, falsifying driving records, leaving the scene of an accident and allowing unauthorized persons to operate company vehicles.
manager should provide some form of documentation.

**Annual Refresher Training**
Refresher safety training should be provided to each employee driver at least annually. Ideally, it should be either behind-the-wheel training or another type that allows the driver to experience the same types of situations he will encounter during the course of both normal and emergency driving situations.

Several types of nontraditional, hands-on training programs are available. These include web-based, desktop, and simulation. Of these, the recent emergence of commercial driver safety simulation training offers the most realistic options and scenarios.

The leading company in this industry is Virtual Driver Interactive (www.driverinteractive.com). Its product includes the latest in technology and graphics, an unbiased instructor and a low-stress environment. It only reinforces “good” driving habits and does not criticize “bad” driving habits. The technology features immersive graphics, realism and relativistic cues for accelerated learning. Myriad driving scenarios offer various weather conditions and road conditions, a mixture of rural and urban environments, and many unexpected hazards and emergency situations.

The virtual trainer also uses actual car parts and components to lend another dimension of practicality and the program’s assessment system offers accurate and documented training records. Course completion includes a certification of completion of the National Safety Council’s DDC 6/8 Defensive Driving Course. Figure 3 provides a comparison of behind-the-wheel and/or simulation training and traditional classroom training.

**Risk-Level Changes**
Drivers whose driving record has resulted in a risk-level (RL) change from RL-1 to either RL-2 or 3 (Table 2) should receive additional training as soon as possible. This supplemental training should be at the driver’s expense and not used as a substitute for regularly scheduled training. Either traditional behind-the-wheel or simulation training is ideal for this type of requirement. Generally, this also should include a documented manager’s observation ridealong before returning to normal job duties.

**Nonemployee Drivers**
All nonemployees who are authorized to operate a company vehicle should complete a supplemental driver education program and should provide the company with a certificate of completion before being allowed to operate a company vehicle.

**Manager’s Observation Ride**
All managers should conduct an annual, documented road observation ridealong of all drivers under their supervision to ensure that the drivers comply with company procedures. This should include an observation of vehicle inspection, vehicle operation and the driver’s safety attitude.

Other circumstances may require a more frequent observation ridealong, including a risk-level change, involvement in a preventable accident and a return to driving duty after an extended absence because of situations such as personal injury or illness, or maternity leave. Managers must be trained on how to plan and conduct the ride so they have the necessary tools and insights regarding the objective of this program.

**Communications**
Ongoing safe driving communications are an important part of the overall fleet safety program. Driver safety materials can include DVDs, videos, audiocassettes, web-based information via the company intranet, e-mails, and specially produced booklets and newsletters. Specific information continued on page 6.
Distractions & Driving

In 2003, AAA unveiled a new study on distracted driving. The study, which used in-car video to record the actions of volunteer drivers, found that wireless phones were the eighth most common distracted driving activity, out of nine. The study found that distraction of all types is an everyday occurrence. The results were as follows:

- Reaching or leaning: 97%
- Adjusting radio: 91%
- Conversing: 77%
- Eating, drinking: 71%
- Grooming: 45%
- Distracted by passenger: 44%
- Reading or writing: 40%
- Using a cell phone: 30%
- Smoking: 7%

*Using cell phones while driving without a hands-free device is illegal in some municipalities and states (such as New Jersey and New York).

FIGURE 3 Comparison of Behind-the-Wheel and/or Simulation Training

The Learning Pyramid

Lecture  5%
Reading  10%
Audio-Visual  20%
Demonstration  30%
Discussion Group  50%
Practice by Doing  75%
Teach Others or Immediate Use of Learning  90%

Simulation

Average Retention Rates – Traditional Training Methods

Looking Ahead


Elements include scope, terminology, leadership responsibilities, operational issues, driver management, vehicle selection and recordkeeping. The appendices include a sample procedure and various sample accident policies.

While this is a breakthrough in fleet safety management, the standard is not an enforceable law and no penalties exist for noncompliance. However, responsible companies should embrace this standard and use it as a model to enhance their fleet safety program and to protect their employees and assets.

Other regulatory-related activities to be aware of and include in a fleet safety program are the mandatory use of seatbelts in most states and various state laws on the use of cell phones. An effective fleet safety program should include all of the various state and local regulations in the geographic areas in which a company operates.

Conclusion

Work-related motor vehicle accidents are largely preventable. No company can involved. Off-the-job motor vehicle accidents are costly and disruptive to employers as well.
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afford to ignore a major program that has such serious impacts on both personnel and budget. When a company realizes the costs associated with motor vehicle accidents, it will also realize that the costs associated with implementing a comprehensive fleet safety program are minimal by comparison. Developing a fleet safety program that includes aggressive driver selection and comprehensive training are key elements in preventing unnecessary and costly accidents.

A recent report by a major insurance company revealed that companies surveyed in its Executive Survey of Workplace Safety believe their companies receive a return-on-investment of $3.00 or more for every $1.00 spent on improving workplace safety. Those are numbers all companies can relate to when it comes to protecting employees.

References


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truck had .74V. The difference of .20V is negligible and will not create any unwanted results (Appendix D presents test data). As far as the ability to jump-start a dead battery, remote jump posts are employed to facilitate this concern.

Conclusion
This article brings to the attention of truck manufacturers, owners and drivers a solution that can mitigate a hazard. The design scheme described is novel to the authors and is specifically to the credit of Freightliner Corp.

Investigators can also use this information when conducting fire cause and origin analysis of heavy trucks involved in collisions, as well as to show the mechanical fingerprints associated with this type of accident. Results of this investigation indicate unique fire cause and origin fingerprints in this type of occurrence and a technically feasible, economical and practical design alternative to mitigate it.

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It is important to note that Section 756 of the Energy Policy Act of 2005, which amended 23 U.S.C. 127 does not preempt state enforcement of its weight limits on all highways. Rather, it prevents FHWA from imposing funding sanctions if a state authorizes the 400-lb weight limit on their interstate system. Therefore, it remains for each state to decide whether it will allow the increased weight limits for APUs. However, a state must adhere to the provisions of Section 658.17 if it chooses to allow the additional weight.

Section 658.23 LCV Freeze: Cargo-Carrying Unit Freeze
The NPRM proposed to replace obsolete references to the Office of Motor Carriers with references to FHWA. In drafting the replacement regulatory text in the NPRM, FHWA inadvertently changed the word “must” to “may” in the last sentence of Subsection (c). We did not propose nor did we intend to change the substantive requirements contained in this subsection. FHWA did not receive any comments in response to the proposals contained in this section. Therefore, we have corrected the regulatory text to reflect the current regulatory requirements and to update the obsolete references to the Office of Motor Carriers.