

The following is an interesting article that speaks to hiring challenges associated with the transportation industry today (pg. 1-5). Although the study is US based, the findings and techniques offered are applicable and appropriate to Canadian circumstances. With cutbacks, freight shortages and quality driver availability, companies could become less stringent with their standards, but there is a cost involved.

If you would like to discuss any of the information outlined in this article, please feel free to call any member of your service team.



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Individual Differences and the "High Risk" Commercial Driver

Article: Federal Motor Carrier Safety Administration (US Department of Transportation)

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To view this article in its original context, please click [here](#).

BACKGROUND

There is a common belief in the trucking industry that, while most truck and bus drivers are both conscientious and safe, a relatively small percentage of commercial motor vehicle (CMV) drivers are associated with a significant and inordinate percentage of the overall number of motor carrier crashes. These drivers are considered to be "high risk" drivers, and the study summarized in this Tech Brief focuses on these commercial drivers. This project explores factors associated with "high risk drivers" and the means by which carriers can reduce crash risk through various safety management practices and other safety interventions.

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STUDY DESIGN

Expert industry opinion was accessed through survey questionnaires on the topic. Surveys were distributed to a random sample of safety managers listed in the American Trucking Associations' fleet directory. A second survey sample consisted of a group of "other experts"—those who are professionally involved in CMV safety but are not fleet safety managers. This group included former drivers and fleet managers, government regulatory and enforcement personnel, industry trade association representatives, and researchers. Of course, these are overlapping categories, and most "other experts" indicated several different motor carrier safety-related professional experience areas.

The results from these surveys were then compared to reviewed research literature on the topic, with emphasis on the personal factors associated with risk and carrier management approaches to reducing the problem. A number of these factors potentially correlate with risk and may be the basis for safety interventions to reduce risk.

SURVEY METHOD AND RESULTS

Two parallel survey forms were used—one for current CMV fleet safety managers and the other for other experts in motor carrier safety. The "safety manager" and "other expert" survey forms contained 50 and 48 questions, respectively. The surveys for "other experts" did not include questions regarding CMV fleet information. These surveys were divided into seven parts:

Part 1: How Important is the Problem? Most respondents (59 percent Safety Managers, 54 percent Other Experts) felt that the worst 10 percent of drivers were associated with 50 percent or more of fleet crash risk.

Part 2: Driver Factors Associated with Risk. Sixteen personal factors were rated on a scale from

"0" (no association) to "4" (strong association) with regard to their strength of association with crash risk. The factors, mean ratings (to the nearest tenth), and rankings are presented in order of safety manager ranking in Table 1. When there were ties in the mean ratings, rankings were determined by looking at additional decimal places, which are not shown in the table. Respondents in both groups rated personality traits such as aggressiveness, impulsivity, and inattentiveness as having the highest associations with risk.

DRIVER RISK FACTOR	SAFETY MANAGERS		OTHER EXPERTS	
	Mean (0 - 4)	Rank (of 16)	Mean (0 - 4)	Rank (of 16)
Aggressive/angry	3.4	1	3.4	3
Impatient/impulsive	3.4	2	3.5	1
Inattentive	3.4	3	3.4	2
Inexperienced (new CMV driver)	3.2	4	3.2	4
Unhappy with job/company	2.6	5	2.4	7
Young driver (less than 25)	2.5	6	3.1	5
Sleep apnea/other sleep disorder	2.4	7	2.9	6
Unhappy marriage/family problems	2.2	8	2.2	8
Debt or other financial problems	2.0	9	2.1	9
Heart or other medical condition	1.9	10	2.1	10
Dishonest	1.8	11	1.8	14
Older driver (60 or older)	1.7	12	1.9	12
New to company	1.6	13	2.0	11
Obese/overweight	1.4	14	1.7	15
Introverted/unsociable	1.3	15	1.1	16
Did not attend truck driving school	1.2	16	1.8	13

Table 1. Survey Results: Driver Factors Associated with Risk

Part 3: Driver Hiring Practices and Tools. The most frequently used, and highest rated, hiring practices were checking the applicant Motor Vehicle Record (MVR), contacting past employers, testing for alcohol and drugs (required by Federal regulation for interstate carriers), and on-road driving tests.

Part 4: Driver Evaluation. "Continuous tracking of driver crashes, incidents, and violations" was almost universally used by safety manager respondents and had the highest-rated effectiveness for both respondent groups in terms of the four driver evaluation practices presented.

Part 5: Driver Management. While reprimands (verbal and written) and manager counseling were among the most-used methods for driver management, "monetary rewards" received the highest effectiveness rating.

Part 6: Comments. Three lines of blank space were provided on each form.

Part 7: Respondent Information.

CONCEPTS OF CRASH RISK

Many interacting factors affect commercial driver crash involvement. The focus of this study was on personal "constitutional" risk factors, or relatively enduring characteristics such as health, physical skills, and some personality traits. At any given moment, however, a number of other factors and influences are operative. A conceptualization of some major interacting factors is shown in Figure 1 (next page).

Researchers have discovered that certain personal traits are related to the occurrence of a vehicle crash—some drivers have a "differential crash risk." To the extent that this differential crash risk is enduring, it probably reflects constitutional or other long-term personal traits. This differential crash risk may also vary across time, reflecting chance variation or changeable traits such as age, maturation, or learning by experience.

FACTORS RELATED TO DRIVER RISK

Many factors related to driver risk were assessed in this literature review. The five most cited include:

Age: For young CMV drivers, age is a very strong personal factor that affects crash involvement. In one statistical study, young truck drivers (ages 18-21) had moving violation rates that were almost twice those of the middle-aged drivers (30-49).

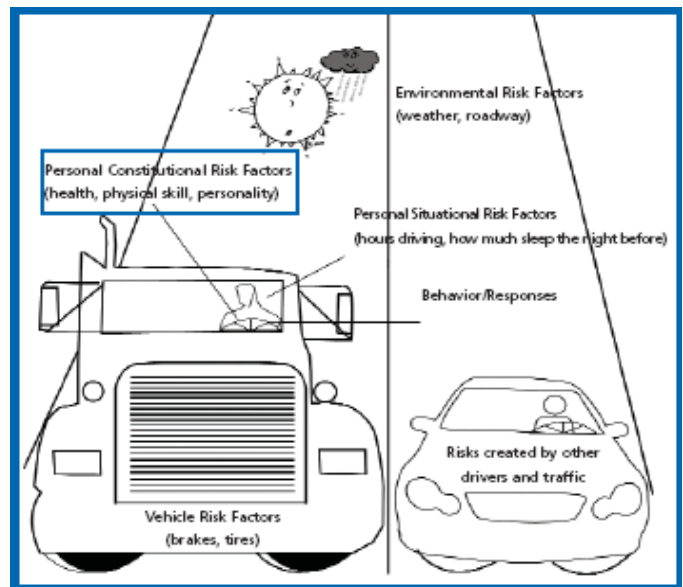


Figure 1. Major interacting factors affecting commercial driver crash involvement.

Speeding above the speed limit and unsafe speeds for conditions were the two top violations cited. In fact, young commercial drivers were reported to be about 50 percent more likely than middle-aged drivers to be charged with a violation in a crash (Blower 1996). In two-vehicle crashes with light vehicles, the young truck driver was twice as likely as the other driver to be charged with a hazardous action or traffic violation, which is opposite the trend for large truck-light vehicle crashes in general (FMCSA 2003). On the other hand, there appears to be no major safety problem relating to older truck drivers.

Commercial Driving Experience: Experience driving a large truck or bus is clearly a factor in driver safety. Not surprisingly, most motor carriers, particularly large carriers, require prior commercial driving experience for applicants to be considered for hiring (Stock 2001).

Sleep Disorder: Many studies agree that the relative risk of being involved in a crash rises if the driver has a sleep disorder. The numbers given were anywhere from 3 to 14 times the normal risk.

Impulsivity: Impulsivity, characterized by behavioral instability and an inability to control

impulses, including threatening behavior and violence, has been suggested to be related to an increase in crash risk. A 1967 study found that both a high crash/other accident group, and a high violation group scored higher on a measure of impulsivity than those with a low number of crashes/other accidents and violations (Schuman, Peltz, Ehrlich, and Seltzer, 1967).

Social Maladjustment and Aggressive/Angry Personalities: Various studies of the personalities of high-crash drivers found these drivers to have negative social traits. For example, when studying South African bus drivers with repeated crashes, Shaw and Sichel (1961, 1971) described these individuals as being selfish, self-centered, overconfident, resentful and bitter, intolerant, and having antisocial attitudes and criminal tendencies.

OPERATIONAL SAFETY MANAGEMENT METHODS

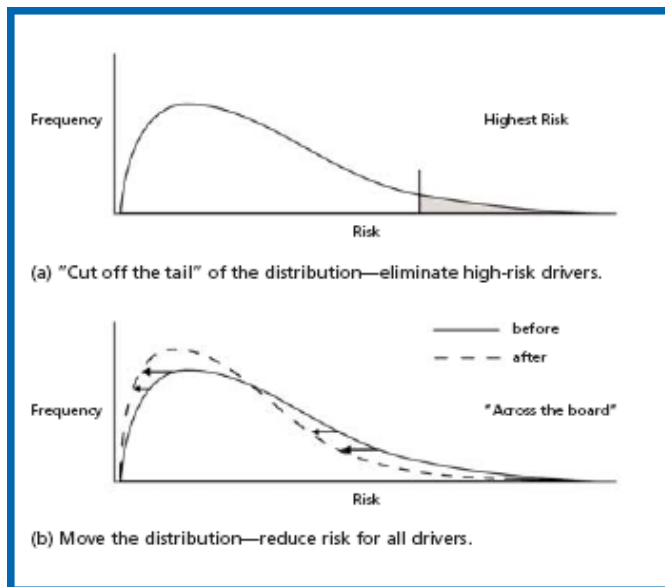


Figure 1. Two conceptual mechanisms of improvements to a group of drivers

Based on the research review, the study team believes that there are at least two distinct ways to improve the safety performance of a group of CMV drivers. Figure 1 illustrates these. In the first

example (Figure 1a), the highest-risk drivers are eliminated from the distribution, as they are never hired, thus "cutting off the tail" of the driver risk distribution. This intervention would have the effect of improving the performance of the average driver of the group by eliminating the greatest source of risk. In the second example (Figure 1b), the safety performance levels of all, or most, drivers in a group are improved through effective intervention. The overall average safety level of the fleet improves through "across the board" advancement. Based on the literature, and discussions with motor carriers, there are a number of methods to reduce driver crash risks. These include:

- Systematic hiring,
- Driver selection tests,
- Driver performance evaluation,
- Driver training and counseling,
- Driver rewards and punishment,
- Behavior-based safety,
- Driver self-management, and
- Driver termination.

CONCLUSIONS

The survey results and statistical findings presented in this report support the view that commercial drivers differ greatly in their levels of crash risk, and that a relatively small percentage of drivers (10-15 percent) account for a disproportionate percentage of total fleet risk (30-50 percent). However, these results lead to the realization of further research needs. The findings presented in this report generally imply, but do not verify, that relative driver risk, both general and specific, endures across long periods of time. In other words, "risk" is, to some extent, a long-term

personal trait, in addition to being obviously related to specific situations and conditions. The various personality traits and performance variables discussed in this report must now be confirmed. One way that this can be done is through a systematic and quantitative determination of the role that each of the many factors discussed play in commercial driver risk. Another research need has to do with carrier management strategies in working with the drivers who are more "accident prone." This can be done through research in relation to all driver management functions, including selection, evaluation, and management intervention. With further research, motor carrier companies can learn how to work with or avoid the "high risk" commercial driver, and the risk for all drivers on the road can be reduced.

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- ANNOUNCEMENT -



Lloyd Sadd is pleased to welcome **DEREK DICK**, who has joined our team as resident Claims Advocate. Derek has 24 years of multi-line claims adjusting experience and has worked extensively as an independent adjuster servicing various national and international insurers. He has specialized in the adjustment of catastrophic commercial losses with significant business interruption exposures, and has adjusted many heavy equipment/transportation, crime, oil & gas, construction property, and liability losses. In addition to obtaining his CIP designation, Derek has also been accredited for property and automobile/equipment damage appraisals through Vale Tech in Fresno, CA.

In this role, Derek will be leading our claims management initiatives. He will act exclusively on behalf of our clients to improve claim-handling timelines, reduce additional legal costs, minimize interruptions, and ensure the most satisfactory resolution of claims – thus reducing our clients' Total Cost of Risk.



Are You Covered in Case of a Business Interruption?

More than 25% of all businesses that close down following a disaster never open their doors again.

-Insurance Information Institute

If a fire causes your business to be temporarily unusable, what would you do next? Ideally, you would move to a temporary location while your permanent place of business is being repaired. Yet, traditional Property Insurance does not cover this move or a loss of income when a business must temporarily close. With Business Interruption Insurance, also referred to as Business Income coverage, this setback can be minimized by simply adding this coverage to your Property Insurance policy.

WHAT IS INCLUDED IN A BUSINESS INTERRUPTION INSURANCE POLICY?

- Compensation for lost income if your company has to vacate its premises as a result of disaster-related damage covered under a Property Insurance policy.
- Covers the profits that would have been earned based on previous financial records, had the disaster not occurred.
- Covers operating expenses, such as utilities, that must be paid even though business temporarily ceased.
- Covers expenses of operating in a temporary location while repairs to the permanent location are completed.



CONSIDERATIONS FOR BUSINESS INTERRUPTION INSURANCE

- Business Interruption Insurance cannot be purchased on its own; it must be added to a Property Insurance policy or included in a Business Owner's Insurance policy.
- Policy limits should be enough to cover a large amount of time to rebuild the permanent business space. Generally there is a 48-hour waiting period before the coverage will apply.
- Price of coverage depends on the risk of disaster to the premises. This may depend on the business location, nature of the business and how easily the business could function at an alternate location on a temporary basis.

WHAT IS EXTRA EXPENSE INSURANCE?

Extra Expense Insurance is also a viable inclusion to cover the amount needed to avoid having to shut down a business while the permanent location is being repaired. This coverage reimburses for expenses that arise on top of normal business expenses and will be paid to decrease business interruption costs. Depending on the disaster, Extra Expense Insurance may be sufficient to provide financial relief without having to utilize Business Interruption Insurance.

Insurance experts estimate that Business Interruption Insurance is one of the most, if not the most, valuable coverage available. Yet, it is often overlooked by business owners as a necessity. Since Property Insurance only covers the cost of physical loss or damage and contents of a business in the event of a disaster, Business Interruption coverage is invaluable in covering the loss of income while the permanent business location is being repaired.

If you'd like further information on Business Interruption or Extra Expense coverage, please contact your Lloyd Sadd Account Executive.

Employee Cell Phone Use While Driving: What is Your Company's Liability?

In 2004, a Georgia employee making a business phone call while driving hit and caused serious injury to another driver. The employee's company agreed to pay \$5 million in damages after the court found that the company was liable since the employee was making a business-related call.

Two million dollars in damages were awarded to a little girl's family after an employee hit and killed her in 2004. The family also sued the employee's company after phone records revealed that the employee was talking to a client at the time of the crash.

According to the Cellular Telecommunications & Internet Association, as of May 2007, 236 million people have a cell phone as compared to 4.3 million in 1990. In keeping with this trend, conducting business on a cell phone while driving has also become a commonplace practice. While employers may be aware of the obvious benefits of allowing employees to use cell phones to conduct business while driving, they may be unaware of their liability risks.

Currently, there is conflicting evidence regarding the link between cell phone usage and car accidents. According to Johns Hopkins University, as individuals focus on listening and engaging in conversation, the activity in the visual part of the brain decreases. This is true even with the use of a hands-free device. Furthermore, with the advancement of technology, cell users can e-mail clients, surf the Internet and receive faxes from their hand-set. These features only increase the likelihood that the driver will get distracted while also trying to

concentrate on the road. In contrast however, the AAA Foundation for Traffic Safety found that the most potentially dangerous activity while driving was "reaching or leaning" — cell phone use placed a distant ninth on the list of distracting activities. Despite these inconsistent findings, there are a growing number of lawsuits involving employer liability for traffic accidents caused by employees talking on cell phones while on the job.

MINIMIZING EMPLOYER LIABILITY

While there is no guaranteed defense to liability, developing an appropriate employee cell phone use policy, training employees about the dangers of talking on a cell phone while driving, and enforcing policies with signed written acknowledgments from employees when they are issued cell phones and related equipment all can help to limit an employer's potential liability.

We appreciate your feedback!

Lloyd Sadd has provided Risk Management and Insurance services to Alberta Transportation companies for over a decade.

We hope you find the content informative and, more importantly, useful in assisting the evolution of risk management in your organization.

Please contact us if you have any questions, feedback or suggestions on topics for upcoming issues of this newsletter:

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