

- 1,981 State fund compensable injuries
- Cost over \$92 million
- Over 447,000 days of time-loss
- A compensable rate of 5.3 per 100 FTE or 1 in 19 employees

Figure 22. Compensable Claims By Age Group

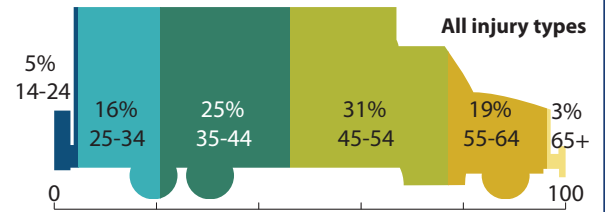
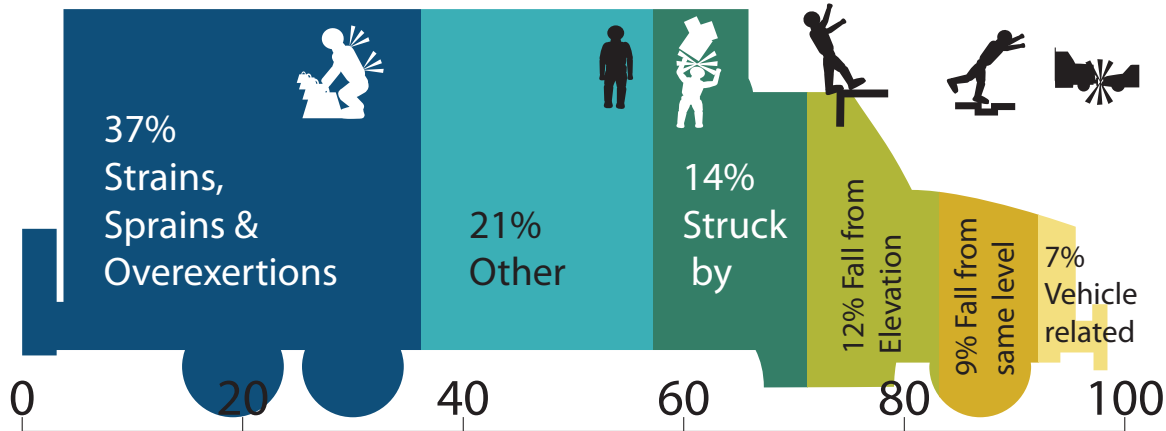
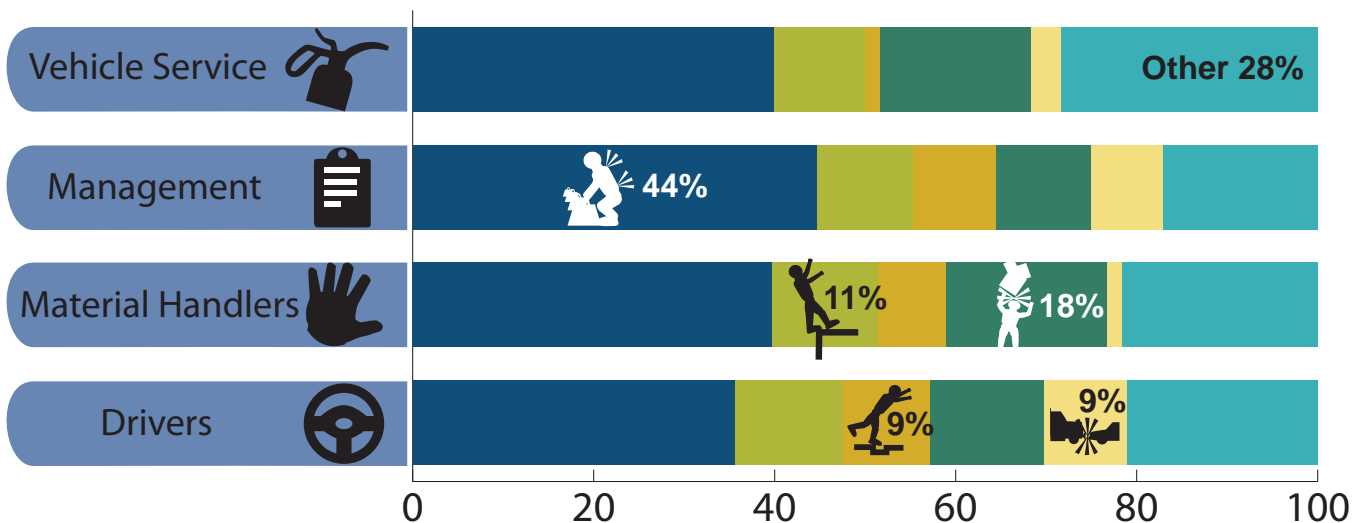


Figure 23. Percent of compensable injuries by type, General Freight Trucking LTL, 2006-2012



Strain, sprains or overexertion injuries were the most common compensable claims in the Less than Truckload (LTL) sector of General Freight trucking, with more than double the percentage of the next identifiable injury type; struck by or against injuries.

Figure 24. Percent of injury type by occupation, General Freight Trucking - LTL 2006-2012



Strain, sprain or overexertion injuries were by far the most common among all occupations, making up almost half of all management occupational group injuries from 2006-2012.

Management made up only 4% of the total number of claims in LTL, but their median claim cost was much higher for both total and medical claim cost (see appendix B for details).

Table 3. Most common type and source combination of injuries in General Freight LTL, ranked by intervention priority

Description	PIP Rank
Bending, twisting body, fell while entering/exiting cab or trailer, lifting heavy loads	1
Falls from ladders	2
Falls on uneven or covered surfaces	3
Lifting heavy objects	4
Slips, trips and falls due to ice, snow and rain; also oily surfaces	5

*PIP prioritizes injury types by ranking three important factors and averaging. The PIP ranks the count of injuries, the type (e.g., fall from elevation, struck by), and the number of time-loss days. Highest time-loss = □, Highest medical cost = ○, Highest count of claims = ▲ are noted with these symbols, when available.

Prevention Targets

Employers

- Invest in cabs with adequate hand holds. Don't make your employees reach across, twist or otherwise enter/exit the cab in awkward angles.
- Provide trailers with handholds (preferably on both sides) to prevent drivers from riding the door down, or twisting awkwardly to grab the side of the trailer to help in their descent.
- Provide drivers with the tools they need to do their job safely – pallet jacks, forklifts, extra workers to help unload.
- Discuss what equipment/assistance is available for drivers to use at the customer site when scheduling a job.
- Engineer away the need for ladders if possible.
- Maintain your yard including lighting, pothole maintenance, ice removal, etc.

Drivers

- Use 3 points of contact when entering or exiting the cab or trailer. Make sure not to twist your torso when entering/exiting.
- Use mechanical devices to lift heavy loads or ask for help.
- Wear appropriate footwear with non-slip treads.
- Report hazards such as broken equipment or spills.
- Wear well-fitting gloves with non-slip surface to maintain your grip and protect your hands.
- Use a flashlight or headlamp during dark conditions.

- Cost over \$34 million
- Resulted in over 181,000 days of time-loss
- 37% of the total time-loss for LTL

Figure 25. Compensable Claims By Age Group

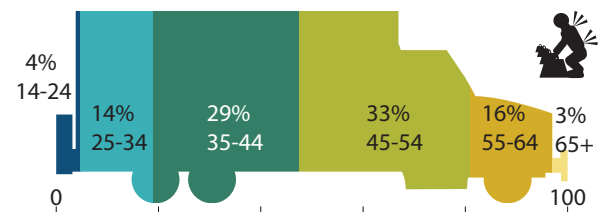


Table 4. Most common strain, sprain or overexertion by type and source combination of injuries in General Freight LTL, ranked by intervention priority.

Description	PIP Rank
Bending, twisting body, while entering/exiting cab or trailer, material handling	1
Neck, back and upper extremity – forceful exertion – lifting heavy objects: cargo, dock plates, forcing open trailer doors	2
Arm, shoulder and neck injuries due to stuck landing gear, fifth wheel or trailer door	3
Pushing/pulling loaded pallet jacks	4
Slip, or fall out of cab or back of trailer	5

*PIP prioritizes injury types by ranking three important factors and averaging. The PIP ranks the count of injuries, the type (e.g., fall from elevation, struck by), and the number of time-loss days. Highest time-loss = 3, Highest medical cost = 2, Highest count of claims = ▲ are noted with these symbols, when available.

Prevention Targets

Employers

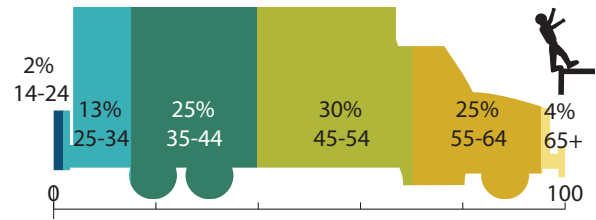
- Make sure to invest in cabs with adequate hand holds. Don't make your employees reach across, twist or otherwise enter/exit the cab using awkward angles.
- Provide trailers with handholds (preferably on both sides) to prevent drivers from riding the door down, or twisting awkwardly to grab the side of the trailer to help in their descent.
- Regularly maintain fifth wheel releases, landing gear, trailer doors, pallet jacks and dock plates.
- Provide drivers with the tools they need to do their job safely – pallet jacks, forklifts, extra workers to help unload.
- Discuss what equipment/assistance is available for drivers to use at the customer site when scheduling a job.
- Have warehouse loaders double check loading order with dispatch schedule to limit the amount of rearranging of the load that must be done by drivers.

Drivers

- Report maintenance issues right away and mark broken equipment out-of-service.
- Use mechanical devices to lift heavy loads or ask for help.

- Cost over \$13.7 million
- Resulted in over 63,000 days of time-loss
- Median costs per claim ranged from \$17,000 for drivers, to over \$48,000 for vehicle service technicians

Figure 26. Compensable Claims By Age Group



Fall from elevation compensable claims for LTL were primarily drivers (72%), with material handlers second at 15% of all fall from elevation injuries.

Table 5. Most common fall from elevation by type and source combination of injuries in General Freight LTL, ranked by intervention priority.

Description	PIP Rank
Falling or slipping off of a ladder	1
Slipped entering or exiting cab or trailer	2
Walking down a ramp	3
Falling off truck or trailer (not while exiting)	4
Falling while climbing or walking up or down stairs	5

*PIP prioritizes injury types by ranking three important factors and averaging. The PIP ranks the count of injuries, the type (e.g., fall from elevation, struck by), and the number of time-loss days. Highest time-loss = □, Highest medical cost = ○, Highest count of claims = ▲ are noted with these symbols, when available.

Prevention Targets

Employers

- Engineer solutions to prevent the need to climb ladders if possible.
- Make sure to invest in cabs with adequate hand holds. Don't make your employees reach across, twist or otherwise enter/exit the cab in an unbalanced posture.
- Provide trailers with handholds (preferable on both sides) to prevent drivers from riding the door down, or twisting awkwardly to grab the side of the trailer to help in their descent.
- Require truck drivers to hand off keys to the forklift driver or material handler while loading occurs.

Drivers

- Wear proper footwear and check your tread periodically.
- Always use 3 points-of-contact when entering/exiting the cab or other parts of the truck or trailer.
- Don't rush on ladders.
- Report any broken or worn stairs or ladders immediately.
- Stay alert while walking up or down steps and make sure at least one hand is free to help steady yourself. During common tasks like these, we forget how easy it is to lose our balance, especially when rushing.

- 182 compensable claims
- Cost \$8.7 million
- Resulted in 47,000 days of time off work

Of the identifiable occupations, drivers had the lowest median claim cost (\$9,233) while management occupations had the highest (\$14,219), though management accounted for only 4% of the General Freight LTL fall from same level compensable claims.

Figure 27. Compensable Claims By Age Group

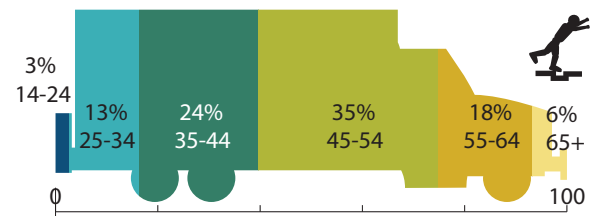


Table 6. Most common Fall on the same level by type and source combination of injuries in General Freight LTL, ranked by intervention priority.

Description	PIP Rank
Slips and trips because of equipment or other object in the way, tripping while walking to or from truck	1
Slipped and fell on uneven ground, on ice or slippery surface, or slipped while carrying objects or while twisting and bending to get objects out of truck	2
Tying down/strapping cargo in trailer, slipped and fell	3

*PIP prioritizes injury types by ranking three important factors and averaging. The PIP ranks the count of injuries, the type (e.g., fall from elevation, struck by), and the number of time-loss days. Highest time-loss = □, Highest medical cost = ○, Highest count of claims = ▲ are noted with these symbols, when available.

Prevention Targets

Employers

- Train workers to walk delivery path at a customer site to limit the risk of tripping over hazards in the yard when their view is blocked by a load.
- Maintain your yard with proper lighting and pothole repairs.
- Provide plenty of new straps and tie downs and require regular material inspections by drivers.
- Add stair tread maintenance to your fall seasonal schedule to make sure steps are safe during winter ice or rain.

Drivers

- If your view will be blocked while loading or unloading, then walk the route first to observe and move any hazards that might be in your way.
- Don't use your phone or review paperwork while walking. Find a safe place for these activities so that you won't be a distracted walker.
- Wear proper footwear and check your treads regularly.
- Inspect tie down straps for wear.
- Always have a flash light or headlamp and use them at dusk and night.

- 267 compensable claims
- Cost \$9.2 million
- 41,100 days of lost work

Management occupations had the highest median claim cost (\$20,468) and highest median medical portion of the claim (\$10,312), even though they had the fewest struck by or against claims among the occupational groups.

Figure 28. Compensable Claims By Age Group

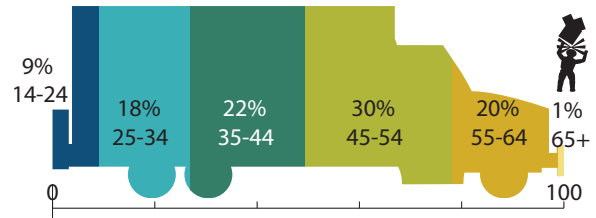


Table 7. Most common struck by or against by type and source combination of injuries in General Freight LTL, ranked by intervention priority.

Description	PIP Rank
Struck by pallets	1
Struck by load while trying to secure, or struck by loose freight	2
Struck by freight while unloading it	3

*PIP prioritizes injury types by ranking three important factors and averaging. The PIP ranks the count of injuries, the type (e.g., fall from elevation, struck by), and the number of time-loss days. Highest time-loss = □, Highest medical cost = ○, Highest count of claims = △ are noted with these symbols, when available.

Prevention Targets

Employers

- Train all new hires on the proper method to secure the load.
- Teach smart pallet stacking. Crushable boxes should not go on the bottom of the pallet.
- Train drivers on the right method for opening the trailer doors. For double doors stand behind opposite door while opening so if the load has shifted they'll be protected.
- Make sure material handlers know the proper way to load and secure freight in the trailer.
- Good housekeeping practices include safe stacking of cargo and empty pallets in the warehouse.

Drivers

- Take the time to properly secure all cargo. Double check the work of others.
- Don't try to catch falling freight.
- Stay out of the way of the forklift driver. Stay in your cab or go to a safe location.

- **145 compensable claims**
- **Cost over \$12 million**
- **About 48,000 days of lost work.**

The overwhelming majority (88%) of vehicle-related claims occurred to drivers. Material handlers had the lowest median claim cost (\$35,000).

Figure 29. Compensable Claims By Age Group

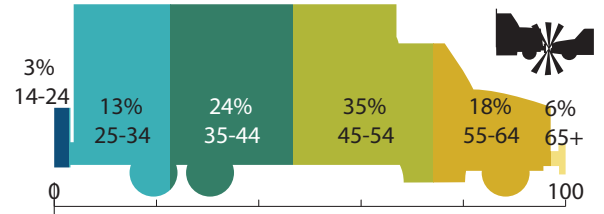


Table 8. Most common vehicle-related by type and source combination of injuries in General Freight LTL, ranked by intervention priority.

Description	PIP Rank
One moving and one stopped vehicle on the roadway, such as rear-ended.	1
Collision between two vehicles moving in the same direction.	2
Collision between two vehicles moving in different directions	3
Jack-knifed with no collision, or roll-over.	4

*PIP prioritizes injury types by ranking three important factors and averaging. The PIP ranks the count of injuries, the type (e.g., fall from elevation, struck by), and the number of time-loss days. Highest time-loss = 1, Highest medical cost = 3, Highest count of claims = ▲ are noted with these symbols, when available.

Research shows that fatigue and driving while drowsy are among the top reasons for single vehicle crashes.^{1, 2}

Prevention Targets

Employers

- Allow drivers to use sick leave when they need to.
- Monitor dispatch to assure drivers aren't being 'encouraged' to drive beyond hours of service.
- Give drivers enough time to safely complete their work.

Drivers

- Get plenty of rest. Call in sick when you need to.
- Bring healthy snacks with you so you won't be tempted to choose foods that will make you lethargic. Stay hydrated.
- Talk to your doctor if you are waking throughout the night or feeling fatigued during the day.

1. Bunn, T. L., S. Slavova, T. W. Struttmann, and S. R. Browning. 2005. "Sleepiness/fatigue and distraction/inattention as factors for fatal versus nonfatal commercial motor vehicle driver injuries." *Accid Anal Prev* 37(5): 862-9.

2. Robb, G., S. Sultana, S. Ameratunga, and R. Jackson. 2008. "A systematic review of epidemiological studies investigating risk factors for work-related road traffic crashes and injuries." *Injury Prevention* 14(1): 51-58.

General injury prevention

Employers

- Encourage drivers to report hazardous conditions at customer sites.
- If your driver is injured at a customer site, follow up with the customer to be sure it won't happen again.
- Provide and maintain adequate lighting.
- Maintain terminal yard and dock areas so that surfaces are even and free of slip and trip hazards such as potholes, ice, snow, rubbish and liquid spills.
- Clearly mark floor transitions at dock edge.
- Have truck drivers hand over their keys while loading occurs.
- The average cost of pallet straps and void fillers run about \$500. Invest in the correct securement devices to keep your workers and your cargo safe.
- Make sure to schedule time into the drivers day to inspect and re-inspect cargo securement. The extra few minutes could save you a lot of time, money and pain.
- Prevent incentives to drive drowsy, by switching your payment to hourly, eliminate by the mile and by the load payment structures.
- Build a safety culture that makes driving drowsy as taboo as driving drunk.
- Schedule realistically. Routes, shipments, seasons and cargo as well as many other issues create different delivery estimates. Keep these factors in mind when scheduling drivers' work.
- If you have to, raise the cost of doing business with your company. An industry leading company with less churn and happier/safer employees is a more successful company, in any industry. People want to associate themselves with industry leaders.

Drivers

- Always wear sturdy shoes with good traction.
- Stay vigilant about hidden hazards.
- Before inspecting your truck and trailer, inspect the area around them for slip, trip and fall hazards.
- Report debris, spills or other hazards to the yard manager
- Keep your work area clear of debris and spills. If you make the mess, clean it up immediately or you may hurt yourself or a co-worker.
- Report broken equipment to your employer.
- Wear your high-visibility clothing.

Suggested citation: Rauser, Smith and Williams 2014. Trucking Industry: Examining Injuries for Prevention, 2006-2012. SHARP Program, report #90-148-2014. Washington State Department of Labor & Industries, Olympia, Washington.

Full Report at www.KeepTruckingSafe.org