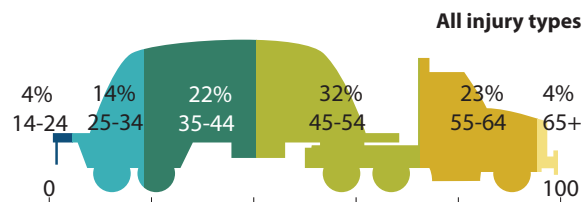


- 1,390 compensable claims
- Cost almost \$80 million
- Over 361,000 days of time-loss
- A compensable rate of 4.9 per 100 FTE or 1 in 20 employees

Figure 38. Compensable Claims By Age Group



Vehicle-related injuries had the highest median cost (\$21,137) for Specialized Freight workers, followed by fall from same level (\$13,038).

Figure 39. Percent of compensable injuries by type, Specialized Freight Trucking TL 2006-2012

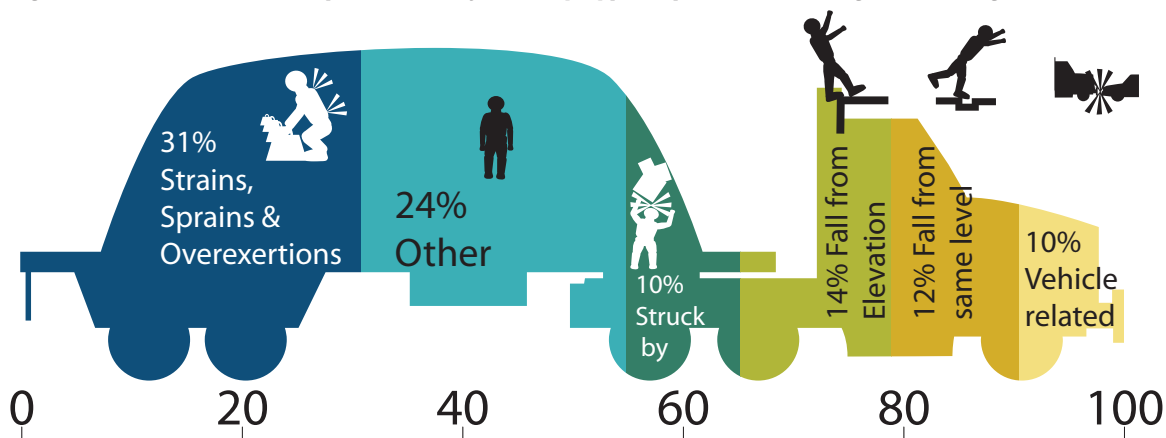
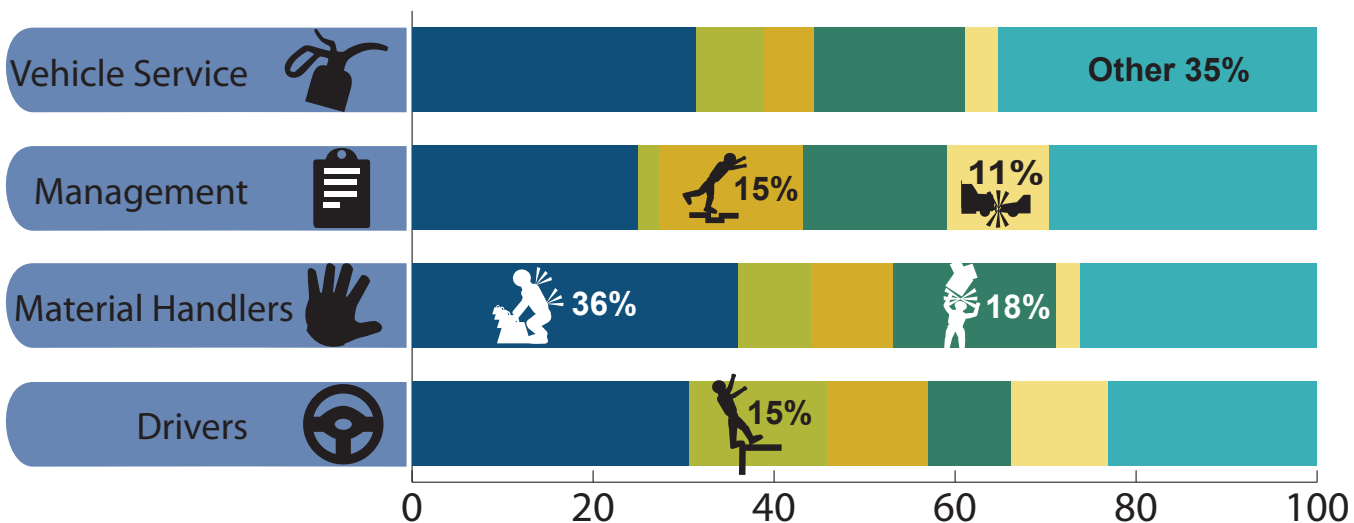







Figure 40. Percent of injury type by occupation, Specialized Freight Trucking TL 2006-2012



The top five type/source for injuries in Specialized Freight are very similar to TL in General Freight trucking. Two things that stand out for Specialized Freight however are the cumulative trauma injuries and jackknife and roll-overs.

Table 15. The top five injury type and source of injury combination in Specialized Freight, ranked by intervention priority were:

Description	PIP Rank
Falling out the back of trailer/flatbed/other truck part	 1
Cumulative trauma - upper and lower extremities	2
Jackknife or rollover - load shift, icy roads, wind gusts	3
Slips, trips and fall - carrying objects	 4
Entering/exiting cab/trailer uneven surfaces at landing, ice	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

- Provide trailers with handholds 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.
- The severity of strain, sprain and overexertion injuries can be positively impacted by early reporting and implementing prevention strategies. This cannot be emphasized strongly enough. Encourage your employees to let you know if they are feeling pain, before the damage becomes severe.
- 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 awkward angles.
- 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.

Drivers

- Always use 3 points of contact when entering or exiting the cab or trailer and on ladders.
- Report pain early to your employer and physician. Early intervention can decrease the severity of injuries to muscles, tendons, joints and other soft-tissue.
- Use ratchet binders instead of lever binders.
- Don't allow your phone or paperwork to become a distraction while walking.
- Scan the steps and ground below before exiting the cab to note any possible hazards (ice, water, potholes, oily sheen).
- Always carry and use a flashlight or head lamp after dusk so you can see where you are walking or what you are stepping down onto. This will help others to see you too.

- 431 compensable claims
- Cost over \$23 million
- 116,000 days of lost time

While having the fewest number of compensable claims, those in the management occupational group had the highest median cost for strain, sprain and overexertion injuries at \$26,382.

Figure 41. Compensable Claims By Age Group

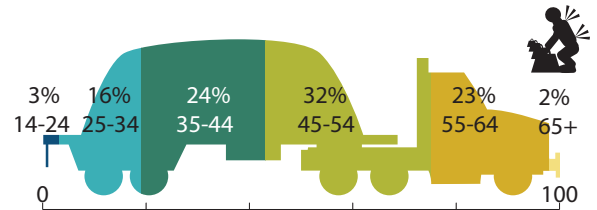


Table 16. Most common strain, sprain or overexertion by type and source combination of injuries in Specialized Freight, ranked by intervention priority.

Description	PIP Rank
Bodily motion - twisted lower extremity getting out of truck, twisted knee landed in pothole	1
Bent over while performing a task; fell and caught self with arm, hurt arm	2
Repetitive motion - hands, arms, shoulders	3
Unhooking trailer, pulling on 5th wheel release	4
Overexertion - lifting heavy objects e.g., hose over head	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 = 1, Highest count of claims = 2 are noted with these symbols, when available.

Prevention Targets

Employers

- 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.
- Use forklifts to put tarps on top of the load.
- The severity of strain, sprain and overexertion injuries can be positively impacted by early reporting and implementing prevention strategies. Encourage your employees to let you know if they are feeling pain, before the damage becomes severe.
- Provide mechanical aids whenever possible to limit strain. Re-organize activities for drivers and material handlers to limit the need for bending, twisting and awkward angles. Don't forget to include management occupations in your safety training programs.

Drivers

- Report pain early to your employer and physician. Early intervention can decrease the severity of injuries to muscles, tendons, joints and other soft-tissue.
- Avoid manual lifting by using mechanical aids or ask for help.

- 190 claims
- Cost almost \$15 million
- 50,000 days of lost time
- 86% of injuries were to drivers

Figure 42. Compensable Claims By Age Group

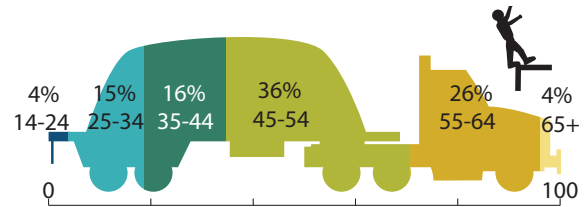


Table 17. Most common fall from elevation by type and source combination of injuries in Specialized Freight, ranked by intervention priority.

Description	PIP Rank
Falling from non-moving truck - fell out of cab or back of trailer while getting out	1
Fall from elevation - stepping out of cab; fall from top of load;	2
Fall from elevation - not specified	3
Fall from truck - tire, 5th wheel area	4
Fall to lower level - fell from top of load, fell off machinery	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

- Provide trailers with handholds 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.
- Train drivers in safer ways of tarping to limit the time walking over covered (hidden) loads.
- Work with customers to limit tarping loads by identifying cargo that doesn't need to be tarped.
- Engineer away the need for ladders if possible.

Drivers

- Always use 3 points of contact when entering or exiting the cab or trailer and on ladders.
- Slow down and take time to complete your work.
- Be aware of gaps in freight under the tarp. Create a system to help you identify gaps, e.g. carry a chalk pen and mark all gaps on the tarp while you are unrolling.

- 161 compensable claims
- Cost over \$9 million
- 44,000 days of lost time
- 75% of these injuries were to drivers

Figure 43. Compensable Claims By Age Group

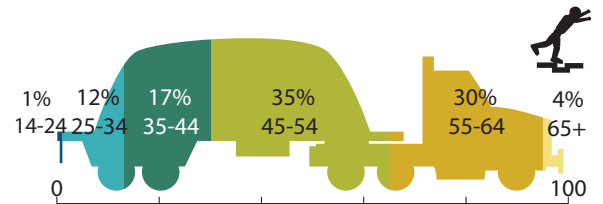


Table 18. Most common falls on same level by type and source combination of injuries in Specialized Freight, ranked by intervention priority.

Description	PIP Rank
Fall to ground due to ice, water, fuel, etc.	1
Fell in trailer, on equipment - due to ice, snow, etc.	2

*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 Tips

Employers

- Develop a plan to deal with severe weather and fuel spills.
- Engineer methods to keep product from leaking or spilling.
- Provide dry mops or absorbent pads so drivers can keep their trailers safe.
- Keep your yard well lit, fill potholes and maintain safe walkways.
- Encourage drivers to report hazards found at customer sites and work with customers to make sure they are fixed or mitigated.

Drivers

- Inspect your straps for wear.
- Carry a dry mop to clean up slick surfaces in your trailer or use absorbent pads.
- Carry non-clumping kitty litter to sprinkle on slick surfaces or over spills if you cannot clean them up.
- Don't allow your phone or paperwork to become a distraction while walking.
- Report walking hazards to your employer immediately.
- If your view will be limited by a package or hand truck delivering, walk the route first and note any obstacles.
- Wear footwear with a good tread.

- 146 compensable injuries
- Cost \$8 million
- Resulted in over 35,000 days of lost work

Figure 44. Compensable Claims By Age Group

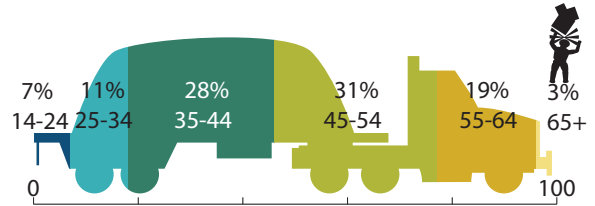







Table 19. Most common struck by or against injuries by type and source combination of injuries in Specialized Freight, ranked by intervention priority.

Description	PIP Rank
Struck by cargo - e.g., box not secured on dolly, fell on driver	
Struck against truck or other equipment - slip and hit against truck	

*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 Tips

Employers

- Provide load securement training.
- Train material handlers on correct warehouse storage and stacking.
- Double check route schedule and load according to delivery route to limit the driver's need to rearrange cargo.

Drivers

- Double check that cargo is properly secured and sequentially ordered during your pre-trip.
- Stay away from your truck's trailer when a forklift loads/unloads.
- Take advantage of designated safe work areas or break rooms while loading/unloading occurs.
- If you must direct loading or unloading, have a plan with the forklift driver and a safe area to stand.
- Watch for tripping/slipping hazards such as ice, oil, debris or potholes.
- Don't allow your phone or paperwork to become a distraction while walking.
- Wear high visibility clothing.

- 129 compensable claims
- Cost \$9.5 million
- Over 48,000 days of lost work
- Drivers suffered 88% of the vehicle-related compensable injuries in Specialized Freight.

Figure 45. Compensable Claims By Age Group

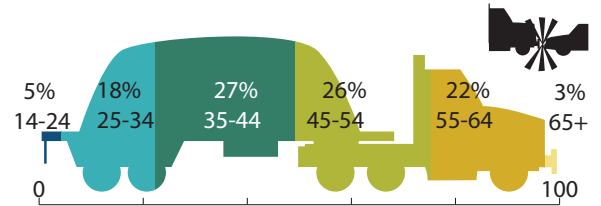





Table 20. Most common vehicle-related claims by type and source combination of injuries in Specialized Freight, ranked by intervention priority.

Description	PIP Rank
Rubbed, abraded or vibration - holding steering wheel in wind gusts, equipment failure jerked arm	1
Jack-knife or overturned, no collision	2
Ran off the highway, no collision	3
Jack-knife highway vehicle incident - unspecified	4
Highway crash, unspecified	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 Tips

Employers

- Assure proper maintenance of equipment based on your use, which may be different than manufacturer intervals.
- Provide regular brake maintenance.
- Assure drivers aren't being pressured to drive when tired or sick.
- Don't over-schedule drivers or otherwise encourage the need to rush.

Drivers

- Adjust driving to road or weather conditions and reduce speed in windy conditions.
- Minimize in-cab distractions and don't drive tired.
- Eat healthy foods, get plenty of sleep and stay well hydrated.
- Leave plenty of stopping space between yourself and the vehicles around you.
- Request training for driving in all weather conditions.
- Wear your seatbelt.

General injury prevention

Employers

- Invest in tarping stations.
- Provide and encourage the use of ratchet binders instead of lever binders.
- 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.
- Maintain delivery bays. Keep cones and mops available to clean up any water accumulation.
- 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, and 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

- Use ratchet binders instead of lever binders.
- Ask a forklift driver to put the tarp on the load. Then have a partner help cover the load.
- Regularly inspect your straps and bindings for wear.
- Check load order before leaving the dock. If cargo is out of order for delivery have the forklift driver reorder it before you leave.
- 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.
- Mark the location of voids when tarping.
- Report broken equipment to your employer.
- Wear your high-visibility clothing and sturdy shoes with good traction.

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