



Safe handling when securing loads on trucks



Campaign report

The transport industry has a high rate of serious injuries associated with workers securing loads, especially when using dogs and cheater bars.

This campaign's goal was to reduce the incidence and severity of injuries associated with securing loads on trucks by raising awareness about the risks associated with equipment and activities.

This report provides information about the outcomes of the campaign and practical guidance to enable businesses to better manage their own risks when securing loads.



Key issues

The safe handling when securing loads report from the 2012 campaign found that while transport operators were actively taking steps to address unsafe practices associated with securing loads on trucks, unacceptable high risk practices were still occurring. The report made the following recommendations:

- The safe handling when securing loads on trucks campaign should focus on targeting businesses that manufacture or supply load restraint equipment to improve their understanding about how to eliminate or reduce risks.
- Manufacturers and suppliers of load restraint equipment should expedite the uptake of safer equipment and phase out the use of dogs and cheater bars.
- Employers within the supply chain should be targeted to help influence and minimise risks associated with the loading and unloading of trucks.



The campaign

The campaign was continued in 2014 with the following objectives:

- build industry capability to control risks
- influence the design and systems of work that eliminate risks
- assist industry in understanding the law and how to comply
- build industry leadership to influence attitudes that value health and safety.

There were several key activities that were delivered during the campaign.

Industry forum

This forum was held to launch the campaign and showcase innovative load restraint devices and promote the use of safer load restraint equipment.

Workplace assessments

Workplace visits were conducted by inspectors to identify the types of activities considered high risk. Inspectors talked to and observed workers securing loads. The inspectors focused on how workers handled gates and curtains, placed lashings and corner protectors, and tensioned chains and webbing.

Resources



Guidance materials: Work health and safety considerations when selecting a chain tensioning device.



Case study: The case study looks at Dickenson Transport's story, their concerns about the use of load restraint devices and persistence to make the change and transition from using the devices.



Film: Safely securing loads on trucks is a film focusing on the dangers of using over-centre tensioning devices (known as dogs) with extension or cheater bars to secure loads and some safer alternatives.



Webinar: The safely securing loads on trucks webinar focused on the health and safety implications for workers who are following a risk management approach to restrain loads safely.



Assessment results

Workplace Health and Safety Queensland (WHSQ) inspectors observed high risk activities, behaviours and design issues across all types of freight tasks, vehicle and trailer types, and at sites throughout the supply chain.

Handling gates



Risks observed

- Workers manually removing or replacing gates at shoulder height or above.
- Workers manually removing or replacing gates between the ground and truck.

Suggested controls

- The risk is controlled if gates are replaced with load rated curtains or another effective load restraint such as racking or chocking.
- The risk is minimised if mechanical assistance is used to position the gates.
- The risk is reduced by a worker manually moving a gate only when the weight of the gate is supported by straps or rollers.



Handling curtains

Risks observed

- Workers walking backwards with a curtain.
- Workers manually opening and closing side curtains on trucks with hand above head height and/or behind the line of the body.
- Workers manually moving curtains forcibly along tracks and/or rollers that are poorly lubricated, poorly designed or damaged.
- Securing buckles repetitively with forceful wrist/arm exertions or awkward wrist hand positions to close buckles.

Suggested controls

- The risk is eliminated when automatic curtains or fastening systems are used.
- The risk is minimised if an extension strap is used for the curtains.
- The risk is reduced when well designed and maintained curtain tracks are used.

Placing lashings and corner protectors



Risks observed

- Workers throwing chains, webbing or lashing over the load.
- Workers climbing on the truck to place the chains, webbing, other lashings, tarpaulins or corner protectors over the load.
- Workers at risk of being struck and injured.

Suggested controls

- The risk can be partially controlled by the use of platform ladders or the use of lightweight extension poles to place lashings or corner protectors.
- The risk is minimised when retractable webbing straps (which are suspended from the roof of the trailer) are used.
- The risk is reduced when lead ropes are used for chains, these can help decrease muscular stress and the chain striking other workers.

Tensioning chains and webbing



Risks observed

- Using fixed lever over-centre load binders (dogs) to tighten chains with or without using extension handles (cheater bar).
- Rapidly tightening or loosening chains and webbing using a winch or hand ratchet load tensioner with awkward wrist postures or over shoulder height.

Suggested controls

- The risk can be reduced by using webbing instead of chains and using a turnbuckle or winch type tensioners instead of dogs.
- The risk can be minimised by using highly geared manual or automatic winches, or using containment without a tie-down device.



Campaign resources

The risk identification tool was developed to give examples of high risks and includes suggested controls.



Safe handling when securing loads risk identification tool



Industry case study

It is not recommended to use fixed or pivoting lever binders due to the risk of serious injury when applying or releasing lashings. One company shares its motivations for implementing an alternative solution.

Dickenson Transport

Transitioning to safer load restraint

Risk

Fixed or pivoting lever binders can cause serious injury when applying or releasing lashings

Solution

Change load restraint devices

Daryl Dickenson Transport found that using load restraint products such as dogs and cheater bars posed a very high risk of injuries to workers. As a result the company began to investigate alternatives. A variety of load restraint devices and techniques were trialled and many were not suitable for the types of loads or

products their employees were working with. While the company was working to improve load restraint on its fleet, their plans accelerated when a major stakeholder implemented load restraint guidelines for each of its products.

The company tried a variety of load restraint devices but found that while some were quicker, they were more expensive, or they were too heavy or too bulky. They also found that new risks could be introduced when changing equipment and methods - for example, working higher above the ground or using heavy load restraining equipment. They found trying to get devices to suit different loads was a challenge and each driver did things differently.

They found that different devices would suit different business needs and load requirements and developed the load restraint guide to assist workers chose the right restraint for the right load.

One of the major challenges they faced was getting drivers on board. So consultation and training was vital in making the transition. A consultative approach ensured it was a shared effort. The training was not simply a show and tell session, it involved ongoing hands-on demonstrations by drivers who had become familiar and experienced with the equipment.

Senior staff at Dickenson Transport are proud of their drivers, especially when they are unsure about a complicated load. Now they put in the effort to check the load restraint guide and make sure it is right. Management accepts that safety has a cost and it was a challenging transition, but their return on investment has been well worth it.

Owner Daryl Dickenson says, “The impact of change is much better than the impact of someone being hurt when you know it’s avoidable. You cannot be complacent. And it is not just about the numbers — it is personal. If your workplace has an accident, it is horrendous.”



Daryl Dickenson demonstrates the use of their latest road restraint device.



Future actions

there needs to be a continued focus on the high risk activities associated with securing loads.

WHSQ will:

- distribute this report and tool to the transport industry, it's supply chain, other government regulators and peak bodies and associations and manufacturers incorporate the findings in an industry education program
- work with the transport industry to improve understanding about how to eliminate or reduce the risks for workers associated with the key activities in securing loads.
- encourage the use of safer load restraint equipment through promotion of work health and safety considerations when selecting chain tensioning devices.

More information

For more information on workplace health and safety, visit worksafe.qld.gov.au or call us on 1300 362 128.

Find us on

