

Goodbye 2020

As we come to the end of this extraordinary year and head into peak season it's a good time to pause, reflect and reset. Christmas is always a challenging time in the road freight industry. With greater demand comes the temptation to push limits and ignore safety norms. More social engagements and alcohol can reduce our rest, leaving us vulnerable to impairment by fatigue. We know from Driver State Sensing (DSS) records that driver fatigue incidents spike at this time of year.

A natural inclination to farewell 2020 with gusto coupled with pent-up demand in the supply chain will exacerbate these trends. I encourage everyone to keep this front of mind during the festive season. Actively practicing patience and cultivating an atmosphere of order and calm helps to manage actual and perceived pressure.

We also need to be mindful that while some people are Christmas-tragics (guilty), for others this can be a lonely and anxious season. The relationship between mental and emotional state and road safety is well established, for example

- Heavy vehicle drivers diagnosed with depression are almost 7 times more likely to be involved in a crash than those without depression
- Drivers experiencing divorce or separation have a greater at fault crash risk by a factor of more than 4
- "Heightened stress due to life events" is correlated with atfault crashes

One of the good things to come out of the Covid-19 pandemic is an increased preparedness to be vulnerable. I've found colleagues and stakeholders more human, more fully-rounded as we've faced this challenge.

Mental health and personal wellbeing have become standard topics of conversation in meetings and corridors.

Let's leverage from this to keep our emotional awareness high during this busy time.

There are some terrific resources available to inform safety conversations on the relationship between wellbeing and safety. I suggest checking out the Healthy Heads in Trucks and Sheds site

In this issue:

and this graphic from the National Road Safety Partnership Program.

On behalf of the Road Transport Safety and Compliance team, merry Christmas everyone. Stay safe, stay well.

Sarah Jones, General Manager Road Transport Safety and Compliance Unit (RTSCU), Health, Safety and Environment Division (HSE)



Safe restraint of cable reels

When restraining freight, friction is our friend. Increasing friction between the vehicle and the freight can make lashings up to four times more effective. This reduces the effort and equipment required for the same outcome, compared to low friction situations.

One exception to this is for round items as increasing friction has no effect on an item's ability to roll. For this reason, load restraint requirements for round items are often not intuitive, particularly with heavy items like cable reels.

Round items also represent a high risk if they dislodge from a vehicle as they will often roll until they collide with

something. This was the case in March this year when a cable reel dislodged from a vehicle in Melbourne. The reel rolled through an intersection before hitting a gutter and coming to rest as illustrated on the right.

With some cable reels weighing over 20t, to ensure a safe journey it is important that an evidence-based

Cable reel

system is implemented when loading and restraining cable reels, and that loading staff and drivers are trained in the process.

Incident analysis and key learnings

On 11th November 2019 Toll was involved in a truck rollover in Dandenong South, Victoria. Toll had arranged for cartage of a container from the Port of Melbourne to the customer's premises. The container, which was collected by a subcontracted operator, contained timber plywood that was packed in China. Fortunately, the driver was unharmed in the rollover and no other road users were impacted.

Nonetheless, this incident was chilling because of its resemblance to a 2012 incident which resulted in a fatality. In this case (which did not involve Toll) the consignor imported melamine planks into Sydney from China. The container was collected from DP World in Botany after which the truck rolled while the driver negotiated a left-hand turn from the Hume Highway onto the Cumberland Highway. The container fatally crushed the occupant of an adjacent car and collided with several others. (See the photo above right)

In both this and the Toll case the consignor did not pack, load, or unload the goods. Nor did they have physical custody of the goods during their transit. Nonetheless, they had obligations as parties in the supply chain. In both cases the goods were timber (or timber-like) boards packed in China and unloaded in Australia for

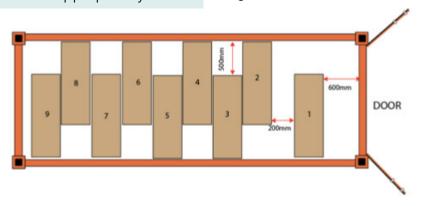


containerised transport via road.

Similar to the conclusions drawn by the Judge in the 2012 incident, Toll's initial investigation concluded that:

"The product contained in the shipping container was not restrained appropriately and moved in transit, thereby overbalancing the trailer as it turned over. There were gaps between the individual product stacks and the container sides".

These gaps are illustrated in the diagram below.



Incident analysis and key learnings (continued)

Toll was simply lucky that the outcome was not much, much worse. Recognising that fact we initiated a further investigation to grapple with the question of how a party that never has physical control of the goods such as a freight forwarder or consignor can do everything reasonably practicable to manage the risk of a rollover. We turned to the relevant case law to glean what we could about good practice and how Toll could ensure the safety of the transport task. Four good practices stand out.

Good Practice 1: Written agreements between all parties that are explicit about the importance of correct load restraint.

Toll Actions

The standard conditions Toll used for freight forwarding placed more emphasis on the placement of product so as to minimise damage/breakage rather than on load shift and vehicle stability. This has since been rectified.

Load restraint expectations were already set in the Agreement between Toll and the road freight subcontractor. However, that Agreement pre-dated the 2018 update to the National Transport Commission's Load Restraint Guidelines and has since been updated. The subcontractor is fully co-operating in a safety and compliance audit.

Good Practice 2: Appropriate load restraint systems

The Judge in the 2012 incident was explicit that the container itself is not sufficient as a restraint system. Instead, she accepted that 30 airbags wedged in the gaps between product or shoring up the sides of the load were required to prevent load shift.

Toll Actions

Toll engaged an external consultant to review a random sample of the customer's containers as they arrived at the port. That review suggested that inadequate restraint was common, rather than a one-off mistake. Consequently, Toll advised the customer that until they developed a certified load restraint system for

their product we could not transport their goods.

Customers pay our bills. Ceasing to work for a customer is a decision no one takes lightly. Discontinuing work is made even harder when the customer can readily acquire another carrier and the net difference in risk on the roads is nil.

But if we know that a practice is risky and we continue to be a party to it, can we say that we have done all that we reasonably can to ensure the safety of the transport task?

Quite apart from fronting a court, how would I, you or any other party feel with this on their conscience?

Good Practice 3: Confirming adequate load restraint at the point of packing

This is probably the most challenging part of the problem: how does a customer or freight forwarder ensure compliance with the Load Restraint Guidelines when the goods are packed outside of Australia?

In the 2012 incident the Judge recommended that the customer's employees in China confirm the restraint method and "establish [it] by a photograph, prior to the doors of the container being sealed".

Toll Actions

Based on its research Toll developed a brochure, Managing container-laden heavy vehicle rollover risk: a guide for Toll's customers and clients, to assist customers better manage risk, especially where a container is packed outside of Australia. The brochure is freely available for download. Hard copies are available from HSE staff or Toll account managers. RTSCU staff can provide information/training sessions to customers on request from Account Managers.

Good Practice 4: Appropriate speed for the conditions

A civil liability case into the 2012 fatality detailed above led the Judge to observe:

"I am satisfied...that the payload in the Container shifted as the Freightliner entered the curve at its then speed which was well above 30kmh. At its entry speed, the lateral forces exceeded the force at which the payload would be stable, and so it moved laterally and probably forward...the consequent destabilisation of the payload within the Container reduced the SRT of the Freightliner by a measure significant enough to play a causative roll in the Rollover"

"SRT" stands for "static rollover threshold". It is the point at which sideways – or lateral - force (the same force that makes your wallet slide across the dashboard) will cause a rollover on a curve. Vehicles with higher SRT are less likely to rollover. There is no regulated SRT limit in Australia. However, Australian regulators generally regard 0.4g as the minimum safe value for vehicles hauling Dangerous Goods in bulk, and 0.35g as the minimum for all other types of freight.

When we took a second look at the Toll incident it suggested that inappropriate speed for the conditions was also a causal factor in the rollover. Accounting for various radii at the intersection and possible load position, the vehicle would have rolled at speeds between 24.2 km/h and 33.4 km/h. This put in question the driver's evidence that he entered the intersection from a stopped position at the nearby lights as he simply would not have had sufficient time to gather that speed. It also indicates the relatively conservative speeds at which a rollover can occur.

Toll Actions

It is crucial that drivers and other supply chain parties understand the relationship between load placement, mass and speed. It is equally important that the people that investigate onroad incidents have the technical and forensic skills to analyse the scene.

The RTSCU developed a masterclass on managing rollover risk, including for containerised freight which staff can attend virtually. We also have toolbox

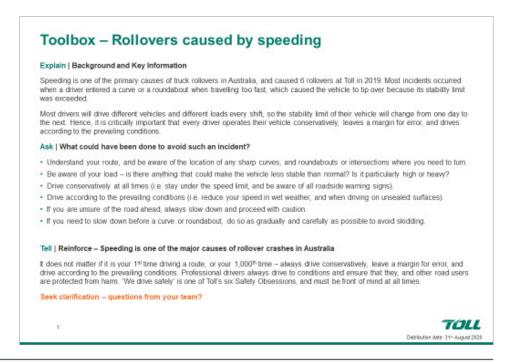
Notaro v Futurewood Pty Ltd 2015, Le v Brown, Nguyen v Brown; Tran v Brown; Monica v Brown; Huggett v Brown (No.2) 2019; EPA v Toll Global Forwarding 2018

Incident analysis and key learnings (continued)

talk material on the relationship between rollovers and distraction, equipment failure, evasive action, fatigue, loading and speeding. The speeding toolbox is reproduced at right.

It is advisable to make note of tight turning circles on the road network in Safe Driving Plans/Journey Management Plans so drivers know to be extra cautious.

The RTSCU will shortly be piloting a "crash investigation training" course with Groceries HSE staff. This course will upskill HSE staff on how to conduct on-site investigations and improve understanding of the road and environment factors critical to safe heavy vehicle operation.



Refresher: NHVAS maintenance management accreditation and its regulatory status

Background

Maintenance Management is one of the three modules of the National Heavy Vehicle Accreditation Scheme (NHVAS).

NHVAS is a voluntary scheme that applies to vehicles over 4.5 tonnes gross mass in Australian States and Territories that are signatories to the Heavy Vehicle National Law (HVNL). Those states are Queensland, New South Wales, the ACT, Victoria, South Australia, and Tasmania.

Among other benefits, participation in NHVAS Maintenance Management exempts participants with vehicles registered in New South Wales, Queensland, and Northern Territory from having to complete annual inspections on vehicles over 4.5 tonnes gross mass.

Despite participation in the scheme being voluntary, some national gazettes previously required participation in NHVAS Maintenance Management as a condition of operation for certain vehicle combinations (e.g. B-doubles, Road Trains).

New changes

Those requirements were recently changed by the NHVR. On 1st August 2020, the NHVR released updated versions of the following two important national heavy vehicle gazettes:

- National Class 2 Road Train Authorisation Notice 2020 (No. 2) – link
- National Class B-double Authorisation Notice 2020 (No. 2) – link

The updates have removed all references to participation in maintenance accreditation and annual inspections from the gazettes.

Consequently B-doubles and Road
Trains registered in South Australia
are no longer required to participate in
NHVAS Maintenance Management and
completion of annual inspections are no
longer required.

Continuing arrangements

The requirement for annual inspections of heavy vehicles over 4.5 tonnes registered in New South Wales,

Queensland, and the Northern Territory remains in place. However, participation in NHVAS maintenance accreditation continues to grant exemption.

Permits

Separate to the above, some permits for Performance Based Standards (PBS) or other types of restricted access heavy vehicles operating in HVNL states may also require Maintenance Management as a condition of the permit. Business Units should check their permits individually to determine if such conditions apply to them.

The above requirements also apply to subcontractors working for Toll, and any hired equipment Toll uses.

It is imperative that managers of operations in all states understand these requirements and ensure that they comply with the requirements of the national gazettes, and the permits they operate under.

Update to the National Heavy Vehicle Accreditation Scheme (NHVAS) Business Rules and Standards

- On 30 October 2020, the NHVR announced an update to the National Heavy Vehicle Accreditation Scheme (NHVAS) Business Rules and Standards
- The update aligns the Business
 Rules and Standards with industryaccepted Safety Management
 System (SMS) approaches, as
 well as fixing some aspects of
 the rules that had previously
 caused confusion
- The new rules come into force from 22 February 2021 for new NHVAS participants, but all existing NHVAS participants (i.e. Toll) will have until after their next scheduled external audit (i.e. mid-late 2021 or early 2022) to bring existing systems into line with the changes
- The RTSCU currently are working through understanding the changes in the new rules, and how Toll's existing accreditation systems and processes need to be amended.
- The RTSCU will convene a stakeholder workshop on the changes for interested internal parties before the end of 2020
- In the meantime, please contact Adam Ritzinger, Accreditation Systems Manager (adam.ritzinger@tollgroup.com, or 0466 867 947) for more information, or feel free to peruse the information on the NHVR's website regarding the new rules, via the link below
- NHVR announcement

Toll Group Works with Healthy Heads in Trucks and Sheds

As the article on the front page points out, there is a clear relationship between mental health and wellbeing and road safety outcomes. What's more, there are unique pressures in road freight that can place pressure on workers' mental health. These include lengthy periods away from home, long periods of inactivity and customer pressure.

That's where "<u>Healthy Heads in Trucks</u> and <u>Sheds</u>" comes in. Launched in

August 2020, this not for profit group aims to promote the prevention and understanding of mental health issues in truck drivers, distribution centre and warehouse staff, and other road transport industry participants, as well as to support healthier options around diet, exercise and individual wellbeing.

Along with others including Woolworths Group, Qube, Coles, Linfox and Ron Finemore Transport Toll is a corporate partner of Healthy Heads. Peter Stokes (President Global Logistics) is a voluntary board member while Sarah Jones (General Manager Road Transport Safety and Compliance) sits on the advisory board.



