

# SPEED LIMIT SAFETY

Are Christmas Trees Allowed on Car Roofs?

Are Autonomous Cars Too Polite?

Presents with Lithium-ion Batteries

Dangerous Good's Waste Disposal

> Safety Leadership Course

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### Merry Christmas and Happy New Year

As people prepare for the Christmas break we discuss whether higher speed limits might lower the road toll as well as whether you can drive with a Christmas tree on your roof.

Other Key topics we discuss are presents with lithium-ion batteries and are autonomous cars too polite.

Safety Action Office is closed for holidays from lunch time 22 December 2023. We re-open on Monday 15th January 2024. Clients and friends can contact your key consultant for support by email or mobile during this time.

### **Farewell From Katie Weber**

It is with mixed joy and sadness that I announce my departure from Safety Action.

After 15 years with Safety Action, I will be moving to an in-house safety role with ESTA and look forward to continuing my safety journey with them.

Even though I won't be in the Safety Action office any more the relationship will always remain, and I will never be far away.

Safety Action has been an amazing company to work for and I have enjoyed seeing family and friends every day, and will definitely miss the team and fun we have.

### What I have enjoyed most working with Safety Action:

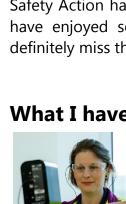
The people, both within the Safety Action team and our amazing clients. I have learnt, and continue to learn, from everyone I have encountered in my years and I am the person I am today because of all of you.

Safety Action wishes Katie the best on her new journey and will be a continued support for her as she moves forward. We hope to see her popping in and keeping in touch.









### MERRY CHRISTMAS FROM THE TEAM AT SAFETY ACTION



Gary Rowe



Andrea Rowe



**Stephen Weber** 



Sarah Oliver



Sue'Ellen Bennett



Nick Bennett



Theodore and Thomas

#### Safety Webinar – 8<sup>th</sup> December 2023

We invite you to join us at **10am on Friday 8<sup>th</sup> December** for our free monthly webinar to keep you up to date on workplace health and safety. Gary and the team present short informal sessions of only 20 to 30 minutes on topical issues and answer

your questions. <u>*Register here</u> Missed our last webinar? View them* <u>here</u></u>

## Andrea Presents at World Congress on Safety & Health

Andrea had the honour of presenting at the 23<sup>rd</sup> World Congress on Safety and Health at work in Sydney on Safety Risk Assessments for Collaborative Robots (Cobots).

During the presentation Andrea highlighted the key safety principles for cobots.

Visit Linkedin for Andrea's summary on her presentation.



### **Speed Limit Safety**

A motoring journalist, Jordan Mulach, has raised the question of whether higher speed limits on highways can lower the Australian road toll.

This sounds improbable but Mulach provides some interesting statistics to support his case.

He states of the 1,189 people killed on Australian roads last year only 152 fatalities occurred on 110km/h roads, whereas:

- 370 deaths happened in 100km/h zones, and
- 319 deaths in 60 or 70km/h zones, and
- 195 fatalities on roads limited to 80 or 90km/h.



This is not compelling analysis or proof of "cause and effect", but the numbers are worth further investigation.

The main argument for higher speed limits on highways is boredom and fatigue experienced on good roads where drivers feel the limit is excessively low.

However, Mulach acknowledges that we would need to improve driver skill and behaviour in Australia before we could match the discipline displayed in countries like Germany, where they have no speed limits on designated freeways yet achieve high levels of safety.

Notwithstanding this interesting question, we encourage everyone to exercise extra care and courtesy on the roads over our busy Christmas holiday season.

Acknowledgement: Based on article by Jordan Mulach in drive.com.au web news 17 August 2023

## Is It Legal to Put a Christmas Tree on the Roof of Your Car?

This time of year, many people are looking for the best way to transport their Christmas tree home, particularly if they only have a small car. This leads us to the question – can you put a Christmas tree on the roof of your car?

In short, you are allowed to secure long loads to the roof of your car subject to a number of road rules.



Australian Road Rule 292 states a driver cannot carry a load that:

- a) Is not properly secured to the vehicle, or
- b) May cause the vehicle to be unstable, or
- c) Protrudes excessively from the vehicle.

Therefore, you should be OK if the tree is tied down securely, and handling of your car is not adversely affected.

#### How far can your Christmas tree stick out from your car?

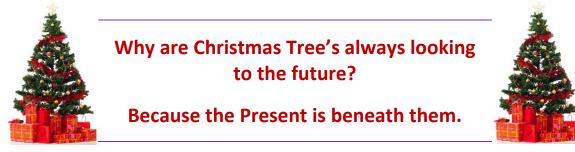
Load over-hang dimensions can vary by state but in general the following limits apply:



- **Front Projection:** Loads must not protrude more than 1.2m from the front of the vehicle.
- **Side Width:** Loads must not protrude more than 15cm on either side of the vehicle, with the maximum total width not to exceed 2.5m.
- **Rear Projection:** Rear load over-hang limited to 60% of vehicle's wheelbase. Where load protrudes more than 1.2m from the rear of vehicle, the load must be clearly marked with a red flag during the day, or a red light at night.

#### **Check Manufacturer Limits for Roof & Racks**

We also recommend you check the manual for any vehicle manufacturer roof load limits, and roof rack specifications for safe loads.



### **Autonomous Cars Are Too Polite**

As driverless taxis are being rolled out in various cities in the US, a new problem has emerged – "over-politeness induced traffic jams". Cities like San Francisco in California and Austin, Texas allow larger numbers of "robo-taxis" on the streets out of normal business hours and dozens of these taxis are roaming the streets at night.



One of the GM Cruise business autonomous taxis

Apparently when these "polite" autonomous taxis arrive at an intersection without traffic lights, to dictate who has right of way, they can get confused and refuse to move, even though gaps exist in the traffic.

In Austin recently one robo-taxi stopped at an intersection and was unable to navigate itself out, and a queue of other robo-taxis quickly built up behind it, and in surrounding streets. Authorities report these traffic jams would have been avoided if a human was behind the wheel to make a "simple decision".



Robo-taxis causing gridlock at an intersection

The challenge for autonomous car designers is getting the balance right between achieving the main objective of providing efficient transport with giving safety the top priority, even if this means staying stationary indefinitely.

The programming for these cars is still a long way off us ordinary humans, who can quickly see a problem emerging and make alternate decisions for the circumstances. However, we expect programming for autonomous cars will learn from this experience and solutions will emerge.

\*Acknowledgement: Based on article by from drive.com.au web news 26 September 2023

# **Autonomous Taxi Permit Suspended**

Since our article above was published, in September, General Motors' self-driving taxi company Cruise has halted operations in San Francisco after the California Department of Motor Vehicles (DMV) suspended their permit to operate.

#### **Robo-Taxi Involved in Hit-Run Accident**

This decision comes after one of their robo-taxis was involved in a hit-and-run incident on 2 October.

According to Cruise a Nissan sedan in the lane next to one of its robo-taxis struck a pedestrian who entered a pedestrian crossing against a red light. The pedestrian was thrown into the path of the Cruise driverless taxi.



DMV say the Cruise robo-taxi came to a complete stop but ran over the injured pedestrian during its hard emergency braking manoeuvre. The robo-taxi then attempted to pull over, dragging the pedestrian underneath the vehicle approximately 7m.

DMV claim Cruise was slow in providing video of the incident, but Cruise deny this and say they showed DMV representatives the full video several times the day after and provided a copy of the video when requested.

#### **Robo Taxi Enters Fire Scene & Drive Through Caution Tape**

In separate incidents San Francisco fire fighter said they had to smash the front window of a robo-taxi when it entered a fire scene and nearly ran over their hoses. In March this year two Cruise driverless cars drove through caution tape put up after wind storms brought down trees and power lines.

These incidents highlight the complexity of situations that autonomous vehicles could encounter and increases the challenge for programmers to detect obstacles under the car as well as post collision action eg stop or pull over out of traffic.

**Note:** Based on information (above) it would appear the robo-taxi did not cause the accident, and a human driver might also have attempted to pull off the road if they were unaware of a person trapped under their car.

### **Presents with Lithium-ion Batteries**

WorkSafe Victoria has recently highlighted the risks of using equipment with lithiumion batteries. Increasingly Lithium-ion batteries are found in many everyday products, including in electric bikes, scooters, toys, and handheld power tools.

When overheated or damaged, lithium-ion batteries can catch fire, and the fires are often fierce and very difficult to put out and the toxic smoke adding to the risk.

With many presents being exchanged over the Christmas holidays containing lithium-ion batteries, we've listed below our top tips on how you can control the risks associated with these batteries:

#### At Home

1. Store batteries within the temperature range recommended by the manufacturer,



away from flammable materials, heat, or direct sunlight.

- 2. Charge removable battery packs in safe areas away from combustible materials and where they will not obstruct safe egress in the event of a fire.
- 3. If equipment, electrical leads or battery pack are damaged, do not attempt to charge them.
- 4. Ensure there is an easily accessible way to disconnect power to battery chargers if the equipment over-heats or catches fire eg a power switch well clear of the charger.

#### At Work

- 1. Refer to the battery manufacture's safe work instructions and Safety Data Sheet (SDS) before use and only charge batteries using a charger supplied or recommended by the manufacturer.
- 2. Install approved "Smart Chargers" that monitor lithium-ion battery status and automatically disconnect the power if a fault is detected.
- 3. Include the risk of a lithium-ion battery fire in your emergency response plans, especially if you have electric car chargers close to or under buildings.
- 4. Only use insulated tools when working on lithium-ion batteries.
- 5. Provide appropriate personal protective equipment (PPE) to employees involved in the servicing and maintenance of equipment with lithium-ion batteries.

# AIHS Joins Australia's Call to Ban Engineered Stone Products

The Australian Institute of Health and Safey (AIHS) has joined other leading health bodies, including Cancer Council Australia, to back the <u>report</u> released by Safe Work Australia recommending a prohibition on the use of engineered stone in Australia.

The report recommends that "WHS Ministers prohibit the use of all engineered stone and implement a licensing scheme for certain work with engineered stone previously installed.

As many as 1 in 4 stonemasons working with engineered stone are contracting a form of silicosis that develops after relatively short exposure periods. The condition is severe and worsens relatively quickly.

The AIHS acts as a voice for the safety profession and is committed to working with industry to protect the health, safety, and wellbeing of all affected workers.

See the full statement here.

### 2-Day Safety Leadership Foundation Workshop

Start 2024 with our in person workshop on effective communication, safety legislation, what to do and not do when there's a safety incident, risk assessments, review work procedures and how to conduct safety talks and positively change behaviours.

#### 21<sup>st</sup> & 22nd February 2024

Early Bird Price \$980+GST until 1<sup>st</sup> February (normally \$1,500+GST) Includes catering, training materials and manual. 8am – 4pm each day Safety Action, Clayton

#### Click here to register.



"I wished I had done this course 20 years ago" – Manager, Melbourne Water "Everything I thought I knew about safety law was wrong" – Metro Manager

### **Dangerous Goods Waste Disposal**

Last month Andrea presented to the Southern Safety Group about Dangerous Goods (DG) storage.

Discussion with the attendees raised some interesting but common issues related to chemical waste, including;

- Waste chemical and waste chemical containers must be collected by licensed waste contractors, or collected by the supplier.
- It can be difficult and costly to engage waste contractors to collect waste chemicals or containers.
- Waste contractors often refuse to collect small amounts of waste or containers, without extra payment, resulting in businesses accumulating large amounts of waste and empty containers.
- Empty dangerous goods containers are treated as full when calculating site DG quantities.
- Large quantities of empty containers can impact on site placarding and manifest requirements.

#### What Can Businesses Do?

- 1. Be aware of site dangerous good quantities including empty containers.
- 2. Have designated locations for waste chemicals (with spill containment) and waste containers.
- 3. Keep empty containers clearly labelled.
- 4. Display signage placarding requirements for DG storage and waste storage.
- 5. Have DG separation requirements including for waste and empty containers.





Southern Safety Group (not for profit) exists to provide members with quality, relevant and practical advice on workplace OH&S issues.

#### Monthly Meetings at Springers Leisure Centre, Cheltenham Rd Keysborough, Vic.

Held on the last Monday of the month from 3pm to 5pm.

Providing monthly meetings to offer assistance and advice to members and to provide a forum for discussion of health and safety ideas, issues, problems and solutions.

More information and contact SSG here.

## Diesel Powering Remote Electric Car Chargers

The National Roads and Motorists Association (NRMA) using \$100m of government funding is installing diesel generators to support electric vehicle charging stations in remote areas.

The image below shows an electric vehicle charging station in Elrunda, in the Northern Territory, with a diesel generator. Elrunda is about 150km south of Alice Springs.



Electric "bowser"

**Diesel** generator

The Drive.com.au website (1 Nov 2023) has a video clip of this charging station with the diesel generator running, even though no one was using the electric chargers.

However, an NRMA spokesperson explained this is a trial hybrid solution for remote areas with no power supply, and the generator was being run at the time the passing motorist filmed it to confirm correct operation of the new installation.

The charging stations have solar panels and batteries, but NRMA say the diesel generator may be needed eg if there is a series of cloudy days.

To be fair, if I had an electric car and I needed a charge top-up in a remote area, I would be pleased to have a charging station with a back-up diesel generator to give greater assurance I would not be stranded.