SAFETY action®

February 2024

Health & afety Trends from 2023

Power Leads on Footpath

The Future of Safety and Work

Trucking Exec Jailed 🖌



Would You Trust a Car With No Steering Wheel?



What's New in February?

Gary discusses the 5 levels of driver automation and the safety issues arising with self-driving cars.

Also this month;

- Trucking executive jailed for 3 years.
- Do car companies have a sense of humour?
- Can you use power leads across footpaths?
- Australian work injury trends from 2023.
- The future of safety and work from the Safety World Congress.
- Selfie hazards.

Stay Safe!



SAFETY ACTION TEAM



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Safety Webinar – 9th February 2024

Join us at <u>10am on the Friday 9th February</u> 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 question.

Register Here

Missed our last webinar? View it here



Self-Driving Cars are Obedient but Not Smart

Would You Trust a Car with No Brake Pedal or Steering Wheel?



Our Future with Self-Driving Cars

Futurists predicted self-driving (and flying) vehicles decades ago, often as part of science fiction stories. It has taken longer than expected, but they are now very close to reality for the average motorist.

Autonomous vehicles (eg robo taxis) are rolling out in various countries overseas, and the technology is actively being tested locally. Indeed, the Australian National Transport Commission (NTC) has released its policy on what changes will be necessary to our road laws to deal with on-road enforcement of autonomous vehicles.

Levels of Driver Automation

There are five generally accepted levels for vehicle automation, these being:

- **Level 1**: Very light eg speed managed with cruise control.
- **Level 2**: Safety features include adaptive cruise control, anti-lock brakes, stability control. Driver monitors and can take control at any time.
- **Level 3:** Vehicle has sensors to detect road features and obstacles and can perform most driving, but driver to monitor and over-ride still required.
- **Level 4:** Car fully automated and able to operate on any type of road in all conditions. Driver over-ride still possible.
- **Level 5**: People are purely passengers with no driving controls in the cabin. So presumably no driving licence required and no alcohol limit.

Most new vehicles are already at level 2 with some models capable of level 3 selfdriving. Full level 4 and 5 vehicles are being rolled out overseas eg robo-taxis in US.

Autonomous Cars are Obedient but Not Smart

Autonomous vehicles are 100 percent obedient, but they are not intuitive and do not get smarter with experience like humans.



Autonomous cars are not intuitive and do not get smarter with experience We underestimate how sophisticated our human mind is when we think programming a car to drive itself is straight forward. We interpret thousands of little things as we drive and adapt and learn from them.

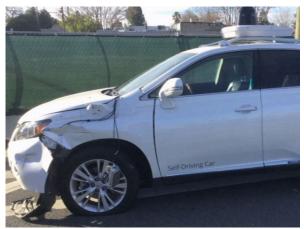
For example, we don't slam on the brakes if a large bug flies into the windscreen, but some autonomous vehicles have initiated emergency stops in busy traffic when something flew across a forward sensor, and it interpreted a "possible collision".

Autonomous vehicles at this stage are not self-learning machines, and programmers have to anticipate every conceivable circumstance and provide instructions for the car. We reported in our December newsletter that a robo-taxi had driven into a fire scene, and another went through temporary danger tape across the road to warn of a fallen tree.

Who is Responsible for Autonomous Car Accidents?

When autonomous vehicles hit the road in Australia without direct supervision, who will be accountable for any accidents?

If the vehicle is a level 5, with no driver controls, the vehicle manufacturer and autonomous systems developer would have to be accountable for any deficiencies in their system which causes or contributes to an accident.



However, if it is a level 4 autonomous vehicle and the "driver" does not intervene, or quickly enough, to avoid or minimise an accident will they be liable, as they may not be looking at the road ahead?

Licenced drivers will almost certainly remain responsible for monitoring safe operation and over-riding any driver aids for vehicles of level 1 to 3.

This story has a long way to go, and we will update you on the safety issues as this exciting development takes to the roads.

"We don't intend to stop driving, but we will look back one day and realise we have"



Do Car Companies Have a Sense of Humour



Franz von Holzhausen laughs at his own failure after breaking the window

You may have wondered, do car companies have a sense of humour. Well, yes at least one does, Tesla.

Some may remember the highly publicised failure back in 2019 when the Tesla chief designer, Franz von Holzhausen, broke a side window at the unveiling event of the proposed Cybertruck

when he threw a metal ball at it. He had intended to demonstrate how strong it was.

Now, Tesla is selling a stick-on decal for the Cybertruck side window to celebrate that famous failure. The decal can be purchased at the Tesla online store for about A\$80.



Stick-on decal you can buy for your Cybertruck window







In November 2023, Andrea Rowe attended and presented at the "The 23rd World Congress on Safety and Health at Work in 2023" in Sydney. The brought together over 3000 global leaders in safety and harm prevention from over 120 countries.



The Congress provided a global forum for the exchange of knowledge, best practices, and experiences to promote safe and healthy work environments for all.

Andrea presented as part of the symposium "Digital Transformation and the Human Factor in Machine and System Safety – Opportunities and Risks" which focused on the role of digitalization in occupational safety, health, and well-being. Topics included cybersecurity, IoT, AI and machine learning, virtual and augmented reality, robotics, and cobots.



The event presented good practices supported by scientific evidence, addressing new technologies like remote access control, cloud connections, and smart protection devices. It aimed to provide a comprehensive view of a modern, digitalized, prevention-oriented production system. Presented shared new technologies that can reduce the physical burdens on human workers and other technologies such as Artificial Intelligence that can enhance the safety managers' role. Presenters guided the audience where caution is needed when introducing new technologies.



Andrea Rowe's presentation highlighted the digital transformation in machine and system safety. She focused on collaborative robots (cobots) and their interface with humans, exploring historical robot laws, categories of robots, machinery safeguarding, and key safety principles for working with cobots and automated guided vehicles (AGVs). She emphasized the importance of safety in environments where humans and robots coexist, safety stressing effective protocols and comprehensive risk assessments.



*AI used to write this article.



Work Injury Trends From 2023

Safe Work Australia has compiled their research into workplace injuries and fatalities in Australia.

It shows that in 2022 there were 195 worker fatalities

due to traumatic injuries sustained in the course of a work-related activity and Mental health conditions accounted for 1 in 11 serious workers' compensation claims.

Whilst young workers suffered more injuries, the age group with the highest number of fatalities was older workers, 55 years and over.

Highest Work-Related	
Injuries	
Strains and Sprains	
Over-Use	
Mental Health	
Falls	
Slips and Trips	
Vehicle Accidents	
Being Hit by Moving Object	

Worker Fatalities by Age Group 2022		
Age group (years)	No. fatalities	
<25	16	
<35	28	
<45	30	
<55	36	
<65	44	
65 and over	41	

For more details refer to: Key Work Health and Safety Statistics Australia, 2023



Power Leads Not Allowed Across Footpaths

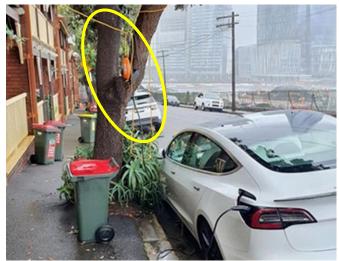


Example of running a charging cable across a footpath (with yellow cable cover)

As electric vehicles become more popular, owners living in inner city suburbs without off street parking are increasingly resorting to "illegal" and unsafe practices to charge their EV outside their home.

Local councils advise they do not issue permits for on-street charging because, even with the (yellow) cable protector over the cable, the leads pose a trip hazard for pedestrians and possible problem for wheels on disability scooters and prams.

Even being inventive and routing the charging cable over-head, like the example below, is potentially dangerous and likely not allowed by councils.



Power cord overhead and tied to tree, but still not safe or approved.

Port Phillip Council in Melbourne say the fine is \$960 for running cables over footpaths or nature strips, and encourage residents to submit photos of infringements, so they can address the problem and educate everyone about the risks and rules.

An engineering solution is being trialed by Port Phillip Council where "pop-up" charging points are installed kerb-side. However, these are expensive and take time for residents to get approval.

Presumably people using electric lawn mowers or leaf blowers at the front of their home are breaking the same rule? More work is needed to solve all the emerging issues arising from the electric transformation.

Acknowledgement: Based on article by S. Guthrie in Drive.com.au 11th October 2023



Selfie-Related Hazards A Public Health Concern in Australia



In recent years, taking selfies has become a popular social media trend, but this seemingly harmless activity hides potential dangers. In Australia, the trend of capturing daring selfies is believed to have led to an increase in tragic incidents, raising concerns about public health and safety. Notably, drowning and falls from cliffs and waterfalls are among the most common hazards associated with selfie-taking.

The Youth at Risk

The demographic most affected by these incidents is notably young, with the average age of victims being around 22 years old. A significant portion of these victims are females, highlighting a worrying trend among young adults seeking adventure and social media recognition. These incidents often occur in scenic yet perilous locations, such as aquatic sites and cliff edges, which are popular for their picturesque qualities but are fraught with hidden dangers like strong currents, slippery surfaces, and unstable grounds.

A Shift in Safety Measures

Traditional safety measures, such as warning signs at popular selfie spots, are proving insufficient. In response, researchers and authorities are advocating for more proactive approaches. This includes the utilization of social media platforms like Instagram to directly communicate with users, particularly when they are identified near known high-risk areas. The aim is to provide real-time safety alerts and information, potentially averting avoidable accidents.

Public Health Perspective

The increasing number of selfie-related accidents is now being viewed as a public health issue. This approach moves the focus away from victim-blaming to a more preventive and educational stance. Similar to how driving without a seatbelt or smoking were once normal but are now recognized as public health hazards, dangerous selfie-taking is being added to this list. It's a shift towards understanding and changing risky behaviours through effective communication and education.

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Safety Tips for Selfie Takers

- 1. **Check Weather and Water Conditions:** Rapid changes in weather and coastal conditions can transform a safe spot into a dangerous one.
- 2. **Observe Safety Signs and Barriers**: These are put in place to provide crucial, life-saving information.
- 3. **Stay on Designated Paths**: This not only ensures safety but also protects the environment.
- 4. **Avoid Edges and Unstable Ground**: Cliff edges can be particularly deceptive and dangerous.
- 5. **Prioritize Safety Over Social Media Likes**: Remember, no online recognition is worth risking your life for.

In conclusion, while capturing the perfect selfie can be tempting, it's crucial to be aware of the risks and to prioritize personal safety above all. With the right awareness and precautions, we can enjoy social media responsibly and safely.

Trucking Executive Jailed for 3 Years

Following the tragic truck accident on the Melbourne Eastern Freeway back in 2020, which caused the death of four police officers, the national logistics manager of the trucking company has now been jailed for 3 years.



Scene of the tragic accident

An earlier court case found the truck driver, Mr Singh, who crashed into the police officers, while severely sleep deprived and high on methamphetamine, guilty of culpable driving causing death, and was jailed for 18 years.

Cris Large, the Connect Logistics national operations manager was charged with failing to uphold the safety regulations at the transport company prior to the deadly April 2020 crash. It was alleged the logistics manager allowed drivers to get behind the wheel without proper training, fatigue management, or supervision, and worse he falsified timesheets for drivers, including timesheets for fatal crash driver, Mr Singh.

This case highlights the risk to office-based staff who are negligent.

For more info on chain of responsibility requirements and training give Safety Action a call on 03 8544 4300 or <u>email</u>.