Prime Mover Magazine – TIC Article for July 2019 Issue.

Stop, Revive, Survive

In 2018 it was pleasing to see that heavy vehicle fatal crashes fell compared to the previous year. This result was achieved by a combination of factors including, improved road infrastructure, education campaigns, a greater number of new trucks with more advanced safety features and enforcement activities. While the 2018 result should be applauded by all concerned with its achievement, the result comes at a time when the trend not just in Australia, but all over the world, sees an increase in road vehicle trauma. Two or more decades ago speed and drink driving were the biggest contributing factors to road vehicle deaths and while inappropriate speed remains the single biggest killer on our roads, a generational change lead by education and enforcement has seen positive outcomes with vehicle crashes resulting from alcohol. However as one cause diminishes, others are on the rise. Driver fatigue and driver distraction now loom as our greatest threats. While fatigue is not new, our understanding of its extent in the cause of vehicle crashes is now better understood and its role is significant. More on that soon.

Distraction too, is a well know influencer in crashes, but has traditionally played a smaller role. However, with the advent of technology over the past decade, particularly personal communication devices, distraction is quickly growing as one of our greatest threats to road safety. Australia is one of the world leaders in vision technologies that can detect in vehicle mobile phone use, with successful trials underway by NSW-RMS in Sydney. Initial findings show that multiple cameras are able to detect phone use within a vehicle and identify both the driver using the device and the vehicle. Seemingly while the technology exists, our laws lag. The debate about the introduction of these systems is not about the technology's function, or ability to detect in vehicle mobile phone use, but privacy and ethical issues surrounding the use of the technology. In a world where political correctness appears to increasingly override common sense, I will watch with interest as the lawyers debate the issues of privacy and ethics verses the road safety of all Australians…….

The National Transport Commission (NTC) and the Cooperative Research Centre for Alertness, Safety and Productivity (Alertness CRC) have recently released the results of what is hailed as a world-first study into heavy vehicle driver fatigue. The two-year scientific study used eye monitoring technologies to evaluated alertness and the impacts of work shifts on driver awareness. The project was headed by Alertness CRC Associate Professor Mark Howard, who detailed that slow eye and eyelid movements, longer blink duration and prolonged eye closure were reliable predictors of drowsiness and fatigue. The study also confirmed the scientific link between alertness and drowsiness patterns associated with specific work shifts for heavy vehicle driving.

Key research findings included that greatest alertness levels can be achieved under current standard driving hours for shifts starting between 6am- 8am, including all rest breaks. While the greatest risk of an increase in drowsiness occurs after 15 hours of day driving (when a driver starts a shift before 9am); after 6-8 hours of night driving (when a driver starts a shift in the afternoon or evening); when driving an early shift that starts after midnight and before 6am; during the first 1-2 night shifts a driver undertakes and during long night shift sequences; after five consecutive shifts when driving again for over 13 hours; when a driver undertakes a

backward shift rotation (from an evening, back to afternoon, or an afternoon back to a morning start) and; during nose-to-tail shifts where a seven-hour break only enables five hours of sleep. The summary report containing all of the key findings and recommendations can be found at: https://www.ntc.gov.au/current-projects/heavy-vehicle-driver-fatigue-data/

The Truck Industry Council (TIC) would encourage all truck operators, scheduling manages and drivers alike, to review this ground breaking research and to put into effect its findings. TIC members, the truck manufactures and importers, will in turn continue to develop fatigue monitoring systems that predict driver fatigue and alert the driver of their potential decreasing awareness of the driving task. Together we can work together to minimise fatigue as a major contributor in heavy vehicle road crashes, just as the prevalence of drink driving has decreased over time.

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