

Health and Wellness Subcommittee meeting

1/14/2020

TRB at Marriott Marquis

Sarah Jones: Suicide by Truck (in Australia)

Suicide-by-truck: In Australia, suicides are removed from the crash data. Sweden is the only country that reports on vehicular suicides and they estimate the prevalence at around 10%. In Australia, suicides on roadways are under-reported and there's no good database.

The suicide problem is not addressed with our usual safe driving messages (obviously).

Vehicular suicide attempts have a high lethality to the individual, and it's the method with the highest collateral damage.

Australia estimates that 20% of their fatalities are actually suicide-by-truck. They had a hard time believing it, so they looked at it more closely in other studies. Sadly, that rate is looking likely. Other studies came to similar conclusions (17-20%)

Near misses are unquantified. Commercial drivers for Toll Group give Sarah self-reported. It has a major impact on the drivers. They are generally the 1st responder. In Australia, the media bias is that the truck driver is always at fault. Toll Group had to address that they are dealing with a work force suffering from PTSD.

The State of Queensland has a 15% higher than country average for suicide-by-truck. What's really at play is that they have a higher rate of drive camera use so they share that footage with law enforcement. It might also be something about Queensland (higher baseline suicide rate anyway), but this could mostly be better data.

Countermeasures:

- 1) Communicate without contagion. Look at Mind-frame materials online. Some guidelines on reporting so that you don't trigger copy-cat/clusters.
- 2) Approached other road safety partners who became a working group focused on the problem from multiple perspectives. Trying to quantify the problem and develop interventions. AusRoads is funding this effort.
- 3) Use cameras. It's a sensitive topic among drivers, but the ability to record the events is important.
- 4) TrackSafe—an established organization working on suicide-by-rail. They have partners in anti-suicide and mental health agencies. Trained station staff to notice and engage. Toll Group used similar methods to identify places on the network and train the drivers to notice and engage—at least this might work on pedestrian suicides.

Jerry Krueger: Marijuana, CBD, Vaping—implications for commercial driving

One CTBSSP study by Krueger and Lehman (2011) looked at the performance impacts of cannabinoids and stimulants. Included stuff drivers could buy at truck stops. Biggest issue is poly-drug combination of THC and alcohol. THC effects alone are less clear in terms of impairment and level of impairment in a dose-response curve. Edible marijuana products give slow buildup of THC in the blood compared to very rapid THC level increase from smoking.

Marijuana today is about 4x more potent than that which was used in the published studies in the older literature. If there *is performance* impairment, it may last a couple of hours or as long as 24 hours. Most of the THC effect ends after about 3 hours.

The literature is clear that low doses have no detectible impact on performance. Marijuana doesn't necessarily show links to crash likelihood, and that might be because impaired drivers realize it (more than they would with alcohol) and compensate. They tend to drive more cautiously under the influence whereas alcohol-impaired drivers become disinhibited and aren't as aware of their level of impairment.

Difficult to get accurate data on marijuana-impairment and crash involvement. It's a multi-faceted problem because they might also be drunk and the behavioral cues may be the same as drowsy driving, so maybe enforcement doesn't check for marijuana.

Are truck drivers self-medicating to get the anti-anxiety benefits (?) of CBD oil? Nobody knows. DOT still says it is not allowed for commercial drivers (and ANY safety-sensitive transportation employee). No medical marijuana for truck drivers.

Vaping is a growing problem! It's got lung-related health issues too.

Since states differ on how they approach driving under the influence of drugs, and marijuana products are only lightly regulated in the 11 states with legalization...WSJ says we're undertaking a risky social experiment.

Mike Belzer

Excessive Work Hours & Hypertension: Evidence from the NIOSH Survey Data

Takahiko Kudo and Michael Belzer

Truck driver survey completed in 2010. Provides data on work hours, compensation model, and health.

- Competition drives carriers to lowest cost
- Lowest cost drives rates down and squeezes drivers
- High turnover in transport pushes freight operator costs to the public

Insurance requirements are very low compared to actual costs of crashes and incidents. Health and safety costs not covered by insurance are simply placed on the public.

2010 NIOSH survey shows the median employee truck driver work 60 hours per week, but 20% of them work more than 75 hours per week. On average, they work 10.5 hours per week. On average, 27% of their work is unpaid.

Long work hours are associated with sleep loss and poor sleep quality. Sleep loss leads to fatigue and health consequences, including hypertension.

Truckers (and their families) theoretically are engaged in an economic tradeoff of work hours, paying obligations, and health. Testing that with a statistical model is difficult. The data are noisy.

The results of analysis show impact of work hours on hypertension for those NOT using medication, but not for hypertension overall.

Discussion

Karl presented a series of points of specific interest to the Health & Wellness Subcommittee from the ANB70 Committee's 2020 Strategic Plan. Bob Scopatz said that we'll have a final comment period open for the week after TRB so that the plan can go to our TRB staff and section leaders at the end of January.

Jerry Krueger asked if we can we emphasize the tie-in to crash causation as that would be of interest to FMCSA for the upcoming large CMV crash causation study.

Ed Watt opened the idea of work organization and other related circumstances. Don't forget the ideas of food choices, work rules, and payment.

Can we look at how fleets can "buy more health" based on choices they make in policies and payment models?

Bob Scopatz mentioned that we had a Sunday Workshop about light-duty vehicles. Some interesting findings and topics in that area, and it seems that injury rates are largely driven by the number of stops, and it's much higher than in long-haul trucking.

Karl mentioned two projects they are seeking comments on via the web. He provided web links.

- Local/short-haul survey:
<https://www.regulations.gov/searchResults?rpp=25&po=0&s=CDC-2019-0104&fp=true3&ns=true>
- Center for Motor Vehicle Safety Strategic Plan 2020-2029:
<https://www.federalregister.gov/documents/2019/12/16/2019-26999/niosh-center-for-motor-vehicle-safety-strategic-plan-2020-2029>