

Workplace road safety: Looking beyond the role of the driver

Dr Sharon Newnam

Senior Research Fellow

Monash University Accident Research Centre



Extent of the problem

- Road traffic injury is the leading cause of work-related death in Australia.
- More than 30% of registered motor vehicles in Australia are work-related vehicles.
- Fleet vehicles comprise of up to 5.3 fatalities per 100,000 registered fleet vehicles





A system approach to workplace road safety







A program in:

Challenging drivers key salient beliefs



Feedback and *Goal Setting*



Self-reported driving behaviour in the intervention and control groups

Newnam, S., & Watson, B. (2009). A participative education program to reduce speeding in a group of work-related drivers. *2009 Australasian Road Safety Research, Policing and Education Conference*, Sydney, New South Wales.



Feedback and Goal Setting



Newnam, S., Lewis, I., & Warmerdam, A. (2014). Modifying behaviour to reduce over-speeding in workrelated drivers: An objective approach. *Accident Analysis and Prevention, 64*, 23-29

A system approach to workplace road safety





Challenges in safety management

- Addressing the problem
 - Traditionally focused on individual compliance
 - Safety management and safety culture

- Managerial challenges
 - Visibility
 - Collection of objective information
 - Timely feedback
 - Management structure



The Gatekeeper





Safety communication intervention

- <u>Stage one</u>: Message development
 - Context-specific safety messages
- <u>Stage two</u>: Message delivery
 - > 3-month intervention
- <u>Stage three</u>: Evaluation
 - Qualitative and quantitative data collection





Safety messages

Salient belief challenged:

Everybody speeds?



Safety messages

The following excerpt highlights the content of the message:

You may think everybody speeds, but you are not like everybody – people are depending on you so it's vital that you slow down, monitor your speed, and avoid time lost from being pulled over.

Results from the intervention



Improved safe driving behaviour from pre to post intervention

Improved the quality of the relationship between supervisors and their drivers



Newnam, S., Lewis, I. (2012). Occupational driver safety: Conceptualising a leadership-based intervention to improve safe driving performance. *Accident Analysis and Prevention, 45,* 29-38. Lewis, I., Newnam, S. (2011). The development of an intervention to improve the safety of community care nurses while driving and a qualitative investigation of its preliminary effects. *Safety Science*, 49, 1321–1330.



Thoughts from Bluecare staff

believe the program has enabled some of the unregulated workers to form better communicative relationships with their supervisors and promoted unity within the service.

- supervisor



Thoughts from Bluecare staff

The program made us very aware that even speeding a little can have a large impact on ourselves and the community (clients) if we are involved in a crash.

- driver



A program in:

Safety Management for the Occupational Driver

Conceptual framework



Newnam, S. (2014). Safety Management for the Occupational Driver: The Conceptual Development of a Program, *In: Proceedings of the 2014 Australasian Road Safety Research, Policing and Education Conference:* November, Melbourne Convention and Exhibition Centre

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Leaders must be close enough to relate to others, but far enough ahead to motivate them.

— John C. Maxwell

A system approach to workplace road safety







Organisational level

1. Safety policies and procedures

- Defining safety practices and role behaviour expectancies
- 2. Risk management strategies
 - Crash database, selection and recruitment etc.
 - High Performance Workplace Practices*
 - Crash investigation*

3. Management commitment*

Project Grant

Aims of the research

•Estimate the prevalence of work-related road traffic injury

•Identify the organisational determinants associated with workrelated road traffic injury

Methodology

•Design: Cross sectional surveys and interviews

•Recruitment: Senior level managers (n=81), supervisors (n=91) and drivers (n=404)

• N=22 (3-nested model); N=165 (2-nested model)

Newnam, S., Sheppard, D., Griffin, M., McClure, R., Heller, G., Sim, M., Stevenson, M. (2014). Work-related road traffic injury: A multilevel systems protocol. *Injury Prevention* doi:10.1136/injuryprev-2013-041132



Crash Investigation: A systems approach



Newnam, S & Goode, N. (2015). Don't blame the driver: A systems analysis of the causes of road freight crashes, *Accident Analysis and Prevention*, *76*, 141-151



Safety benefits

- Significant improvement in safe driving behaviour
- Insurance premium reduction of \$29,000 (<3.5%)



Driver at-fault claims



Safety benefits





Dr Sharon Newnam

sharon.newnam@monash.edu Tel: 03 9905 4370