



Workplace Road Safety:

The mobile financial crisis

*Assoc. Professor **Brett Hughes***
Director, Curtin - Monash Accident Research Centre
Curtin University

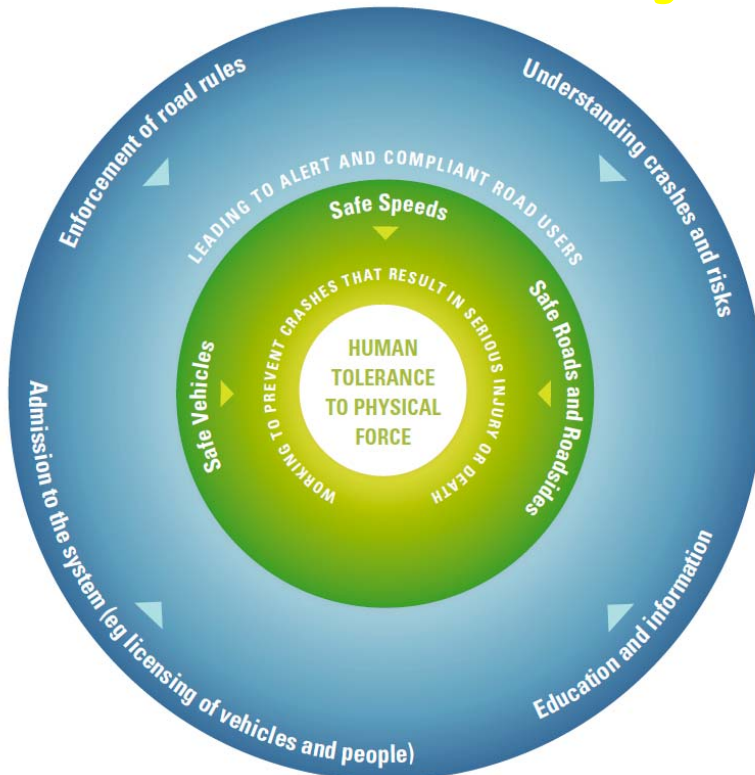
SKM Occupational Health & Safety
November 2011



Overview

- **Road Safety System**
- **Road Safety Reality**
- **Road and Workplace Safety Issues**
- **Workplace Road Safety Solutions**

Safe Systems



- Recognise that users make mistakes
- Set targets
- Recognise the limits of the human body to withstand energy
- Integration and collaboration between contributing parties and authorities

Road Rules

- There are 1.5 million road safety experts in WA, all with a good solution for someone else to do
- Cemeteries are places for people who thought “*it isn't going to happen to me*”
- The dumbest person you know can get a drivers license
- 95% of drivers think they're better than average



Overview

- Road Safety System
- **Road Safety**
- Road and Workplace Safety Issues
- Workplace Road Safety Solutions



Transport Safety by Mode

Indicator (2007)	Road	Rail	Marine	Air	Work place
Fatalities <i>Number of deaths</i>	1616	37	52	22	232
Fatality Rate <i>Deaths per 100,000 population</i>	7.7	0.18	0.25	0.10	
Injury Rate <i>Serious injuries per 100,000 population</i>	151	0.84	0.57	0.21	
Fatality Rate <i>Deaths per billion passenger km</i>	5.4	2.8		0.42	

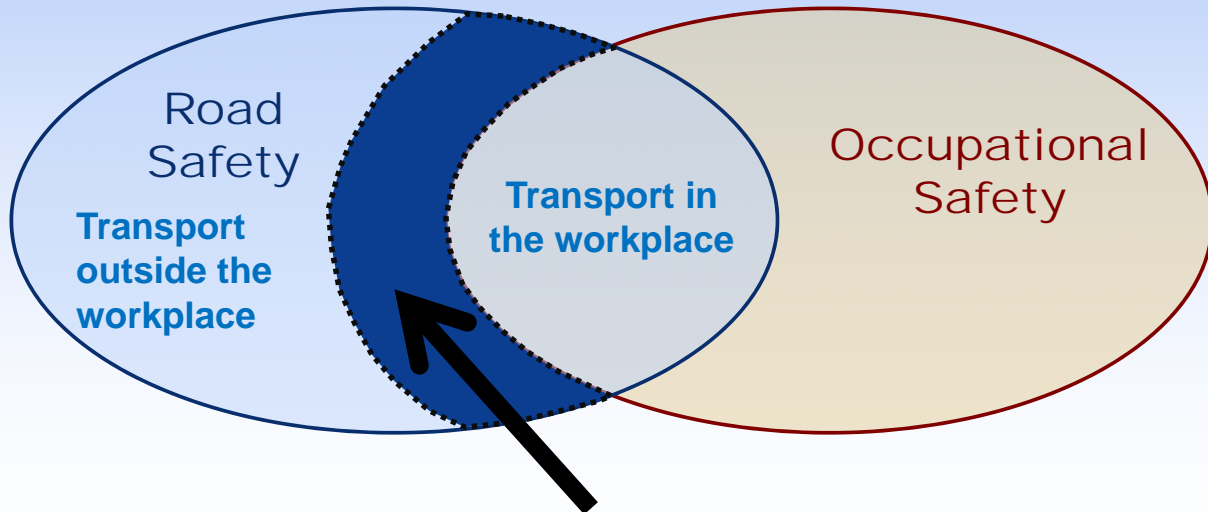
Source: Australian Transport Statistics Yearbook, BITRE (2009)

Compendium of Workers' Compensation Statistics Australia 2007-08, Safe Work Australia, (2009)



Road Safety Regulation & Responsibility

➤ Road safety as a specific element of OSH



Transport outside the workplace, which affects workplaces



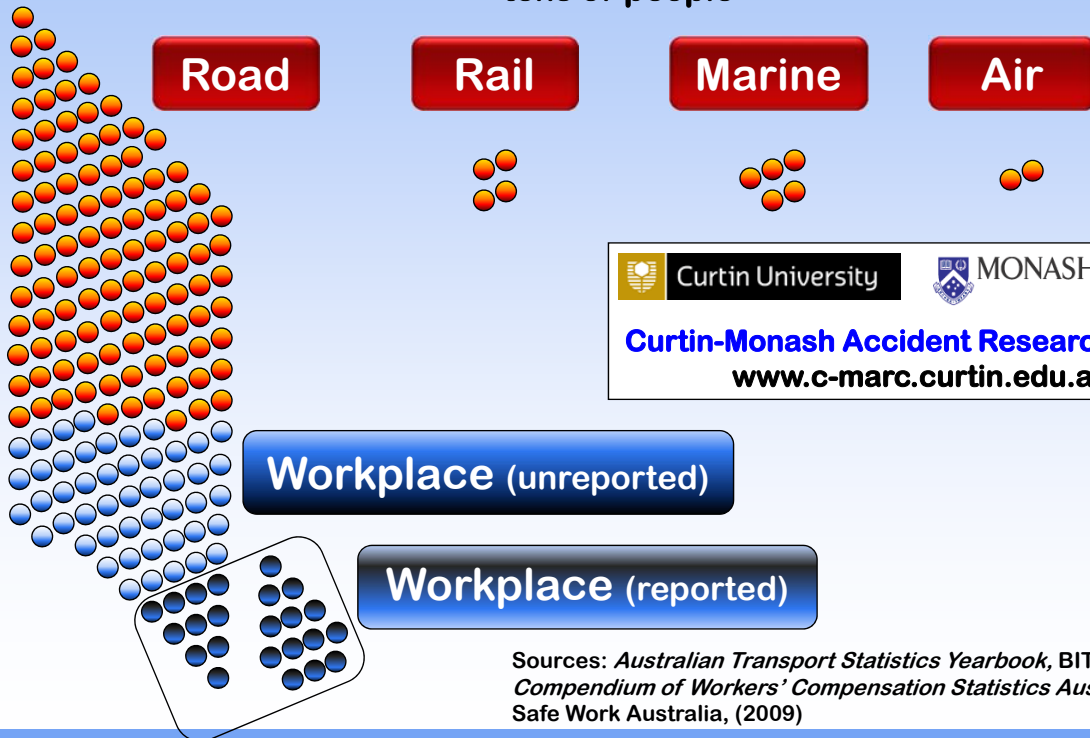
Whose Responsibility?





Deaths in Australia

tens of people



Curtin-Monash Accident Research Centre

www.c-marc.curtin.edu.au

Sources: *Australian Transport Statistics Yearbook*, BITRE (2009)
Compendium of Workers' Compensation Statistics Australia 2007-08
Safe Work Australia, (2009)



Overview

- Road Safety System
- Road Safety
- Road and Workplace Safety Issues
- Workplace Road Safety Solutions

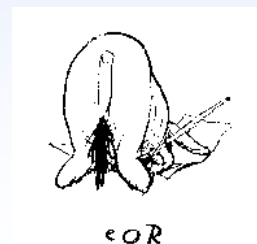


And Eeyore whispered back:



"I'm not saying there won't be an Accident now, mind you.
They're funny things, Accidents.
You never have them till you're having them.

The House at Pooh Corner
by A. A. Milne



Road Safety Issues for any Workplace

- **Road safety in any industry is important**
 - about 100 people a year die in motor vehicle crashes and are reported in OSH statistics
 - about **450 people** die in motor vehicle crashes while at work
 - vehicle crashes are the 2nd highest cost per insurance claim
 - transport work is 2nd highest frequency of serious claims
 - level crossing crash reported to cost \$20m.

*Is a crash between a minerals train and a grain truck
a transport, resources, agricultural or workplace incident?*



Road Safety Issues Outside the Workplace

- **Road safety outside the workplace is important**
 - about **1400 people die** on Australian roads each year (2009) and more than **30,000 are injured**
 - the cost of road crashes in Australia is approx. **\$30 bn pa**
 - **about 30% of lost time at work is due to road crashes** (not necessarily in the workplace)
 - **the cost of road crashes to workplaces could be about \$10 bn pa**



OSH Rules

- Safety is accurately measured by LTIFR
- There is good data on workplace safety
- We know the major workplace safety risks
- We are addressing workplace safety thoroughly – *process, policy, practice*
- Workplace regulation provides good regulation and guidance to ensure safety



Land transport related death and injury in WA

- Leading cause of injury death for young people aged 5-24 years
- The leading cause of premature death due to injury
- 2nd leading cause of injury death and hospitalisation
- 22231 hospital days per year
\$33.4M health cost per year

Source: The Epidemiology of Injury in Western Australia, 2000-2008.

Ballestas T, Xiao J, McEvoy S and Somerford P (2011). Department of Health



Land transport related death and injury in WA (2)

- Rates of death for males increasing linearly since 2004.
- Major cities had significantly lower rates than other areas.
- The rate of transport related death was 4.7 times higher for Aboriginal people.
- Death rates for socioeconomically disadvantaged areas are nearly 10 times higher



WYLFIWYF

WYFIWYF



Road & Occupational Safety





Reality Check

Unskilled and inattentive users,
operating dangerous machinery
at high speed
in an unsympathetic, hazardous,
uncertain and changing environment



Workplace Road Safety Issues

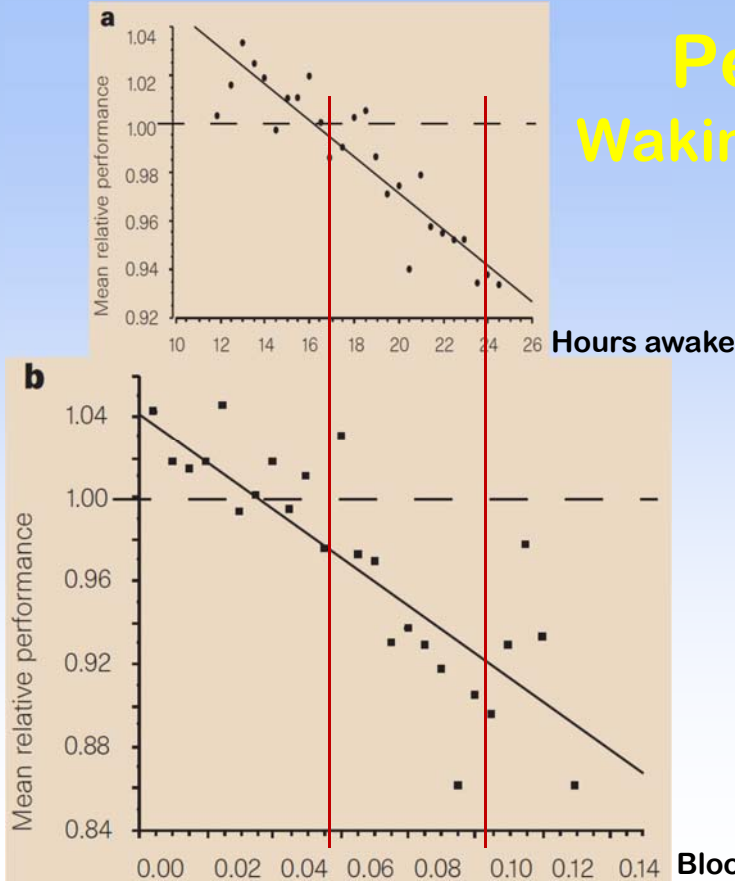
- Safe vehicles
- Safe speeds
- Driver competency
- Safe loads
- Fatigue and alcohol
- Unusual events
- Unsealed road safety
- Long distance driving

43% had not received any occupational health and safety training in the job where their injury or illness occurred.

Source : *2005-06 Work-related Injuries*,
ABS Report 6324.0 (2006)



Performance: Waking Hours v Alcohol



**.05 BAC =
~17 hours awake**

**.10 BAC =
~24 hours awake**

Source: *Fatigue, alcohol and performance impairment*, Dawson & Reid, Nature (1997)



Overview

- Road Safety System
- Road Safety
- Road and Workplace Safety Issues
- Workplace Road Safety Solutions



Workplace Road Safety Solutions

➤ Risk management

- Risk identification, elimination, reduction, incident response
- Recruitment and selection
- Induction programs
- Fleet selection and maintenance
- Incentives and disincentives
- Training and education

➤ Workplace vision and road safety policy

➤ Organisation and structure

➤ Management - systems and information

➤ Staff performance management



Benefits of Workplace Road Safety

- Reduced stress and trauma to staff and their families
- Increased morale and improved productivity
- Increasing staff availability for work
- Reduced vehicle damage and work rescheduling
- Reduced administration and HSE/OSH management
- Increased vehicle availability
- Reduced business and customer interruptions
- Reductions in vehicle and workers' compensation insurance premiums
- Lower repair, maintenance and running costs
- Increased resale value from improved care of vehicles by drivers



"... South West Hwy, 6:50am ..."

" ... fighting charges of dangerous driving, saying she has no memory of a three-car crash ... "

" ... was heading to Bunbury after a 12-hour night shift... "

" ... had a momentary lapse of concentration ... "

Source: The West Australian 4/8/10

Woman has 'no memory' of SW crash

GEORGIA LONEY

A 24-year-old woman is fighting charges of dangerous driving, saying she has no memory of a three-car crash in the South-West which seriously injured a mother and two children.

Chelsea Narelle Godenzi, of Perth, pleaded not guilty in Bunbury Magistrate's Court yesterday to one charge of dangerous driving causing grievous bodily harm and two counts of dangerous driving causing bodily harm after a crash on the South-Western Highway just east of Bunbury at 6.50am on January 19, 2009.

Police prosecutor Sgt Greg Ward told the court Miss Godenzi was heading to Bunbury after a 12-hour night shift at Collie's Griffin Coal when she had a momentary lapse of attention and her car veered on the wrong side of the road at Waterloo.

But defence lawyer Michael Devlin said there was insufficient evidence to prove the prosecution's case.

Sgt Ward said Miss Godenzi's black Hyundai hatchback clipped a Nissan Navara utility, then spun and collided with a Toyota LandCruiser, in which Norman Boddington, wife Tammy Hanke, 37, and their three daughters

were heading home after a holiday in Dunsborough.

Ms Hanke was left with a broken foot, broken leg and a broken vertebrae while daughter Shari, 13, suffered a ruptured bowel and Jaymee 10, had a 20cm gash to her stomach.

Ms Hanke gave evidence yesterday she heard a voice, which could have been Miss Godenzi's, saying that she "must have fallen asleep".

Mr Boddington told the court he saw Ms Godenzi's black hatchback fail to navigate a curve in the road.

But Miss Godenzi told the court she had no memory of the accident, in which she broke her kneecaps, right ankle, left hand and right wrist.

She rejected Sgt Ward's suggestion she could have been fatigued after night shift but could offer no explanation for the collision.

"I can't explain something I can't remember," she said.

Defence lawyer Michael Devlin questioned the police investigation into the crash and noted specialist officers from the major crash unit only investigated the accident close to eight months later.

Magistrate Michelle Pontifex is due to hand down her decision on August 20.



Best Practice Workplace Safety?

- There are alcohol free workplaces for safety, and it is equally unsafe to send people home drunk from workplaces
- Road safety risks from fatigue are identical to the risks from alcohol
- One day:
 - a worker will go home from work too tired and die in a road crash
 - a worker will die in a crash where the vehicle is not 5☆ ANCAP crash rated
 - a worker will roll a car on a gravel road and die
 - an untrained worker will roll a 4wd and die



C-MARC

- Outcome focussed
- Multi-disciplined
- Strong analytical base
- Independent
- Multimodal



Curtin-Monash Accident Research Centre

School of Public Health,
Curtin University
GPO Box U1987, PERTH 6845, Western Australia
Ph: (08) 9266 9591 email: Brett.Hughes@curtin.edu.au
See www.c-marc.curtin.edu.au for more information