

Occupational Road Safety Worldwide: Lessons for Research, Policy, and Practice (Poster presented at the World Conference on Injury Prevention & Safety Promotion. 21st-24th September 2010, London)

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The findings and conclusions in this poster are those of the authors and do not necessarily represent the views of the National Institute for Occupational Safety and Health.

Abstract

In February 2009, the National Institute for Occupational Safety and Health (NIOSH) and partners hosted the first International Conference on Road Safety at Work,* which was attended by 225 participants from 44 countries. Major conclusions from the conference are as follows:

- ◆ Occupational motor vehicle crashes affect a substantial proportion of road and worker fatalities, meaning that occupationally-focused initiatives can be highly significant.
- ◆ There is a consensus for the need to adopt a systems-based approach to at-work road safety, engaging all stakeholders.
- ◆ Purpose of journey should be identified in road safety statistics, and on-road incidents should be included in health and safety datasets to guide policy, regulation, and enforcement. Government leadership is also required to manage the safety of their own employees.
- ◆ At the organizational level, it is important to make the 'business case' for road safety and to ensure collection of data for baseline assessment and monitoring progress. These activities should be guided by a systems-led, risk-based approach and supported by rigorous evaluation.
- ◆ Further efforts are required to link research and practice, and continue to engage governments, researchers, practitioners, and NGOs around the globe.
- ◆ Follow-up activities in Europe through the European Transport Safety Council (ETSC) PRAISE project and other initiatives, Africa (through a meeting in Dakar, Senegal in May 2010), Asia, and the emerging BRICK economies can sustain the momentum generated by the NIOSH conference.

This poster illustrates the conference conclusions and outcomes, making recommendations for researchers, policymakers and practitioners, and identifying how barriers to success can be overcome.

* To see the program, presentation slides, and video from the International Conference on Road Safety at Work, please visit: <http://www.virtualriskmanager.net/niosh>

Why is occupational road safety important?

- ◆ Motor vehicle crashes are the leading cause of death at work and contribute to large numbers of nonfatal injuries – resulting in lost wages, disability, and pain and suffering for the worker and family.
- ◆ Crashes also lead to major losses for businesses – loss of productivity and valued human resources, vehicle and property damage, medical and liability costs.
- ◆ Work-related traffic makes up a large proportion of total traffic, and organizational vehicles are substantial proportions of the overall vehicle fleet in many countries.
- ◆ Fleet owners are large purchasers of vehicles, so demand for safer fleet vehicles will drive improvements in the vehicle fleet overall.
- ◆ Through the employer-employee relationship, employers have the opportunity and responsibility to set conditions for safe operation of vehicles driven for business.



In the U.S., the EU, and most other higher-income areas, transport of freight and passengers is covered by comprehensive safety regulations.



Worldwide, however, occupational safety regulations applicable to workers who drive light vehicles are limited in scope and coverage.

Most countries collect limited data on work-related road traffic fatalities, making it difficult to define the scope of the problem and monitor progress toward injury prevention goals.

Road traffic fatalities involving driving for work and commuting, selected countries (All sources are listed in full white paper)

Country	Work-related MVCs as a % of all road deaths		Work-related MVCs as a % of all occupational deaths		Sources
	Commuting excluded	Commuting included	Commuting excluded	Commuting included	
Australia (Queensland)	24	n/a*	46	n/a	Murray et al 2003
Austria	n/a	n/a	32	54	Eurogip 2009
Bangladesh	70+	n/a	n/a	n/a	Sheikh 2009
Belgium	n/a	n/a	32	53	Eurogip 2009
Canada	n/a	n/a	31	n/a	IAPA
France	10	29	23	48	Eurogip 2009, Charbotel et al 2010
Germany	10	n/a	34	61	Eurogip 2009
India	42+	n/a	n/a	n/a	Gururaj 2005, Hindustan Times 2007
Ireland	30	n/a	15	n/a	HSA 2008
Luxembourg	8	62	n/a	71	Wlodarski 2007
Netherlands	7	33	12.5	n/a	Venema & Bakhuis Roozeboom 2009
New Zealand	n/a	n/a	16 – 29	n/a	Driscoll et al 2005, McNoe et al 2005
Spain	n/a	n/a	20	40	Eurogip 2009
Sweden	n/a	n/a	20	n/a	SWEA
Turkey	n/a	n/a	14.4	n/a	Colak et al 2004
United Kingdom	17**	26**	n/a	n/a	DfT 2010
United States	3	n/a	35	n/a	BLS 2010, FARS 2010

* n/a -- not available

** NOTE: UK data are based on vehicles involved in injury collisions rather than fatalities.

Case Studies: Fleet Safety Initiatives

Case #1: D.B. Schenker (Sweden)



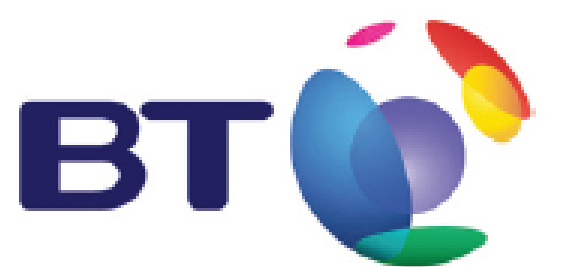
- ◆ A logistics and transport business, with 530 directly operated vehicles (Schenker Åkeri AB) and 300 contracted haulage companies: a total fleet of 4,000 vehicles in Sweden
- ◆ Has adopted Swedish 'Vision Zero' framework based on no tolerance for loss of human life in traffic, with road safety a shared responsibility of road designers and users
- ◆ Road safety at Schenker is a responsibility for several senior managers, including marketing, environment, and business development.

Priority program elements:

- ◆ **No speeding:**
Cruise control systems in Schenker Åkeri AB vehicles cannot be set above 80 km/h, whereas the speed limiters are set at 85 km/h (regular speed limits may be 90, 110, or 120 km/h).
- ◆ **No alcohol or drugs:**
Schenker Åkeri AB (530 vehicles) has equipped every new vehicle since 2006 with alcolocks and carries out random alcohol checks at their own terminals. In addition, about 15% of contracted vehicles in Sweden are equipped with alcolocks.
- ◆ **Safety belts should always be worn:**
Reinforcing existing traffic law, safety belt use is mandatory, with 60% of vehicles currently equipped with safety belt reminders.
- ◆ **Cargo should be secured properly:**
Worked with regional roads authority for installation of new road signs warning heavy trucks about sharp turns, and issued a special warning about proper weight distribution of goods/cargo between the lorry and the trailer

Source: <http://www.etsc.eu/documents/PRAISE%20Fact%20Sheet1.pdf>

Case #2: British Telecom (United Kingdom)



- ◆ BT's program, covering its fleet of over 40,000 vehicles, aims to reduce the significant impact of occupational road safety on the health, safety and well-being of its people and their families.
- ◆ Uses a loss control strategy based on the Haddon Matrix covering management culture, journeys, road/site environment, people, vehicles and society/community

Key program elements and benefits:

- ◆ Risk assessment for more than 65,000 drivers, and cost-effective targeting of interventions and training to the 10% of drivers most 'at-risk' and 70% of drivers identified as being at 'medium risk'
- ◆ Hundreds of thousands of kilometres of exposure (over 10% of journeys) eliminated through home, tele- and smarter working
- ◆ Benefits: Safer driving culture, reduced operating costs, and positive brand recognition tied to Corporate Social Responsibility goals

BT collision and cost reductions, 2001-2008

Years	Claims	Costs	Claims per 1000 vehicles	Cost per claim	Cost per vehicle
2001-2	32,610	£25,583,961	59	£785	£556
2007-8	15,626	£15,382,492	30	£983	£355

Source: http://www.virtualriskmanager.net/main/aboutus/niosh/washington-conference_case-studies.pdf

PRAISE Project: European Transport Safety Council (ETSC) "Preventing Road Accidents and Injuries for the Safety of Employees"

PRAISE is a 3-year project which receives funding from the European Commission to address all safety aspects of driving at work and driving to work. Its aim is to 'praise' best practices to help employers secure high road safety standards for their workers.

PRAISE objectives:

- ◆ To advance the awareness of the need for work-related road safety management and provide the know-how to organisations that must take on that challenge. A key instrument is to urge companies to adopt the new ISO international standard for road safety management.
- ◆ To increase awareness of the work related road safety standards of EU Member States and carry out advocacy work at the EU level: work-related road safety is an area of road safety policy that clearly needs renewed political commitment.
- ◆ To communicate the message that occupational road safety should include road safety 'at' work (driving on duty) but also road safety 'to' work (commuting). Work-related road safety management does not concern only professional drivers, and should protect employees driving their private vehicles for work-related purposes as well as those driving fleet vehicles.

PRAISE thematic reports released to date:

- ◆ Fit for Road Safety: From Risk Assessment to Training
- ◆ Fitness to Drive
- ◆ In-car Safety Equipment



For more information and to download thematic reports and other resources, please visit: <http://www.etsc.eu/PRAISE.php>

Conclusions: Increasing number of research, policy, and practice-based initiatives for occupational road safety are in progress around the world. The work environment can be an important venue for promoting road safety for the larger community as well as for workers themselves.

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