



Evaluating the effectiveness of guidance on the management of work-related road risk

An initiative by Great Britain's Department for Transport
Britta Lang (TRL)



Work-related road crashes significant problem in Great Britain

- Approx. one third of all injury crashes involve someone driving for work
- 900 fatalities arising from at-work driving p.a.
- Costs to employer arising from at-work driving approx. \$ 3965 million p.a. (HSE, 1999)
- At-work driving associated with significant NET accident risk (Broughton et al., 2003)
- Frequent engagement of high-mileage fleet drivers in potentially dangerous behaviours, e.g.:

Situation	Company over 500 vehicles	Company under 500 vehicles	Private only
Hands-free mobile	~65	~45	~15
Long drive after work	~55	~35	~15
Under time pressure	~65	~45	~15
Searching for signs	~55	~35	~15

Employers have duty of care for their employees

- Health & Safety at Work Act , 1974
- Introduction Corporate Manslaughter & Corporate Homicide Act April 08
- Employers uncertain what risk mitigation measures can reasonably be expected from them

Objective: Provide & evaluate guidance on Work-Related Road Risk (WRRS) Management

1. Develop guidance resource on managing WRRS for organisations with car, van or truck vehicle fleets
→ WRRS CD-ROM developed
2. Evaluate effectiveness of guidance in implementing/ improving risk mitigation procedures and safety culture

Contact: Lead Researcher: Britta Lang
Phone: 0044 1344 770024
Email: britta@trl.co.uk

Transport Research Laboratory (TRL)
Crowthorne House, Nine Mile Ride
Wokingham, RG40 3GA
UK

Evaluation study design

Sample: 68 public & private sector organisations in Great Britain

Design: Pre-post comparison over 16 months (Dec 06-April 08)

Procedure: See graph

Time Point I (Dec 06-Apr 07):

- Completion of WRRS questionnaire by H&S or Fleet Manager: 68 questionnaires returned
- Visit from TRL researcher with 2h in-depth interview: 57 visits carried out by TRL
- Questionnaire survey with drivers & managers of participating organisations: 385 manager forms sent out; 207 returned by 45 orgs; 2594 driver forms sent out; 812 returned by 52 orgs (Response rate: 31%)

Time Point II (Dec 07-Apr 08):

- Copies of WRRS CD-ROM sent out to participants
- Completion of WRRS & feedback questionnaire by H&S or Fleet Manager: 24 questionnaires returned
- Visit from TRL researcher with 2h in-depth interview: 37 visits carried out by TRL; 203 manager forms sent out; 107 returned by 23 orgs (Response rate: 43%)
- Questionnaire survey with drivers & managers of participating organisations: 1791 driver forms sent out; 405 returned by 25 orgs (Response rate: 23%)

Results: Management of WRRS at baseline (Time Point I)

- 51 organisations out of 68 had written road safety policy; 42 had policy signed off by senior management; 38 reviewed it regularly
- Not in place in half of participating organisations were procedures on:
 - Pre-employment assessment (of driving)
 - Regular eye-sight tests, random alcohol/ drug testing
 - MOT checks & road worthiness of privately-owned vehicles
 - Breakdown cover, first aid kit & incident report forms in all vehicles
- Total number of accidents & costs of insurance claims for work-related road crashes over 12 month period

	n	Min	Max	Central tendency	SD
Damage only	60	0	959	m= 80.3	188.4
Slight injury	62	0	50	m= 3.0	8.7
Serious Injury	62	0	12	m= 0.4	1.6
Fatality	63	0	1	m= 0.0	0.1
Annual insurance claim	47	£0	\$13,244,264	md= \$73,945	\$2,034,895

Results: Improvements in WRRS management after access to the WRRS CD-ROM (Time Point II)

- Policies & procedures on driver training, journey & subcontractor management, & privately-owned vehicle use significantly **more comprehensive** at Time Point II
- Managers' awareness of their organisations policies & procedures remains **only fair**, their confidence that organisations' systems sufficiently covers employees' safety is, however, **high**
- No change in proportion of drivers with **at-work road crashes** in 12 months period (at 17% at Time Point II); but significant decrease of active & increase of passive crashes
- **Improvement of driving-related attitudes & behaviours**, including drink driving & driving when distracted/ tired; changes in drivers' awareness of policies & procedures unsystematic

Results: Assessing change in WRRS management using the Stage of Change Model (Prochaska & DiClemente, 1983)

Of 37 organisations at Time Point II:

- 15 remain at same stage
- 6 move from contemplation to preparation or action
- 6 move from preparation to action
- 7 move from action to maintenance
- 3 move from maintenance to earlier stage

Reported barriers to change include:

- Personnel & management changes
- Lack of time, resources & dedicated staff

Recommendations

- **Data on costs of at-work crashes typically patchy**; companies should aim to gather such information routinely as it will help to target resources & develop business case for investing in WRRS
- Drivers & managers frequently unaware of policies & procedures; companies to be encouraged to include WRRS in development of their H&S **communications strategy** to ensure WRRS permeates whole organisation
- Companies drive down crashes when **senior managers** act as **champions**
- UK Dept for Transport promotes communications programme **"Driving for Better Business"** to encourage organisations to network & exchange good practice. Networking should be encouraged across companies.

