



Work- related Summary

2015



Work-related Road Safety - Summary

What is the problem?

Work-related road travel comprises activity at the site of work on or near the road, work journeys on the road and commuter journeys to and from work. Work-related motor vehicle accidents are a leading cause of death and long-term injury in the workplace and in driving associated with work. While systematic monitoring of work-related road deaths and serious injuries for the EU as a whole is lacking, it is estimated that between 40-60% of all work accidents resulting in death are road accidents while using the road for work and while commuting.

How big is the problem?

Risk exposure: Data from the UK indicate that business travel makes up about 30% of all travel, rising to 50% if commuting is included.

Risk of accident involvement: Research in Britain indicates that car and light van drivers with high proportions of work-related mileage (excluding commuting) have a 53% higher risk of injury accidents than other drivers of similar age, sex, annual mileage and motorway mileage. Professional driving involves far higher risks than those encountered in virtually any other occupation or most other daily activities.

Size of accident injury problem: Despite the fact that the rate of death in road accidents is lower for professional drivers than for other road user groups, substantial risks of injury exist for other road users in accidents involving commercial road transport.

What does science say?

Number of accidents and injuries.

Some data exist on the numbers of accidents and vehicles involved in work-related activity. Few countries, however, currently collect systematic, comparable information. Under-reporting and different definitions of work-related road travel present challenges when analysing work related road safety data. Where "commuting" is identified in national accident records, it is clear that it comprises a significant proportion of all fatal work-related accidents, more than 40% in many European countries.

High risk groups.

As with road accident risk in general, young drivers and riders bear the highest risks. European data indicate that the incident rate (number of non-fatal accidents at work per 100.000 people employed) of young workers (18 - 24) is almost 41% higher than for older workers. A German study indicated that the risk of accident involvement for young commuters up to 25 years of age is 2,5 times higher than for commuters between 25 and 50 years. Older workers also have elevated risk; a US study showed that workers with an age of 65 years and older had an occupational highway transportation fatality rate ratio of 3,77 compared to workers with an age of 16-24 years of age.

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Key risk factors.

Research shows that most work-related accidents (excluding emergency vehicle accidents) are not fundamentally different in their causal structure to any other type of road accident. However, the following risk factors have a particular influence on work-related road safety: road network safety quality, vehicle fleet safety quality, speeding, drinking & illegal drugs & prescription medicines, fatigue & time pressure & distraction.

Heavy commercial vehicle driver fatigue

Research undertaken in various EU Member States indicates that driver fatigue is a significant factor in approximately 20% of heavy commercial transport accidents. The results from various surveys show that over 50% of long-haul drivers have at some time fallen asleep at the wheel.

What are the solutions?

Improving work-related road safety requires a planned, systematic approach and is a shared responsibility requiring careful leadership and management. Key intervention strategies include:

Planning, design, operation and use of the network:

- Consideration of the safety impact of land-use planning, road hierarchies which take safety into account through specification of separated use, speed limit, median and roadside protection and safety at work zones are all relevant.

Safer journey planning:

- Important considerations for safer journey planning include necessity for travel, identification of the safest and most appropriate modes of travel for each journey and the safest and most appropriate routes.
- Ratings of road safety quality such as EuroRAP and iRAP are useful tools, as well as internet based journey planners.

Vehicle fleet quality:

- Organisations that manage vehicle fleets should be concerned with the selection of safer vehicles, their routine maintenance and the duration of their use.
- Proven vehicle safety features, such as airbags, anti-whiplash protection, electronic stability control, alcolocks, etc. can be included in fleet safety requirements.
- In-vehicle distraction from nomadic devices such as cell phones or other in-vehicle equipment should be minimised.

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Driver selection and training:

- Research has highlighted the potential scope for recruitment of safer drivers, based on personality profiles, risk perception, experience, age, and medical screening. Little evaluation, however, seems to be available of specific driver selection strategies.
- Formal defensive driver training for professional drivers combined with motivation and incentive systems for accident-free driving has been found to reduce accident rate by around 20%.

Work scheduling:

- Examining work schedules to ensure that drivers are not pressured by time and ensuring that people do not drive long journeys after a full day's work are two means by which companies can help to create a framework for safer driving.

Recovery and rehabilitation of victims:

- The severity of injury outcomes following an accident can be influenced by timely and efficient access to the emergency medical system, swift diagnosis and treatment.
- The training of professional drivers in emergency first response is recommended by international organisations.

Notes

1. Country abbreviations

	Belgium	BE		Italy	IT		Romania	RO
	Bulgaria	BG		Cyprus	CY		Slovenia	SI
	Czech Republic	CZ		Latvia	LV		Slovakia	SK
	Denmark	DK		Lithuania	LT		Finland	FI
	Germany	DE		Luxembourg	LU		Sweden	SE
	Estonia	EE		Hungary	HU		United Kingdom	UK
	Ireland	IE		Malta	MT			
	Greece	EL		Netherlands	NL		Iceland	IS
	Spain	ES		Austria	AT		Liechtenstein	LI
	France	FR		Poland	PL		Norway	NO
	Croatia	HR		Portugal	PT		Switzerland	CH

2. This 2015 edition of Traffic Safety Synthesis on Work-Related Road Safety updates the previous versions produced within the EU co-funded research projects [SafetyNet](#) (2008) and [DaCoTA](#) (2012). This Synthesis on Work-Related Road Safety was originally written in 2008 and then updated in 2012 and in 2015 by Jeanne Breen, [Jeanne Breen Consulting](#).

3. All Traffic Safety Syntheses of the European Road Safety Observatory have been peer reviewed by the Scientific Editorial Board composed by: George Yannis, NTUA (chair), Robert Bauer, KFV, Christophe Nicodème, ERF, Klaus Machata, KFV, Eleonora Papadimitriou, NTUA, Pete Thomas, Un.Loughborough.

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5. Please refer to this Report as follows:

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