Work-related Road Safety: Meeting the Global Challenge

Stephanie Pratt, PhD
Coordinator, NIOSH Center for Motor Vehicle Safety

ICOH Congress
Cancún, México
March 19, 2012

National Institute for Occupational Safety and Health
Division of Safety Research

Why do work-related motor vehicle crashes matter?

- Leading cause of occupational fatalities
- Major source of costs and liability for businesses
- Substantial economic and human toll on injured workers and families
- Impact on public safety
- Impact on economic development

What is a work-related motor vehicle crash?

- Definitions vary widely from country to country
- For the United States:
  - A road traffic crash on a public roadway involving one or more vehicles, or a pedestrian worker struck by a vehicle
  - The injured person was working for salary or wages at the time the incident occurred, and may be employed in any occupation or industry.
  - At least one vehicle was in normal operation as a means of transportation, with the impact caused by a traffic incident or motion of the vehicle.
  - Crashes while commuting to or from work are not included.

The structure and placement of institutions responsible for work-related road safety in each country determine:

- How work-related road safety is conceptualized
- What data are collected

- If occupational road safety is seen as a road safety issue:
  - May be identified in general road safety statistics as a specific "purpose of journey"
  - May identify only large trucks and buses as work vehicles
  - Crashes away from public roads are generally excluded
- If seen as an occupational safety issue:
  - Is likely to be part of occupational safety and health statistics
  - May include data on injuries away from public roads, on industrial premises, or involving industrial vehicles
- If seen as a workers' compensation or social insurance issue:
  - Is likely to be included in social insurance claims data, but motor vehicle crashes may not readily be identifiable as event types
  - Often includes injuries while commuting to and from work

Road traffic fatalities and work-related fatalities, selected countries

Country	Total RTF	RTF at work	RTF while commuting	WRF
Argentina	7,885	NR	380	481
France	3,992	105	359	529
Japan	5,772	278	NR	1,195
United States	33,808	1,130	NR	4,551
United Kingdom	1,850	540	204	171
India	134,513	29,089	NR	1,454

Note: Data are provided for single years and are most recent data available.
RTF=road traffic fatalities, WRF=work-related fatalities (fatalities at work)
NR=not reported

Footnotes for data table

- Argentina: Publicly available data do not report at-work RTFs as a separate category. Data on WRFs cover only enrollees in the social insurance system.
- France: Number of RTFs at work is based on number of deaths with a motor vehicle reported as the material agent.
- Japan: Publicly available data do not include commuting incidents.
- United States: Data on commuting fatalities are not collected through police crash reports or occupational fatality statistics.
- United Kingdom: Traffic incidents are excluded from data on WRFs.
- India: Data on RTFs at work include all truck and bus occupants. Workers cannot be identified separately. Data on WRFs cover workers in registered factories only.

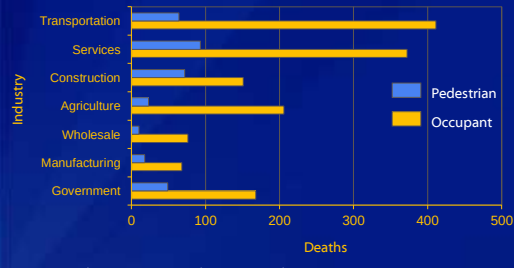
Driving for work: Large trucks and buses

- Covered by government safety regulations in most countries:
  - Licensing and training requirements
  - Maximum number of hours of consecutive driving, and minimum hours of rest between periods of driving
  - Disqualifying medical conditions, safety violations, and vehicle defects
  - Weight limits and requirements for securing cargo
  - Design and performance standards for vehicles

Driving for work: Occupational light vehicles

- Limited driving safety regulations for smaller trucks and passenger vehicles
  - Company-owned vehicles
  - Personal vehicles
- Basic traffic laws are often the starting point for company policies.
- Many organizations set a higher standard for work-related road safety because compliance with traffic laws alone does not meet their safety goals.

Work-related motor vehicle deaths for selected private industry divisions,* U.S., 2008



*Private industry (government shown separately)
Source: U.S. Department of Labor, Census of Fatal Occupational Injuries
http://stats.bls.gov/iif/oshwc/cfoi/cftb0233.pdf

Risk factors for work-related crashes

- Drivers:
  - Inadequate training or qualifications
  - Fatigue and long hours of work
  - Non-use of safety belts
  - Impaired driving
  - Distractions (mobile devices, others)
  - Medical conditions and health status

Risk factors for work-related crashes (continued)

- Vehicles:
  - Inadequate standards for purchasing or leasing vehicles
  - Absence of safety features and safety equipment
  - Inadequate inspection and maintenance
  - Mechanical defects

Risk factors for work-related crashes (continued)

- Operations and organization:
  - High levels of exposure to road traffic
  - Lack of employer commitment to road safety
  - Weak road safety program and policies
  - Scheduling and delivery demands
  - Pay schemes that discourage safe operation
  - Weak regulatory regime and enforcement
  - Poor road infrastructure

Key components of an employer program to prevent work-related crashes

- Recognition that road safety is part of worker protection responsibilities
- Assignment of responsibility for road safety to a senior manager
- Policies to manage drivers: safety belt use, impaired driving, training, mobile phone use, medical fitness
- Policies to manage vehicles: selection, inspection, maintenance, in-vehicle technologies
- Policies to manage journeys and operations: journey management, scheduling, fatigue management, travel information, regulatory compliance
- Continuous monitoring of driver and vehicle performance

How can employers promote road safety more broadly?

- Protect workers from at-work crashes
  - Can also support environmental stewardship
- Reduce risk of crashes while commuting
- Safety promotion for workers' families
- Safety promotion in communities and countries in which they operate:
  - Educational programs
  - Advocacy for changes in policies and standards
  - Infrastructure improvements

The Challenge for Occupational Road Safety

Many countries have high proportions of informal-sector workers, and a need for greater commitment and capacity for road safety in public and private institutions.

In these countries, workers' compensation, occupational safety regulations, and employer-led interventions have limited opportunity for positive impact on road safety for workers.

UN Decade of Action for Road Safety 2011-2020: The Five "Pillars"

1. Road safety management
2. Safer roads and mobility
3. Safer vehicles
4. Safer road users
5. Post-crash response

Governments are seen as the primary actors, but work-related road safety is part of every pillar.

WHO "Decade of Action" site:
http://www.who.int/roadsafety/decade_of_action/en/

Questions?

Stephanie Pratt, PhD
Coordinator, NIOSH Center for Motor Vehicle Safety
Phone: (304) 285-5992
E-mail: sgp2@cdc.gov
Web: http://www.cdc.gov/niosh/topics/motorvehicle

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

National Institute for Occupational Safety and Health
Division of Safety Research