According to the EU-OSHA report or ill health. Special issues in long-distance road haulage include:

- non-driving activities, such as dealing with the public and handling luggage, that account for a large proportion of incidents in which drivers sustain injuries or ill health.

Road traffic accidents are a leading cause of workplace death, injury and disability in many countries around the world. Accident statistics for 2007 show that 34,121 people were killed in road traffic accidents within the EU. However it is the non-driving activities, such as dealing with the public and handling luggage, that account for a large proportion of incidents in which drivers sustain injuries or ill health.

According to the EU-OSHA report OSH in figures, special issues in long-distance road haulage include:

- violence and harassment
- prolonged sitting and exposure to vibration
- increasing customer contact, including explaining organizational changes to customers
- lone work
- shift work
- conflicting demands (attending to customers and driving)
- needs of an aging workforce

The static postures required to drive a vehicle can also be detrimental to health as they can lead to musculoskeletal disorders. The role of a passenger transport driver can also be highly stressful; drivers need to cope with time pressures, negotiating heavy traffic and confrontations with other road users and/or customers. Slips, trips and falls are another common cause of injury.

The land transport sector is made up primarily of male workers, although the number of female workers is increasing especially in passenger transport. So health and safety action is male-centred. Matters such as ergonomic design still reflect the male-dominated work environment. Thus, women working in transport have to adjust to a more centred organization of work, workplace culture and working conditions. In order to make the sector a more attractive workplace for women attention has to be devoted to solving key problems, such as the difficulty of combining work and family, the highly physical workload and the lack of female-friendly facilities.

Urban bus drivers have fewer serious accidents than, for example, long-haul truckers. But among public transit operators, bus drivers suffer almost 63 percent of the reported injuries. In 2005, for example, of the 18,131 injuries sustained by transit workers, almost 12,000 injuries were bus-related. And their health issues and work problems differ somewhat from tour, long-distance, and school bus drivers. But they are exposed with inordinate frequency to such crimes as sexual offenses, drunkenness, and vandalism according to American Public Transit Association statistics.

Because of all these pressures, they're also at greater risk of post-traumatic stress disorder than the population at large, a study of Montreal transit operators found. And yet bus operators are expected to be ready at all times with a smile for the customer, a quick memory for transit information for those who ask, and a helping hand for bicyclists and the disabled. Add to that the sedentary nature of their jobs and the likelihood that, ruled by their schedules, they are apt not to eat the right foods, to drink enough water, or even to relieve themselves when they should. There's no such thing as a bathroom break. Even though on a bus with 40 people, the operators are extremely isolated.

A JUMBLE OF DEMANDS

Despite inroads by autos and rickshaws, the private bus transit industry is a stable and growing business. "A lot of problems are created because of the juxtaposition of different demands on the drivers," says Cornell University researcher Gary Evans, a professor in the department of design and environmental analysis.

Supervisors judge drivers primarily in terms of safety, on-time performance, and their relationship with passengers, he says, adding that bus drivers are in a vise. They think of themselves as professionals, he says, but they're evaluated primarily in terms of time -- no matter what kind of traffic they're facing.

German and Austrian researchers have reported that bus drivers' main troubles come from what they termed...
an "effort-reward imbalance" in the workplace. Lack of control contributes greatly to that imbalance and to the stress that results from it, Evans and co-researcher Gunn Johansson of Stockholm University reported in an article published in the Journal of Occupational Health.

"Drivers have very little decision latitude or discretion in how they carry out their jobs," they concluded. "Transit districts have hierarchical, top-down management styles with little or no employee input into the management or organization of work."

One measure of driver stress comes in the form of absenteeism. For many drivers, being absent from work is an escape from the stress of tight schedules and forced overtime. It is also a strategy to forestall the 10-year "burnout point."

A heavy price accompanies the years on the job. The very skills which get the driver through a working day are, in fact, a quiet displacement of the burden onto his target organs: the heart, the blood vessels, the gastrointestinal tract, the musculoskeletal system. It has been shown both in laboratory simulation and field studies that the experienced drivers who silently cope and seemingly automatically handle the continuous barrage of potential dangers and who roughly deny how difficult this work is, are those who show the most dramatic blood pressure and electrocardiographic responses to these threatening stimuli of the traffic environment. Reviews of the literature show that professional drivers are second to none as an occupational group at risk for hypertension and ischemic heart disease and that these diseases occur at an early adult age, also translates into enormous overrepresentation of professional drivers, up to 40%, in some series. The published papers showing a high risk among this occupational group for cardiovascular and cerebrovascular disease, musculoskeletal disorders and/or peptic ulcer disease come from various parts of the world: from Europe, the U.S., Latin America, East Asia and the Indian subcontinent. A strong relation between number of years on the job and/or number of daily hours behind the wheel have been found in many of these studies.

The terrible human toll taken by these diseases, coming at an early adult age, also translates into enormous economic costs: absenteeism, disability and early retirement. It is unusual for a mass transit operator to retire at term in any city. In the Netherlands, for example, the average age of retirement for city bus drivers is 48 and is usually disability-based, with only 12% working until the normal retirement age of 60.

"In terms of the industry, [management] needs to be more open to the idea that the environment is part of the problem," Evans said. "I've approached numerous transit districts to see if we can change the environment. Generally, I get a stonewall. The main thing the industry is to take into prime consideration is that, not to take the monolithic view that the driver is the problem."

Still, transit districts here and there are experimenting with remedies through technological innovation and changes in work practices. A study on drivers in Sweden, for example, found that improved highway design, fewer bus stops, and electronic information displays substantially altered the effort-reward imbalance in drivers' favor and led to lower blood pressure.

In fact, worldwide, there are a number of major efforts in this direction. Drs. Kompier and DiMartino, as has Dr. Evans, have published an inventory of potential strategies to prevent bus drivers' stress. There is a general consensus among experts in this area that limiting the number of hours behind the wheel, guaranteed rest breaks and diminishing time pressure are absolutely essential minimal requirements for all urban transit operators. More attention to the special health needs of professional drivers, and primary prevention programs are also necessary.

Furthermore, efforts should be made to have the operator drive on the same line as much as possible. This has been a major demand, allowing the operator to become familiar with his environment: with the passengers and all the specifics of the route. Knowing what to expect improves the level of the transit operator's control, and this is a key part of healthy-work practice.

Dr. June Fisher has stated that the urban transit operator represents the "eyes and the ears of the city". Stated another way, the troubles of the urban transit operator are the troubles of us all in the city. But, the corollary would read: the health of the city transit driver is inextricably linked to the health of the city. Efforts in the latter direction are therefore in the interest of us all.

REFERENCES

- CARE European database on road accidents