

Health promotion in the road transport sector

1. Introduction

Promoting health at the workplace requires a holistic approach. Any initiatives should consider the worker's private life, their working life, and the interaction between the two. Working conditions are known to influence the general health of workers; for example, sedentary work can contribute to obesity. Similarly, workers' personal habits, attitudes and lifestyle choices affect their health and wellbeing, and also can have an impact on their work performance.

Workplace health promotion (WHP) can be defined as the 'combined efforts of employers, employees and society to improve the health and wellbeing of people at work. This can be achieved by:

- improving the organisation of work and the working environment;
- promoting active participation of employees in health activities; and
- encouraging personal development.' [1]

WHP includes introducing measures supporting health-enhancing behaviours and attitudes; promoting mental health and wellbeing, and work-life balance; and addressing issues related to work-related stress, ageing and staff development.

Transport is a male-dominated sector (83% of workers in the sector are men). Workers in this sector are exposed to prolonged sitting, tiring or painful positions, long working hours (average more than 48 hours a week) and non-standard working hours (night and evening work, weekend work and more than 10 hours worked per day). Unsurprisingly, this sector scores relatively unfavourably on work-life balance.[2] [3] In addition, drivers have limited opportunities to eat healthy meals and take exercise breaks while on the road.

The most common health problems reported by drivers are lower back pain, overweight, [4] cardiovascular and respiratory diseases, [5] [6] and work-related stress. These problems have been found to be linked to factors relating to the working environment (such as poor work organisation) and working conditions (static work), and to individual risk factors (such as lack of exercise, unhealthy diet, alcohol abuse, smoking, age and pre-existing diseases). [7] [8] When developing WHP programmes it is of the utmost importance to consider the role and the impact of **both** organisational and individual-level factors on drivers' health and wellbeing, and to address these factors.

A review of evidence-based case studies [9] of WHP interventions found that several factors were key to their success:

- organisational commitment to improving the health of the workforce;
- appropriate information and comprehensive communication strategies to employees;
- employees' involvement throughout the process;
- organisation of work tasks and processes contributing to health, rather than damaging it;
- implementation of practices which enhance healthy choices as the easiest choices.

However, a WHP programme may not replace the management of health and safety risks at work. Instead, it is complementary to proper risk management.

2. Health aspects related to drivers' occupation

In the transport sector, occupational risk factors can be divided into three groups: those that refer to (a) work; (b) the working environment; and (c) individual factors.

Main groups of risk factors for the health and safety of drivers

Related to work	Whole body vibration, noise, prolonged sitting, tiring and painful postures, strict timetables, shift work and overnight driving, insufficient breaks and sleep, repetitive tasks and monotonous routine, unorganised meals, road accidents, transport of flammable, explosive and toxic substances, air conditioning, un-ergonomic movement while getting in or out of the cabin, etc.
Related to working environment	Carbon monoxide (CO), sulphur dioxide (SO ₂), nitrogen monoxide (NO) _x , asbestos, polycyclic aromatic hydrocarbon (PAH), benzene, particulate matter, climate conditions, pollen, physical violence, etc.
Related to individual	Gender, age, ethnicity, education, personality, attitudes, risk perception, experience and previous motor vehicle accidents, private life events, fatigue, pre-existing diseases (allergies, asthma, diabetes, myocardial infarction, etc.), medicine consumption (antihistamines, tranquillisers), lifestyle (physical inactivity and unhealthy eating) and hazardous behaviours (tobacco smoking, alcohol abuse, use of hard or soft drugs), etc.

Source: Lentisco, F., Baccolo, T.P., Gagliardi, D., *Risk factors for the health and safety of drivers*, 2009

Because individual risk factors, as listed above, may affect drivers' behaviours and attitudes towards risk perception and their health, these factors need to be considered, along with organisational risk factors, in the development of WHP measures at the workplace.

3. Workplace health promotion interventions

A number of practical workplace health promotion interventions can be put in place to improve drivers' health and wellbeing. Wherever possible WHP planning and interventions should be connected to risk prevention activities.

3.1. Health screening and education

Organisations should conduct regular health risk screening and education for drivers as a central component of any workplace health promotion initiative. Health risk screening is an evidence-based process that helps to identify key health risk factors and lifestyle concerns: for example, sleep apnoea, diabetes, high blood pressure and tobacco use problems. Additionally, trained professionals should provide counselling to drivers on how to address these concerns directly. Particular attention should be paid to diet, physical activity, weight management, sleep habits and personal accountability for health behaviours. Topic-focused training should be used as part of health education sessions. In general, education sessions should have a strong focus on building skills and confidence to motivate and sustain healthy behaviours in drivers.

The active participation of employees throughout the health screening and health education process has been proven to increase the adoption of healthy behaviours by drivers. Many successful programmes have also used coaching to encourage employees to adopt more healthy behaviours and attitudes. Education sessions or coaching programmes should emphasise the active

engagement, personal responsibility and building of confidence of drivers, thereby supporting the development of recommended lifestyle changes.

3.2. Targeted lifestyle support

Drivers should be offered topic-focused educational sessions with a focus on building skills and confidence to encourage and sustain healthy behaviours. In addition, the employer should organise the work and working environment in such a way that is supportive to and encourage healthy choices. For example, by introducing regular breaks that are long enough to allow drivers to have a proper meal and do some exercise.

3.3. Personal health coaching

Employers should offer coaching programmes that help drivers to improve their health through behaviour changes. These sessions should emphasise the active engagement, personal responsibility and building of confidence of drivers, to encourage them to implement recommended lifestyle changes.

4. Implementation of WHP interventions

Several key principles should be considered when implementing workplace health promotion actions:

- Health promotion should be a **continuous and ongoing process**. Health messaging and coordinated health awareness campaigns should be used to reinforce health messages and sustain the changes in drivers' health behaviours and attitude. Workplace and environmental support to drivers for selecting and applying healthy options should also be emphasized.
- The **active and visible support by managers** for workplace health promotion. This has been demonstrated to increase the long-term success and sustainability of interventions.
- The **participation of workers** throughout the intervention process (development, implementation, and evaluation) is essential. The better the WHP programme matches the drivers' needs, the more interested they will be to take part in it. Incentives tailored to the company can be useful in promoting a healthy culture within the company. [10]
- An understanding of the workforce demographics, employee benefits and health management objectives is important when **tailoring the intervention** to the direct needs of workers. This will make the intervention and health programme more effective. [1]
- It is important to **evaluate the developed workplace health programme**. This means examining the intervention's overall effectiveness, its impact on addressing working environment and work organisation factors, on changing drivers' behaviours and attitudes to health. The evaluation should be planned and systematic in its approach, and should be considered a key component of the overall intervention process. The evaluation should also be linked to intervention aims and goals, and to identified problems; and should use a variety of outcome measures (e.g., records of absenteeism, sick leave reports, and subjective feedback from drivers). The information derived from the evaluation of the intervention should be used to inform the further development of the intervention in order to support its continuous improvement. [11]

5. Good practice: case studies

The competitive nature of the transport sector leads to a potential conflict of interests between workplace health promotion and the commercial pressures faced by companies. However, some transport companies recognise that effective workplace health promotion may not only prevent health problems, but also lead to significant savings by, for example, reducing absenteeism. This section highlights three case studies of companies in the transport sector that implemented a health promotion programme.

5.1. *'My back is devilishly important', Belgium*

Van Dievel is a full load transport company that delivers goods within a 500 km radius of Brussels, to and from the Netherlands, Luxembourg, Germany and France. The company employs approximately 90 drivers and owns about 60 trucks and 120 specialised trailers.

In 2001 the company's director initiated this project because the workers often complained about back problems. Van Dievel has prioritised occupational health and safety for a long time and employs an occupational health physician, who gives the workers an annual medical examination. As the physician knows the company and drivers very well the workers have confidence in him. He was asked to educate workers and the management about musculoskeletal problems and diseases. This was the starting point of the health promotion project. Together with an external occupational health service (ergonomists) the company analysed the drivers' working conditions and then looked for ways of improving them. The occupational health physician, in close collaboration with an external ergonomist and eight company drivers, produced a special training programme and a booklet for drivers to show them how to work healthily and to prevent musculoskeletal disorders.

This booklet also gives general advice about balanced nutrition, correct sitting and lying, exercises to prevent musculoskeletal injuries and special advice for drivers such the appropriate sitting position behind the wheel, the right way to get in and out of the vehicle, and how to lift and handle heavy goods. The booklet, which is heavily illustrated to make it convenient to use, is given to new drivers when they start working for the company.

After a year the company evaluated the project, and found that fewer problems had been recorded since the introduction of the booklet and training. In 2002 the company won a 'Health and Enterprise' award from the European Health Club for its actions. The long-term health and safety culture of the company was the foundation for the project. The management supported and promoted the project and drivers were closely involved. [12]

5.2. *'Trim Truckers', Finland*

The 'Trim Truckers' project sought to address a number of risk factors and health issues, including health promotion, among drivers, with the help of the employer's multi-professional occupational health service provider. Firstly, the company provided health screening for drivers. This health screen was conducted by the in-house occupational physician and sought to identify key issues among drivers related to physical health and obesity; for example, sleep apnoea. When problems were identified, the driver was given preliminary health counselling by the physician and referred to a specialist for further diagnostic testing and treatment. To further address obesity and promote general health among drivers the company also started a lunch box service for each driver. The lunch box provided includes a selection of healthy foods; the company also offers information and recommendations on healthy eating principles. The third component of this WHP programme is the involvement of an occupational psychologist in the planning of shifts and routes, with the primary aim of improving scheduling to allow drivers enough time to rest. An evaluation of this intervention showed widespread satisfaction among both management and drivers. The project has also promoted a better atmosphere at work, a more positive working attitude and increased safety culture among drivers. [12]

5.3. *Health at the workplace: a holistic approach, Italy*

ATM runs the public transport services in Milan and 72 other nearby towns. The organisation employs more than 8,700 workers at 28 different sites, and serves an area with a total population of 2.6 million.

The company recognises that all employees, whether drivers or office workers, and whether they work regular hours or shifts, need to have a good work-life balance. This means focusing on factors such as healthy lifestyles, balanced diet and general health culture.

For this reason, ATM created a special unit (DRU-S) within its human resources department, composed of a manager and two experts: a psychologist and a nutritionist who give counselling sessions with practical advice and guidance on healthy diet, physical exercise and work-related stress management.

Since 2005, this unit has promoted workers' health and wellbeing through a number of integrated communication initiatives developed in conjunction with public safety institutions. An example is an in-house journal that is posted to all employees' homes and contains clear and interesting information on diet and healthy lifestyles.

ATM's so-called 'Social System' is based principally on research into the needs of the company's workers and on the qualitative/quantitative analysis of hazardous events that occur at the workplace. These events are documented in a monthly internal report that also describes the measures put in place to correct problems, as well as reports on emerging health and safety trends.

ATM's Social System demonstrates clearly that workers' needs are the driving force for action on health and safety.

In the 'Operative' area the starting point is represented by the stories of each worker, which are relayed to the ATM human resources management operative unit.

Through a holistic approach to human resources, ATM puts in place actions aimed at empowering the workers and creating mutual responsibility between the company and the individual employees. The company considers and connects the individual, social and occupational dimensions of its employees, addressing the expressed needs through information, counselling and cooperation with local institutions.

One example is the training courses organised by the company and targeted at newly recruited drivers and general workers as well as drivers. The courses cover topics such as healthy diet; chronic diseases and risk factors prevention; and healthy lifestyles with a special focus on work-life balance. Special training courses on drug and alcohol abuse prevention are held for employees whose working activity can pose a risk to third parties.

In the 'Strategy' area are the innovative social policies, which are sponsored and supported by the top management of the company.

These policies respond to the company situation by developing anticipatory strategies and designing prevention and health promotion interventions aimed at improving employees' personal and working conditions. The main objectives of these policies are: health promotion, timetable organisation, equal opportunities, social housing (especially for vulnerable groups of workers such as migrant workers or legally separated people), staff involvement, social case management of diseases, injury prevention, innovative measures of professional retraining for unfit workers, management of gender, age and ethnic differences and work-life balance.

6. References, resources

- [1] European Network for Workplace Health Promotion, *The Luxembourg declaration on Workplace Health Promotion in the European Union*, ENWHP, 1997 (updated 2005). Available at: <http://www.enwhp.org/publications.html>
- [2] European Foundation for the Improvement of Living and Working Conditions (2008). Fact sheet: land transport. Retrieved 13 December 2009, from: <http://www.eurofound.europa.eu/pubdocs/2008/149/en/1/EF08149en.pdf>
- [3] Parent-Thirion, A., Fernández Macías, E., Hurley, J., Vermeylen, G., European Foundation for the Improvement of Living and Working Conditions, *Fourth European Working Conditions Survey*, Luxembourg, Office for Official Publications of the European Communities, 2007. Available at: <http://www.eurofound.europa.eu/pubdocs/2006/98/en/2/ef0698en.pdf>
- [4] Technische Universität Dresden, '13 The situation in Europe. Germany, Policies and Best practices', in Technische Universität Dresden, *GPO Guidelines for the prevention of obesity at the workplace. Review of the theoretical framework. Report on the theories and methodologies*

for the prevention of obesity at the workplace, Dresden, Technische Universität, 2008, p. 91.
Available at:

<http://gpow.eu/media/File/Theories%20and%20methodologies%20for%20the%20prevention%20of%20obesity%20at%20the%20workplace.pdf>

- [5] Stoohs, R. A., Guilleminaut, C., Itoi, A., Dement, W. C., 'Traffic accidents in commercial long-haul truckdrivers: the influence of sleep-disordered breathing and obesity', *Sleep*, Vol. 17, No 7, 1994, pp. 619-23
- [6] Poulsen, Kjeld B., 'Healthybus - health promotion for bus drivers. From research to action' , in *WHP-Net-News* No 7, March 2000, Federal Institute for Occupational Safety and Health , Dortmund, 2000, pp. 14-18. Available at: http://www.ispesl.it/whp/documenti/whp_news7a.pdf
- [7] Fattorini, E., Stella, M., Istituto Superiore per la Prevenzione e la Sicurezza del Lavoro, *L'autobus come ambiente di lavoro. Valutazione degli effetti sulla salute dei conducenti di mezzi pubblici di trasporto urbano, conseguenti a problematiche ergonomiche e all'esposizione ad inquinanti derivanti dal traffico*, Roma, ISPESL, 2006
- [8] Ghedini, G., 'Salute e sicurezza nell'autotrasporto: le condizioni psicofisiche', in Conference "*La sicurezza stradale nell'autotrasporto: le responsabilità, le cause e i possibili rimedi*". Bologna, 12 giugno 2009, Bologna, Gruppo Federtrasporti, 2009. Available at: <http://www.ambientelavoro.it/UserFiles/File/AL09/G.Ghedini-SALUTE-E-SICUREZZA-nell'autotrasporto-le-condizioni-psicofisiche.pdf>
- [9] Italian National Institute for Occupational Safety and Prevention (ISPESL). Workplace health promotion: good practice examples. Retrieved 13 December 2009, from: <http://www.ispesl.it/whp/Modelli/ricerca.asp>
- [10] European Network for Workplace Health Promotion, *Lisbon Statement on Workplace Health in Small and Medium-Sized Enterprises. Small, Healthy and Competitive New Strategies for Improved Health in Small and Medium-Sized Enterprises*, Essen, ENWHP, 2001, p. 2. Available at: <http://www.enwhp.org/fileadmin/downloads/Lisbon%20statement%20%20final.pdf>
- [11] European Network for Workplace Health Promotion, *Healthy Employees in Healthy Organisations. Good Practice in Workplace Health Promotion (WHP) in Europe. Quality criteria of workplace health promotion*, Essen, BKK European Information Centre, 1999. Available at: http://www.enwhp.org/fileadmin/downloads/quality_criteria.pdf
- [12] European Agency for Safety and Health at Work, EU-OSHA, *Programmes, initiatives and opportunities to reach drivers and SMEs in the Road Transport sector*, Bilbao, OSHA, in publication

7. More information

- European Agency for Safety and Health at Work <http://osha.europa.eu/en/topics/whp>
- European Network for Workplace Health Promotion <http://www.enwhp.org/>