SECTORAL ACTIVITIES PROGRAMME

Working Paper

Violence and stress at work in the transport sector

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Working papers are preliminary documents circulated
to stimulate discussion and obtain comments

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Preface

The ILO's Sectoral Activities Department commissioned this working paper in preparation for a Meeting of experts to be held from 8 to 15 October 2003 in Geneva, which is intended to consider and review a draft and to adopt a Code of practice on *Violence and stress at work in services sectors: A threat to productivity and decent work.* That Meeting is part of the continuing work of the Department on 22 sectors of economic activity, of which the transport sector is one. Sectoral Working papers have been or are being prepared on a number of other sectors and subsectors as well as the postal sector, in relation to violence and stress. These include the following draft papers, which may be published in 2003: Sabir Giga and Helge Hoel: V*iolence and stress at work in financial services* (Geneva, ILO, forthcoming); Helge Hoel and Ståle Einarsen: *Violence and stress in the hotel and catering sector* (Geneva, ILO, forthcoming); Sabir Giga, Helge Hoel and Cary L. Cooper: V*iolence and stress at work in the performing arts and in journalism* (Geneva, ILO, forthcoming); Sabir Giga, Helge Hoel and Cary L. Cooper: *Violence and stress at work in postal services* (Geneva, ILO, 2003); Richard Verdugo: *Workplace violence in the education sector: Issues, solutions and resources* (Geneva, ILO, forthcoming); and Benjamin Paty, Dominique Lassarre and Anne Jolly: *Violence et stress au travail dans le secteur de l'éducation* (Geneva, ILO, forthcoming). Other papers have already been published, as follows: V. Di Martino: *Workplace violence in the health sector – Country case studies: Brazil, Bulgaria, Lebanon, Portugal, South Africa, Thailand, plus additional Australian study: Synthesis Report* (Geneva, ILO/ICN/WHO/PSI Joint Programme, 2002); V. Di Martino: Relationship of work stress and workplace violence in the health sector (Geneva, ILO/ICN/WHO/PSI Joint Programme on Workplace Violence in the Health Sector working paper, 2003); J. Richards: *Management of workplace violence victims* (Geneva, ILO/ICN/WHO/PSI Joint Programme working paper, 2003); and ILO/ICN/WHO/PSI: *Framework guidelines for addressing workplace violence in the health sector* (Geneva, 2002).

It is hoped that this study can help to promote action to tackle violence and stress in transport sector workplaces, and complement work being carried out by the ILO and other organizations at various levels to assist in reducing or eliminating stress and violence at workplaces in services sectors around the world.

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1.   Introduction

>   "Violence to staff at work from members of the public is at an unacceptable
>   level ... No one should have to accept verbal or physical abuse as part of their
>   job".

>   Bill Callaghan
>   Chair, Health and Safety Commission (UK)

"Every few days, there is another story on the news. One day, it may be a convenience store shooting; the next, a sexual assault in a company parking lot; a few days later, it's a disgruntled employee holding workers hostage, drunken passengers attacking a bus driver, or a student attacking a teacher. Not surprisingly, the incidents of workplace violence that make the news are only the tip of the iceberg. What its victims all have in common is that they were at work, going about the business of earning a living, but something about their workplace environment – often something foreseeable and preventable – exposed them to attack by a customer, a co-worker, an acquaintance, or even a complete stranger[. Some 2 million American workers are victims of workplace violence each year. It is estimated that cost of workplace violence to employers is in the billions of dollars. Unfortunately, research into the prevention of violence in the workplace is still in its infancy.]." [1]

In 2000, the Bureau of Labor Statistics recorded 677 work-related homicides in the United States, while the figure for 2001 was 639 (excluding fatalities resulting from 11 September 2001). Homicide remains the second leading cause of occupational fatalities for all workers and the second leading cause of fatal occupational injuries for women. Documented workplace violence data cover mostly fatal events. There is less information available concerning injuries from non-fatal events, economic impact on employers, lost productivity and other costs. [2]

This study on violence and stress at work in the transport sector is one of the background studies prepared for the ILO's Sectoral Activities Department, in preparation for a tripartite *Meeting of Experts on Violence and Stress at Work in Services*, to be held in October 2003.

Violence and stress are distinct from each other, but they can interact, since stress is believed to be at least partly a result of violence and vice versa. Moreover, both occupational stress and violence may be addressed simultaneously. Defining violence and stress is a major challenge. Perceptions, attitudes, cultural backgrounds, academic theories and operational approaches all have a bearing on the way stress and violence are defined, and they greatly vary from country to country and from situation to situation. While this complex problematic is beyond the scope of this study, the following definitions are given for the purpose of establishing a shared understanding among the various services sectors and in addressing this subject area.

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[1] J. Merchant, J. Lundell: *Workplace violence: A report to the nation*, Iowa City, University of Iowa Injury Prevention Research Center, http://www.public-health.uiowa.edu/iprc/nation.pdf, Feb. 2001, p. 3.

[2] C. Peek-Asa: " Workplace Violence", in *Workplace health and safety report*, University of Iowa, Vol. 8 No. 3, Fall 2001, p. 1.

Violence at work can be defined as incidents where employees are abused, threatened, assaulted or subject to other offensive behaviour in circumstances related to their work. Violence includes both physical and non-physical violence. It finds its expression in physical assault, homicide, verbal abuse, bullying/mobbing, sexual and racial harassment, threats and mental stress.

Work-related stress may be defined as the physical and emotional response that occurs when the requirements of the job do not match the capabilities, resources or needs of the employee. Stress is not necessarily a negative phenomenon. But if stress is intense, continuous or repeated, if the person is unable to cope or if support is lacking, then stress becomes negative and can lead to physical and psychological problems or illness, as well as impairing morale and productivity.

An essential problem with efforts to reduce workplace violence and stress is that data are scattered and sketchy, making it difficult to study what works and what does not work to reduce violence in the workplace. The best data available cover fatal events. There is less information available concerning injuries from non-fatal events, economic impact on businesses affected, lost productivity and other costs. Various data collection systems have different ways of defining "at work", especially when there are ambiguities such as commuting and travel, volunteers or students in a workplace, or workplaces that are also residences, such as farms or home offices.

Sources of information such as the police, physicians, workers' compensation or employee reports may capture only one element – the violent incident, or the injury, or the lost work time, or the setting (at work) – but not the whole picture of the trauma resulting from violence in the workplace. Another major problem is that many non-fatal incidents, especially threats, simply go unreported because there is no coordinated data-collection system to process this information or because the workers involved, such as taxi drivers, cannot afford to lose the time to report the incident.

2. Violence and stress in services sectors

Recent years have witnessed a burgeoning of the seriousness of workplace violence and stress, and its placement onto the global agenda. Trade unions, employers, employees, occupational health and safety regulators, academics, victims' groups, the public health community, and other key stakeholders have all expressed disquiet regarding the perceived magnitude and consequences of the phenomenon.

Violence against transport workers attracts considerable public and media attention, particularly when workers go on strike after some of their colleagues have been attacked. From available data, however, it would seem that workers in other services sectors are more frequently victimized than transport workers. On the other hand, transport workers are robbed at a higher rate than workers in any other occupational field. (see tables 2.1 and 2.2).

A train strike in Paris called to protest against attacks on rail staff spread to the north of France today despite promises from Prime Minister Lionel Jospin of a crackdown against violence in public transport. Suburban commuter traffic in Paris was paralysed for a fourth day across a swathe of stations and, for the first time, the protest was joined by workers in the northern region around Calais, hitting mainline and local services.

Source: Lloyd's List (London), 10 Oct. 1998.

Buses in Lyon and Grenoble targeted by Molotov cocktails

Public transport in Grenoble and the eastern suburbs of Lyon have been at a complete standstill since Monday morning, following two Molotov cocktail attacks against buses. Negotiations are currently underway to get the drivers back to work.

Source: Tribune de Genève (Geneva), 9 Feb. 1999.

Air France ground workers protest overbooking policy

About 200 ground employees stopped work Tuesday to protest the "extreme tension" of recent months. They say the situation results from an overbooking policy that is helping Air France to fill record numbers of seats but often means that the police have to be called to intervene in scuffles.

Source: IHT Online, 11 Aug. 2000.

Relatively little is known about the extent and the development of violence against workers in frequent contact with people unknown to them, in (semi-)public places or in locations that are freely accessible to the public (e.g. shops, hospitals, or public transport), and who, for one reason or another, might be unable to satisfy their clients' wishes. This in turn may contribute to violence and stress among co-workers. Furthermore, the consequences of violence and stress at work may have a significant impact on the efficiency and effectiveness of services sectors in general.

Services sectors employ rapidly growing numbers of employees, to the extent that in many countries the services sectors now dominate the economy. In the United Kingdom, for example, 76 per cent of employee jobs are provided by services and, including government, services account for 70 per cent of the gross domestic product (GDP). Private sector services alone account for 50 per cent of GDP.

The customer's expectations of the service worker are also important. Society has come to expect a high level of courtesy and friendliness in service workers. This requires workers to display emotions that comply with certain expressed norms or rules of the

organization that help to create a desired "state of mind" in the customer. Many service workers are encouraged to defuse customer hostility, with a "the customer is always right" approach, meaning that in the process of their working day a raft of verbal abuse may have to be absorbed. Worryingly, this approach may lead in turn to an acceptance that verbalized customer dissatisfaction, no matter how upsetting for the recipient, is "just part of the job". One ramification of the acceptance of verbal abuse may be under-reporting of such incidents.

In the United Kingdom and elsewhere, there has been a recent surge in interest in occupational stress, sparked by the dramatic figures on the financial costs to business and to the economy. Studies carried out by the Health and Safety Executive (HSE) and the Trade Union Congress (TUC) identified customer verbal abuse and physical violence as well as work-related stress as the most important causes of occupational health problems. [1]

A report published by the Health and Safety Executive has revealed Britain's most stressful occupations. The occupational groups reporting the highest levels of stress most commonly were teaching, followed by nursing, management, social workers, road transport and security workers, including police. In all these groups at least one in five reported high stress. For teaching it was two in five. Non-white workers reported higher levels of stress than white workers; however, the HSE stressed that there were very few non-white respondents in the study. The study revealed little difference in reported stress between women and men. [2]

A recent study in the Netherlands[3] concluded that the extent of violence against workers in (semi-) public places was much higher than was generally assumed. Because of their function, certain groups (police officers) are better prepared to deal with violence than other groups (nursing personnel or lawyers). In the European Union, the hotel, restaurant and entertainment sectors have the highest scores on all forms of violence, including physical violence and intimidation, followed by the transport sector, public services and other services.

Organizations and services which experience high levels of workplace violence seem to have certain external and internal characteristics. Such external characteristics include:

– providing face-to-face service to members of the public;

– handling cash transactions in one form or another;

– employing staff who work alone or in small numbers;

– providing services early in the morning or late at night;

– operating from relatively unsecured premises; and

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[1] For more details, see C. Boyd: Customer violence and employee health and safety, in *Work, employment and society*, (London, Sage Publications, Mar. 2002), Vol. 16 (1): pp. 151-169.

[2] J. Thomson: *Which jobs are most stressful?*, www.thenetrisk.com, 28 Mar. 2002.

[3] L.K. Middelhoven, F.M. Driessen: *Geweld tegen werknemers in de (semi-)openbare ruimte*, (Utrecht, Bureau Driessen), 2001.

–   being located in disadvantaged areas.[4]

In 2000, 4 per cent of all reported accidents in Irish workplaces were due to violence. The sectors most involved were Public administration and Defence (58 per cent), Health and Social Work (22 per cent), Transport, Storage and Communication (8 per cent), and Financial and Retail Services (5 per cent).[5]

In the United States between 1993 and 1999 the rates of workplace violence for all occupational categories fell, and all the declines were statistically significant except for mental health workers (table 2.1). The percentage decline in the workplace victimization rate for the law enforcement field (55 per cent) was somewhat greater than the decline in percentage among mental health employees (28 per cent).

Some occupations are much more exposed to violence from members of the public than others. The British Crime Survey (BCS) allows estimates to be made of occupational risks. Table 2.2 shows the risk of violence by occupational group in the United Kingdom. Public transport has a fairly high level of risk, although this is particularly because of the contribution of bus and taxi drivers.

Table 2.3 shows the average annual rate of violent victimization in the workplace by occupation of the victim in the United States. Persons employed in law enforcement were victimized while at work or on duty at the highest rate of all occupations examined – followed by persons working in the mental health field. Retail sales workers were victimized in the workplace at a somewhat higher rate than those employed in teaching, transportation or the medical field. Within the transportation field, the highest rate of victimization while working or on duty was for taxi-cab drivers.[6]

Simple and aggravated assaults accounted for 94 per cent of all workplace violent victimizations. There were four simple assaults for every aggravated assault occurring while the victim was at work or on duty (table 2.4). Nearly four out of every 10 robberies occurring while the victim was at work or on duty were committed against persons in the retail sales or transport field (table 2.5). Transport workers were robbed at a higher rate than any other occupational field reported (three per 1,000 in the workplace).

According to the French national agency for the improvement of working conditions (ANACT), some six million French workers have to deal with workplace violence, but this estimate includes stress and hierarchical problems. The ministry of employment estimated that in 1991, 22 per cent of employees with client contacts regularly experienced tense situations. In 1998, this had increased to 30 per cent. The most important increases concerned teachers, nurses and bus drivers.

Notwithstanding the costs of violence to employees, the costs of customer violence to employers have been estimated at around £62 million a year, excluding compensation costs, and the costs associated with poor staff morale, poor business image, recruitment and staff turnover problems and high absenteeism.[7] The consequences of violence appear

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[4] V. Bowie: Planes, trains and prostitutes: dealing with potential workplace violence encountered by Olympic support services, in *Journal of Occupational Health and Safety – Australia and New Zealand*, Vol. 16 (3), pp. 247-254.

[5] Percentage of reported accidents in these sectors.

[6] Libération: *Insultes au guichet*, www.liberation.com, 18 Oct. 1999.

[7] Boyd, op. cit., p. 165.

to be substantial. Studies in several countries reveal the significant impact on sick leave and absenteeism, the willingness to change jobs, the number of psychological health complaints as well as job dissatisfaction. This also has financial consequences, including the number of lost work years, impacting on productivity and the costs of the health system.[8]

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[8] Middelhoven and Driessen, op. cit., p. 17.

3. Violence and stress at work in the transport sector: Character and causes

Violence and stress at work are a source of occupational risk in the transport sector that has attracted increasing attention over recent years. This paper will mainly focus on the following sub-sectors public transport (railways, rural and urban transport systems, whether public or private), road freight transport and the taxi industry. Where appropriate, attention will also be given to civil aviation. [1]

Predictable, preventable, and happening almost everywhere, violence against transport workers is a growing problem. Worse, it is a problem that could be stopped by better communication and proper investment. An investigation into the issue reveals three distinct trends:

– the number of incidents is rising;

– the levels of violence per incident are mounting; and

– many incidents show similar patterns of risk and behaviour.

Several types of violence can be distinguished:

– *external violence* (workplace violence committed by external intruders who have no legitimate relationship with the workplace and who have undertaken criminal acts such as vandalism, robbery, sabotage or terrorism);

– *service-related violence* (aggressive acts by customers or clients of a service or a business; could also include the secondary trauma caused to staff in "care and control" positions as they deal with violent people and their previous histories of being abused and in turn become abusers);

– *internal violence* (aggressive acts by current or former employees or other persons with an employment-based relationship with an organization; this includes workplace bullying and harassment); and

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[1] To avoid the risk that the discussion of the much publicized "air rage" incidents may overshadow the extent and the intensity of the problem in other transport sectors, relatively little attention will be given to this phenomenon in this working paper. Furthermore, there already is an international legal instrument dealing "air rage" offences. The 1963 Tokyo Convention on Offences and Certain Other Acts on Board Aircraft unified, on the international level, many legal issues relevant for the suppression of acts of air rage. The Convention applies not only to "offences against penal law" but also to "acts which, whether or not they are offences, may or do jeopardize good order and discipline on board" - thus covering the acts classified as air rage. It may appear that the existing legal framework for dealing with air rage is sufficient but it is not so in practice.

The International Civil Aviation Organization (ICAO) has recently disseminated a new circular focused on the legal aspects of unruly passengers. The document, Guidance Material on the Legal Aspects of Unruly/Disruptive Passengers, includes model national legislation for addressing offences committed on board civil aircraft.

The 33rd ICAO Assembly adopted a resolution calling for all Contracting States to enact national law and regulations to deal effectively with the problem of unruly or disruptive passengers, incorporating as far as practical model legislation developed by ICAO.

– *organizational violence* (involves organizations placing their workers in dangerous or violent situations or allowing a climate of bullying or harassment to thrive in the workplace).

Potentially, the employees of any organization can be subjected to one or all of these four types of violence. Among the services potentially most at risk of violence are the services whose staff will provide international and national transport, including plane, ferry, train, bus, taxi and airport services. Transport services are prime sites for workplace violence, with taxi and bus drivers often being the targets of robberies and assaults. Transport workers are confronted with at least two of the factors of "dangerous workplaces": public frustration at having to wait and dealing with members of the public who have been drinking or taking drugs. Their main tasks include the provision of information to and the supervision of the "social safety" of the travelling public, the control of tickets as well as the prevention of vandalism and violent behaviour. In many countries, fare evasion is one of the most important causes of violence against public transport employees. [2]

According to Boyd (2002), the main reasons identified by respondents as the triggers and causes of passenger violence were alcohol, delays, lack of information provided to passengers during delays, the quality of environmental surroundings, disputes over baggage and the failure to meet passenger expectations. All of these causes are controlled and exacerbated by management policy, with the most notable causes being the sale of alcohol on aircraft and trains. Profit maximization and cost minimization appear to take priority over the safety and health of employees.

3.1. Public transport

Violence on public transport is strongly determined by the presence of opportunities for violence, and public transport vehicles, stations and bus terminals potentially provide many situational opportunities for violence, mainly by external perpetrators. For example, where there is a lack of formal or informal surveillance, this presents opportunities for offenders to commit crime. Other examples of situationally-related opportunities for violence on public transport are those situations that provide easy access to potential victims such as the absence of safety screens in taxis or for bus drivers.

Public transport in many countries is chronically under-funded. As services are run down, passengers experience more congestion and more frustration. Public transport has a vital public function and therefore needs to be completely safe and secure. Many local governments do not yet assume their responsibility for the public order at stations.

In the past decade or so more public transport companies have reduced the number of guards and revenue control agents, restricted the number of hours that service employees are available, closed the ticket counters earlier and relied heavily on technical solutions such as automatic ticket dispensing machines, computers and video cameras. As a consequence, potential troublemakers have fewer uniformed staff watching them and, when trouble does break out, there are fewer employees available to deal with the problem or to alert the police. By some observers, the reduction in staff in public transport companies is called the "dehumanization" of transport.

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[2] C. Boyd: Customer Violence and Employee Health and Safety, in *Work, employment and society*, (London, Sage Publications), March 2002, Vol. 16 (1): pp 151 -169.

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On the train

I have been a train conductor for over 20 years and I try to enjoy my job. However, because of my recent experiences, it becomes more difficult to do so. During the past 2 weeks, I had three incidents on my train. One about smoking in a non-smoking compartment, one disturbance in an over-full train, and in another one a boy was harassed by three other persons.

Then, there are the delays, the many dirty trains, and the lack of assistance when needed, all of which don't make my job easier.

Source: Senior train conductor, the Netherlands, cited in FNV Bondgenoten Rood Boek.

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In addition to the organizational, managerial and interpersonal roots of violence in the workplace as outlined by Chappell and Di Martino, the cost and competitive pressures on railway companies since deregulation and privatization are also likely to be important factors in the workplace violence equation.[3]

This, in turn, leads, to what is termed in the literature the "cycle of fear". The cycle of fear refers to the observation that fear of being the victim of crime on public transport leads to drops in the use of public transport. Reduced use in turn reduces the effect of "safety in numbers", which can lead to a reduction in real levels of safety. Although fear has a more indirect relationship to violence than opportunity, many prevention programmes include the reduction of community feelings of fear of violence on public transport as a primary goal. Thus, factors strongly related to fear of crime such as incivilities (including general lack of upkeep and uncleanliness), graffiti and vandalism are targeted directly in many public transport violence prevention programmes.

Other factors, more distantly related to violence on public transport, include community variables (such as lack of community cohesion, social disorder, delinquency, weak social structure), the media's role in creating fear through the exaggeration of problems of crime on public transport, and broader factors such as race, poverty, welfare, unemployment and family life.[4] Security officials employed by urban transport systems argue that there is a close link between violence and aggression in public transport and the more general violence in urban suburbs.

Related to the problem of general violence are the reports from a number of countries (Australia, France,[5] Netherlands, New Zealand, United Kingdom, United States) that attacks on transport workers and means of transport by children and teenagers have become a widespread problem. A British government investigation into assaults on bus staff found that in English cities 43 per cent of attacks were committed by 14-17 year-olds. Even children under 14 years were responsible for 3 per cent of the assaults.

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[3] Boyd, op. cit., p. 157.

[4] Crime Prevention Division: *Preventing Violence – Chapter 2 – Public Transport*, www.lawlinks. nsw.gov.au .

[5] Conseil Supérieur de Travail social, Groupe de travail sur "violence": *Rapport d'étappe*, 15 fév. 2000, www.social.gouv.fr .

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Bus driver hit with coke bottle

Police have arrested a 14-year old boy from Amsterdam because of a serious assault on a 48-year old bus driver. The boy, who was annoyed because he was obliged to buy a ticket, hit the bus driver, without warning, in the face with a coke bottle. The victim had to undergo medical treatment.

Source: De Telegraaf, 14 Jan. 2000.

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Railway and airline staff may be at greater risk than other service workers because of the length of time that they remain in contact with the customer. While most interactive service workers have only short-term contact with customers, railway and airline staff are relatively unique in that they may experience long-term contact with abusive or disruptive passengers during a long air or train journey. In these cases, where staff could be considered "hostages" of abusive or disruptive passengers in aircraft or train carriages, the strain is perhaps more pronounced.

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On the train

A drunk passenger kissed and slavered down the back of my neck while I was serving from the trolley. I have suffered bruising from being kicked and a man poked me with his walking stick.

Source: Railway Customer Service Assistant, female, cited in Boyd, 2002.

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In addition, long-distance air travel, with its increasing no smoking and limited alcohol consumption policies may lead to drug withdrawal in some passengers and related aggressive behaviour towards other passengers or flight staff. Inadequate, overcrowded or delayed public transport may also fuel passenger frustration and lead to aggressive acts against transportation staff and others. A distinct aspect of violence in the transport sector is that it is often directed against passengers and staff alike. [6]

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On the plane

Myself and close colleagues have not been involved in any physically abusive situations, but plenty of verbal...almost every day, we meet with aggression due mainly, I feel, to stress. We are the frontline people of the airline, and therefore the target for every petty problem that passengers are experiencing, whether in relation to their flight, family or business. Things are magnified out of proportions so often, and even after you have tried to placate the person, they never back down and apologize for their behaviour, which leads to bad feelings on all sides. I feel now I am on the defensive whenever someone approaches me by assuming that they are going to have a go at me.

Source: Cabin crew, female, cited in Boyd, 2002.

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Violent hold-up of scores of train passengers

Passengers in a train from Dordrecht to Rotterdam were Sunday afternoon robbed and threatened with death by a 20-year old boy and a 17-year old girl. The boy, who appeared to be confused, said he was carrying a pistol and a hand grenade, and that he would kill, blow up and rape passengers.

According to the railway police, there were some 200 passengers on the train. At least 10 of them gave money to the boy. Upon arrival of the train in Rotterdam, police arrested four persons, including the two perpetrators. The other two, who carried no weapons, were released.

Source: De Volkskrant, 14 Aug. 2002.

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[6] V. Bowie, op. cit., p. 250.

It has to be recognized that certain occupations are more likely to be a victim of violence. For example, in railway companies revenue control inspectors are the most likely occupation to suffer. Other railway staff who have direct contact with the public on the train, for example checking tickets or selling food and refreshments, also face the problem of working alone, even when carrying large quantities of cash. Without a personal mobile phone or personal alarm, the individual has no one to rely on for immediate help or assistance if a violent situation occurs (see table 3.1).

The increase in the number of fare-dodgers (black or grey travelling) not only results in loss in income for the companies, but also results in an increase in aggression and violence against rail employees.[7] Fare-dodgers tend to react aggressively when they are caught. Ironically, increased ticket controls on trains result in an increase in violence, in other words: the better transport employees execute their job, the more they are confronted with aggressive passenger behaviour.[8]

Is aggression serious? Yes, very serious. You are not only abused or slapped, but also threatened with knives or pistols. Each one of us will deal differently with violence. For someone, abuse is no longer aggression, for another it has a traumatic effect. I almost daily experience aggression. Often for the simplest reason like an Euro 2 ticket. If it gets out of hand and the police intervenes, the perpetrators are out again in less than 10 minutes. That disturbs me.

Source: Train conductor, cited in FNV Bondgenoten Rood Boek.

A comparative study, carried out for the ILO Conditions of Work and Welfare Facilities Branch, on work-related stress among bus drivers[9] found that driving a bus was an occupation with high risks for health and well-being. Comparisons with other occupational groups generally show higher rates of absenteeism and disability among bus drivers. This is also true for several psychological (strong feelings of fatigue, tension and mental overload, sleeping problems) and musculo-skeletal complaints (back, legs, neck and shoulders).

Tram driver's finger bitten off by passenger

An Amsterdam tram driver will have to live without his left-hand ring finger. He was assaulted by a passenger who, standing along the line, appeared to warn the driver that something was wrong. The driver stopped and let the passenger enter, who then immediately attacked the driver. During the struggle, the passenger bit off the driver's finger.

The driver later found his finger in the tram, but, by then, it was too late for the hospital to reconnect the finger.

The driver was seriously disappointed by the other passengers, who stood on the seats to watch the fight, but did nothing to intervene. On top of that, in the commotion, people stool his money and that of the conductor.

Source: De Telegraaf, 11 May 2001.

Meaningful and plausible correlations have been demonstrated between work factors and the nature and size of the health problems among bus drivers: for instance, between ergonomic problems and self-reported musculo-skeletal problems, absenteeism and

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[7] *Le Temps*: Les CFF veulent faire la chasse aux resquilleurs, (Genève), 17 juin 2002.

[8] *De Volkskrant:* Agressie tegen treinpersoneel neemt toe, www.volkskrant.nl, 31 July 2002. De Telegraaf: NS'ers melden steeds vaker agressie in trein, www.telegraaf.nl, 31 July 2002.

[9] M. Kompier: *Bus drivers: Occupational stress and stress prevention*, (Geneva, ILO, 1996).

disability, and also between high psychological demands, low autonomy and low support, on the one hand, and the amount of psychological complaints and absenteeism due to psychological problems, on the other.

Bus driver attacked after confiscating son's pass

A school bus driver was bashed by the father of a student who had his travel pass confiscated for misbehaving, a Sydney bus operator claimed today, adding that the attack was caught on video.

Shorelink Bus Services said the driver, aged in his mid-30s, was punched in the face several times when he made a stop at Hornsby, in Sydney's north. The company said the driver took the boy's travel pass for misbehaving, but dropped him at his normal stop.

When the buss pulled up again nearby, the boy's father allegedly climbed on board and attacked the driver as he sat at the wheel.

Source: www.smh.com.au, 3 Sep. 2002.

An article by Belkic and Schnall gives a graphic description of the toll which operating a motor vehicle in San Francisco (United States) takes upon the human nervous system. A driver is responsible for transporting thousands of passengers each day via narrow, hilly streets, facing innumerable obstacles and under inexorable pressure to keep to a strict schedule, the slightest accident could result in injury to a passenger and might even put the driver's job in question. [10] (See text box 3.2)

The Paris regional public transport system (RATP) conducted a study on one of the categories particularly at risk, the driver-conductors who have seen a rise in the rate of stressful incidents in recent years. It was possible to demonstrate a causal relationship between stress and exposure to attacks. The study revealed three basic attitudes towards stress-causing factors:

– assertive diplomacy: the employee adopts a strategy that lowers stress;

– reactive inhibited: the employee takes refuge in an attitude of hostile withdrawal; and

– reactive aggressive: the employee reacts with a strong propensity for conflict.

The study established that employees, who were assaulted multiple times, were in the last category. [11]

While public transport companies are mainly confronted with external violence, there are also reports about internal violence, i.e. by managers, colleagues and others. Two examples will be given here. Until three years ago, sexual and racial harassment was part of the culture at London Underground Ltd. (LUL). Victims who tried to complain were not believed or were treated as a nuisance. Staff members were accepting things that any decent person would say were unacceptable. These included racial insults and abusive telephone calls, crude sexual remarks, threats of gang rape and real sexual assault. The perpetrators were colleagues, managers and subordinates. Interviews with eight women, four white and four black, who had been persistently harassed, showed that the black women experienced a horrible cocktail of racism and sexism.

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[10] K. Belkic, P. Schnall: *On a San Francisco Public Transport Line: Burden and consequences upon the human operator*, www.workhealth.org, undated.

[11] A. Henrion: Preventing assaults is everyone's business, in *Public Transport International*, No. 6/99, pp. 25-27.

> **On a San Francisco Public Transport Line (excerpts)**
>
> An extremely important part of the transit operator's work is unseen by the public. This is the so-called "start-up" procedure. Before even beginning on the line, the operator must sign in, and meet a dispatcher to receive the schedule and find out about any detours, etc. Under ideal circumstances, the dispatcher could be a source of support and encouragement. However, given the pressure of urban transport life faced by the dispatchers as well, this may prove quite the opposite, i.e. yet another stressor before getting started.
>
> Drivers are responsible for the safety of the passengers and vehicle. Mass transit vehicles often handle poorly, brake slowly and, in case of electric trolley cars, must be stopped only in locations where they will not lose contact with the overhead grid. There are often too many passengers and not enough buses. Drivers are frequently behind schedule and trying to catch up. This may result in excessive fatigue, leading to frayed nerves, poor driving and more conflict with passengers.
>
> Knowing that passengers for the next tour are waiting, getting more impatient by the moment, most drivers opt to skip or at least shorten their break, in order to try to ameliorate that impatience, and try to get back on schedule. What is really happening is that the driver sacrifices his or her own comfort, and in the long run, health and well-being, to compensate for the city's traffic congestion and the lack of adequate numbers of drivers and vehicles.
>
> While varying in degree from one urban centre to another, danger and threat of violence is a common and major stressor for this occupational group. The operator is vulnerable to violent attack at any moment; there are frequent reports of the driver being robbed at knife or gunpoint. The enormous social problems of urban society are often manifested in hostile acts against the transit operator.
>
> Besides physical danger, frustrated persons often verbally vent their rage upon the operator. They may complain about the bad conditions in the vehicle itself, about which the driver is only more than well aware. The operator has, de facto, to be a kind of psychologist – to anticipate and handle all kinds of people and their troubles, and to devise coping strategies to minimize the disruption of these complaints.
>
> Source: www.workhealth.org.

Mishandling of complaints caused even more distress. Despite several industrial tribunal cases, no records were kept by the LUL of incidents among the 12,370 staff, 85 per cent of whom are male and 30 per cent from ethnic minorities. When the severity of the problem emerged, a "zero tolerance" message was communicated to staff through a video, on notice boards and in newsletters, briefings and training courses. [12]

An inquiry among female employees of the Municipal Transport Authority (GVB) on health and safety in the workplace in Amsterdam, the Netherlands, revealed that 22 per cent of the women had experienced sexual intimidation and 15 per cent felt that they had been discriminated. Another 28 per cent said that they had been the victim of bullying and nagging, while 9 per cent had experienced aggression and violence. [13]

3.2. Stress resulting from suicides or trespassing

In the United Kingdom, in 2001, 250 people were killed or seriously injured trespassing on railways. [14] Suicides on a railway track happen about two hundred times a year in the Netherlands. The number has been more or less constant for a number of years. In addition, there are an important number of almost-hits.

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[12] A. Maitland: *The end of the line for harassment*, Financial Times, 21 May 2002.

[13] TNO Arbeid: *Desired policies against undesirable behaviour: Examples of good policies against undesirable forms of behaviour in the workplace*, www.arbeid.tno.nl, 18 June 2001, p. 30.

[14] Health and Safety Executive: *Off the rails*, 2002 campaign, www.hse.gov.uk/railways/main .

Railway workers, in particular train drivers and (senior) conductors, are regularly confronted with suicides and violent deaths. These are a major cause of stress. The incidents often produce reactions ranging from mild anxiety to hallucinations and include nightmares, weeping, inability to relate to family and friends, guilt, hopelessness, flashbacks, anxiety and panic attacks and fear of returning to work. The effects of witnessing, being involved in, or clearing up after any incident which is outside the normal range of human experience is well documented. A sense of isolation is experienced by men and women, who, because they are not able to talk about what has happened, do not know that their workmates have had exactly the same experiences, the same sense of aloneness, the same belief that there is something wrong with them, that they should feel guilty about their feelings and imaginings. [15]

Such a traumatic experience can cause considerable damage. The post-traumatic syndrome can stay for years. Patients may relive the trauma time and again, complete with sounds and pictures: not necessarily immediately after the incident, but sometimes after ten or twenty years, sometimes because of the slightest cause. Several machinists a year have to apply for disability pensions because of their traumatic experiences. [16]

3.3. Road transport

Transport workers in many countries (lorry drivers, bus, minicab and taxi drivers) frequently complain of harassment and extortion at road blocks or border posts by members of the armed forces, police officials and customs agents. In addition, long-distance truck drivers live in constant fear that their trucks can get stolen during rest periods or overnight stops or simply at gun point somewhere along the road. In the Netherlands alone, every year about 700 loaded trucks are stolen, according to the industry organizations. [17]

In a more recent development, drivers may also face stiff fines for each illegal immigrant found on their vehicles and their trucks will be impounded until the driver or owner has paid the fine. Transport leaders are demanding protection for lorry drivers as more than 400 fight smuggling charges in Europe's jails. Most insist that they were used as unwitting couriers by drug gangs. The general secretary of the United Road Transport Union (URTU-UK) warned that drivers have to be aware that they are targets for drug barons who see them as an easy prey, particularly those new on international routes and who are not with big companies or a union. [18]

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[15] M. Nelson: "Do employers care about stress and trauma ?", *Locomotive Journal*, Dec. 1999, pp. 8 and 18.

[16] J-D. Douma: Machinisten ziek van zelfmoorden, in *NRC Handelsblad*, (Rotterdam), 11 Sep. 2002. See also: J. Colijn and C. Sanders: Smartengeld NS'er bij voor-trein–springer, in De Telegraaf, (Amsterdam), 7 Sep. 2002.

[17] J. Colijn; E. Nordholt: "Handboek met tips tegen truck rovers", in *De Telegraaf* (Amsterdam, 19 June 1998.

[18] ILO, *Symposium on the Social and Labour Consequences of Technological Developments, Deregulation and Privatization of Transport: Background document*, Geneva, 1999, p. 29.

3.4. Taxi industry

Workers in the taxi industry face a number of risks – working alone, working with the public, working at night, working in high crime areas, and working with cash. They are, therefore, at very high risk for violence at the job and are 60 times more likely to be murdered while attempting to make a living than workers in any other field. (See table 3.2)

The taxi industry usually provides a 24-hour-a-day, seven-day-a-week service, with most drivers working 12-hour shifts. The labour force in Australia, like in other countries, is overwhelmingly male in cities, although there is an increasing proportion of female drivers. Some taxi drivers own their taxis, others lease the cab from an owner, some companies own fleets of taxis and hire casual drivers and many operate on a "pay in" basis with drivers paying a pre-set amount to owners for a shift – sometimes including fuel costs. Employee drivers can be hired on a permanent, casual or irregular basis. Casual drivers frequently work any available shifts, and more commonly pick up passengers in the evening in inner-city areas who have been out drinking – in order to "break even". Competition for fares can be fierce.

Malaysia to clamp down on errant cabbies

Malaysia's Tourism Minister, in an outburst against cabbies who are found to over-charge or mistreat their customers, said that they were the "new enemies of our country", the same as communists and should be shot. The minister said that his ministry would also call for lesser, but equally harsh, forms of punishment, including jailing and a lifetime suspension of the taxi licence.

Source: The Straits Times interactive, 27 Aug. 2002.

Many drivers are of non-English-speaking background. An overrepresentation of immigrants in the taxi labour force is also seen in other industrialised countries such as Canada and the United States. There are no reliable data on correlations between ethnicity and violence levels.

Because taxi drivers usually work 12-hour shifts, night driving is inevitable. However, night driving involves disruption to the normal body circadian rhythm and results in decreased concentration capacities at low biological points, that is, between 2 a.m. and 4 a.m. Inevitably the ability to perform complicated tasks, or recognise warning signs of impending violence, are compromised at these low points of the circadian rhythm. Any relationship between circadian rhythms and times of assaults is unknown. [19]

3.5. Air navigation services

Like cabin crews who work in an intensive, stressful environment, air traffic controllers are generally considered as one of the working groups having to deal with a highly demanding job. In fact, it entails a complex set of tasks requiring very high levels of knowledge and expertise, as well as the practical application of certain specific skills pertaining to cognitive domains (e.g. spatial perception, information processing, logic reasoning, decision-making, communicative aspects and human relations.

The air traffic controller must constantly reorganize his or her system of processing flight information by changing operating methods (in particular, conversation, coordinating with assistants, anticipation and solving problems) as they arise and interact with each

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[19] C. Mayhew: Violent Assaults on Taxi Drivers: Incidence Patterns and Risk Factors, Australian Institute of Criminology trends and issues, No. 178, November 2000.

other. This is carried out by means of the precise and effective application of rules and procedures that, however, need flexible adjustments according to differing circumstances, often under time pressure.

The main sources of stress reported by air traffic controllers are connected with both operative aspects and organizational structures. For the former, the most important are peaks of traffic load, time pressure, having to bend the rules, limitations and the reliability of equipment. The latter are mainly concerned with shift schedules (night work in particular), role conflicts, unfavourable working conditions and the lack of control over work.

These stress factors can affect not only job satisfaction, but the well-being and safety of air traffic controllers. In fact, as the workload increases the controller tends to employ more procedures which are less time-consuming, together with a progressive reduction to the minimum of flight information and the relaxation of certain self-imposed qualitative criteria. It is evident that the number of decisions to be made becomes a stressful condition when the controller's decision-making capacity is stretched to the maximum; this can lead, in case of overload, to a very risky situation defined as "loss of picture".

On the other hand, it is frequently reported that, paradoxically, many errors often occur during periods of light or non-complex traffic. This points to the greater effort required to regulate the psycho-physical reactions, maintaining a high level of arousal and vigilance even in conditions of "underload".

It is evident that the job entails, on the whole, high psychological demands while being subjected to a considerable degree of external control. This feeling of lack of personal influence often complained about by air traffic controllers can be a powerful stressor, especially if one takes into account the fact that the job requires high levels of responsibility. [20]

In addition to the above described stress factors, air traffic controllers also have to deal with stress resulting from "critical incidents", that is any high-stress working situation that causes employees to experience unusually strong physical or emotional reactions. These reactions can impair ability to function either at the time, or later. Some examples of critical incidents are situations involving loss of life or serious injury, near collision or operating irregularities/investigations to which the controller was a party or the cumulative or "pile-up" effect. [21]

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[20] For a detailed study, see G. Costa: *Occupational stress and stress prevention in air traffic control*, ILO Conditions of Work and Welfare Facilities Branch Working Paper, CONDI/TWP.6/1995 (Geneva, ILO 1995).

[21] The Controller: *Critical incident stress management*, (IFATCA), Vol. 41, No. 3, p. 5.

4. Scope of violence and stress at work in the transport sector

4.1. Public transport

Reports from a number of countries indicate that the number of incidents of violence and aggression against transport workers in all sub-sectors has increased over the past decade. This may be partly due to the increased attention given to this issue by the media and the operating companies. The same reports, however, indicate that there is a considerable amount of under-reporting, particularly with regard to verbal abuse.

In the United Kingdom, figures from the HSE (1999) show that injuries to railway employees as a result of passenger violence were up by 40 per cent on those three years ago. In the three years ending on 31 March 1999, there were nearly 1,000 injuries serious enough to be reported to the HSE arising out of assaults on railway staff.

Data on reportable assaults in the UK railway system for the period 1996-2000 show that nationally: (i) there has been little change in the number of major injuries, but the less severe over-three-day absence injuries have steadily increased; (ii) the proportion of injuries resulting from assaults has increased; and (iii) the proportion of railway injuries due to assault is much higher than the average, but is fairly consistent. [1] (See table 4.1)

The railway industry's Safety Management Information System (SMIS) is the system for recording assaults, including those which are sufficiently serious to be reportable under RIDDOR 95. In 2000-01 there were some 1,700 recorded assaults on railway staff – *on average more than four a day* –, an increase of 16 per cent. This increase may be due to the increased attention given to the issue by the railway operators. There is agreement that the industry should keep records on the three categories of violence (physical assault, threats of violence and verbal assault). However, the SMIS does not have separate categories, which makes monitoring problematic when a large reduction in under-reporting is sought. Of the different types of assault in the SMIS, physical assaults dominate, *but nearly half the increase this year came from a doubling of the number of recorded verbal assaults*.

Available data since 1992-93 show that: (i) incidents involving fare evasion more than doubled up to the mid-1990s, at least partly as the result of changes in the fares and security policy, but since then fare evasion cases have remained almost constant; and (ii) 57 per cent of the assaults occur at stations. Station assaults substantially outnumber on-board assaults for most hours except, notably, around midday and between 21.00 and 23.00 when they are balanced.

Not surprisingly, those whose work places them in contact with passengers and members of the public are at greater risk of being assaulted. Table 3.2 shows the breakdown of assaults by occupation. There are indications that absenteeism resulting from assaults is decreasing. In 2000-01, the average absence per assault (including those resulting in no injury), which had been more than three days for the last three years, reduced to below two in 2000-01. While until the same year, the average number of days-off for instances of assault that involved time-off was rapidly increasing, from three days

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[1] Railway Safety: *Annual safety performance report 2000-01*, p. 189.

per absence in the mid-1990s to reach 18.7 days in 1999-2000, the number of days off went down to 13.8 days in 2000-01. [2]

Railway employees feel safer during the day than at night, as might be expected. The employee perception of safety during day time has slightly worsened between 1998-99 and 2000-01 on both trains and at stations. Interestingly, for the first time, in 2000-01 female employees did not feel less safe than men. During the night, employees feel more safe on trains than at stations, but with considerable variations by region and gender (women feel less safe at night than men).

In June 2002, Railway Safety, the Railtrack subsidiary that produces Railway Group Standards, collects safety performance data and formulates the Railway Group Safety Plan, published its annual report 2001-02. Compared with the report for 2000-01, some of the headlines were that:

–   reported assaults on railway staff increased by 34 per cent;

–   assaults and robberies increased by 13 per cent (much of the increase is related to the theft of mobile phones);

–   no progress in improving workforce safety. [3]

In the Netherlands, physical violence against the some 45,000 public transport (public/private) happens less often than verbal violence, but it gets much more public attention. Public transport employees in the Netherlands are mostly confronted with forms of violence such as intimidation, nagging, abuse, and threats. One study showed that between 1993 and 1997, there has been a decrease in verbal violence as well as a slight decrease in the percentage of victims of abuse, from 10 per cent to 9 per cent.

As far as the main railway operator is concerned, the number of times that NS Reizigers employees have been threatened and/or physically assaulted has increased, especially those incidents characterized as unreasonable and *unpredictable types of aggression*. In 1999, 3,400 of the 5,000 reports of aggressive behaviour were filed by ticket inspectors. Employees on board trains indicated that they felt particularly threatened, and have, for a number of years, urged that more personnel should be hired. [4]

Probably as the result of the increased awareness, the company received 2,464 complaints by employees about verbal or physical violence in the first quarter of 2002, while in the same period in 2001, the number of complaints was "only" 1,557. [5]

In Belgium, the number of physical assaults by passengers against employees of the national railway company (NMBS) has almost tripled in five years: from 74 cases in 1996

[2] Railway Safety: *Annual safety performance report 2000-01*, pp. 187-196.

[3] TSSA: Annual safety performance report 2001-02, in *Health and Safety News – TSSA Reps bulletin*, Aug. 2002, www.tssa.org.uk

[4] Eironline: Violence against staff under debate on railways, www.eiro.euroinfo.ie .

[5] D. Weesie, Trainingstrein NS voor omgaan met agressie, in *De Telegraaf*, www.telegraaf.nl, 3 mei 2002.

to 199 in 2001. In eight of ten cases, it started with a discussion about a ticket – the passenger had no valid ticket and refused to buy one.[6]

In the UK, nearly 7,000 crimes were reported on London buses alone in 2001, ranging from stabbings, graffiti, stone throwing and other serious incidents of violence. A team of experts has been set up to consider ways of combating the thousands of attacks and felonies against bus passengers and drivers that blight public transport every year. The government-led partnership, Safer Travel On Buses and Coaches Panel (STOP) is hoped to create a safer environment bus and coach crews and passengers. The Department of Transport will invite representatives of bus operators, unions, transport and local authorities, passengers and the police to become members of the panel.[7]

In a comparison of surveys on violence in the airline and the railway industry, it was found that over half of respondents reported an increase in the experience of verbal abuse from passengers in the last year (53 per cent). A higher proportion of railway employees reported an increase (61 per cent) compared to airline employees (50 per cent). Almost three-quarters of all respondents reported that they experienced verbal abuse from passengers at least once a month (74 per cent). Verbal abuse came in a range of forms and the most common and regular types were sarcasm, condescending remarks and swearing. The majority of respondents (58 per cent) did not report incidents involving verbal abuse. Respondents' testimonies indicated that employees might feel that they are expected to cope with a regular stream of verbal abuse from passengers, and to accept this "as part of the job". *Two common themes identified from respondents' comments were the belief that there was a lack of support from management in dealing with verbal abuse and that the reporting procedures were too complex and time-consuming.*

Respondents were asked if they had experienced particular types of physical abuse or threats of physical abuse. Sixty per cent of all respondents had experienced at least one type of physical abuse. The findings also show that 37 per cent of respondents had experienced at least two types of physical abuse and 26 per cent had experienced at least three types of physical abuse.[8]

Even before 11 September 2001, violence from passengers was a significant problem for airport check-in workers. A recent study found that 82.5 per cent of workers have experienced verbal abuse on the job, 17.4 per cent of those surveyed reported having been threatened by customers, and 4.5 per cent said they had been physically assaulted. Furthermore, 44.6 per cent of workers perceive a substantial risk of violence in their work.[9] A 1996 survey, carried out by one of the transport workers' unions in the Netherlands, revealed that ground staff are also increasingly subject to aggressive passenger behaviour. According to the survey, 90 per cent of the ground staff had

[6] De Standaard Online: Driemaal meer geweld tegen spoorpersoneel, www.standaard.be, 4 juni 2002.

[7] Trade Union Congress: "Bus crime crackdown launched", in *Risks 69*, 31 Aug. 2002, www.tuc.org.uk.

[8] Boyd, op. cit., p. 160.

[9] E. Rosskam: "Perils of the check-in desk", in *Transport International*, (London), No. 5, 2001, pp. 19 -20.

experienced such behaviour, of which 10 per cent was physical violence such as slapping or spitting. [10]

In France, ground workers with Air France went on strike in August 2000 demanding that the company review its overbooking policy as they increasingly face verbal and physical attacks by passengers bumped off flights. "Last week, someone threw a computer at an (customer) agent, every week it is getting more violent." [11]

4.2. Road transport

Approximately 75 per cent of all goods sold in the United States are transported at some point by trucks. With more than 3 million truck drivers plying the highways and streets, delivering goods and services through congested traffic and inclement weather, accidents abound. Between 1992 and 1998, more than 3,500 truck drivers were killed on highways alone. Traffic incidents are not the only hazards lurking on a truck driver's path. Robberies, injuries while loading and unloading a truck, and being struck by another vehicle while out of their truck also account for a substantial number of occupational deaths each year. In 1998, truck drivers were 6.5 times more likely to be killed in job-related mishaps than the average worker. In that same year, there were 30 fatalities, or 3.4 per cent of total fatalities, attributed to assaults and violent acts. [12]

While the average life expectancy of male Americans is 76 years, that of male truck drivers is only 61 years. This big difference can be attributed to the truckers' life style. Many of them smoke – 54 per cent, compared with only 20 per cent for the adult male population. Among other factors, there is their eating habits, stress, sleep and lack of exercise. [13]

Some of the problems truckers in Canada are experiencing in their daily work – causing health problems and stress – are described in the article *Le tiers-monde sur un 18 roues: 42 heures dans la vie d'un camionneur.* [14]

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[10] *De Volkskrant*: "KLM gaat toenemende agressie passagiers aanpakken" (Amsterdam), 22 Oct. 1998.

[11] *IHT Online*: "Air France Ground Workers Protest Overbooking Policy", (Paris), 11 Aug. 2000.

[12] P. Suarez: "The Unforgiving Road: Trucker Fatalities", *Compensation and working conditions*, (Washington), Winter 1999, pp. 27-32. See also: T. Knestaut: "Fatalities and injuries among truck and taxicab drivers", in *Compensation and working conditions*, (Washington), Fall 1997.

[13] Conseil canadien de la sécurité: *Le saviez-vous?*, www.safety-council.org, Oct. 2001.

[14] H. Goulet: "42 heures dans la vie d'un camionneur", in *Nouvelles CSN 450*, www.csn.qc.ca, 11 Dec. 1998.

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Maximum stress as a truck driver

To earn a decent wage, you have to drive 4000 miles per week. Over a five-day week, that makes 800 miles a day, without counting the endless waiting times. The guys keep themselves going with coffee, energy blasts and max alert. The working day, for us, is 24 hours. If we actually manage to sleep four or five hours, we're really happy.

The bosses use fixed appointments, where deliveries have to be at a set time, usually first thing in the morning. That system makes us have to sleep at the docks. People don't believe we sleep all year round outside depots and warehouses. But stopping the night at a motorway service station is a luxury. You feel safe because there's a hundred trucks near you, whereas appointments are hell.

This system is only possible because we have our motel in the truck cab. We're flexible because of that, I've never got to find a place to sleep, I bring my own slavery tools with me.

We're always stressed. Especially those doing short-haul pick-ups and deliveries. We're always having to go to new places. We don't know how to get there. The routes aren't clear. The bosses use PC Miler computer maps to give the shortest route, but it's me who has to find it. You have to get the information. And the computer doesn't take account of traffic jams or roadworks ...

Source: Henri Goulet: Le tiers-monde sur un 18 roues.

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British truck drivers returning from the European mainland are increasingly subject to violent attacks by asylum seekers hiding in their vehicles. The trouble starts when the drivers search their lorries for asylum seekers before ferry crossings from France and Holland to Britain. If British immigration officers find refugees on any vehicle reaching Dover, Folkestone or any other port, the driver can be fined £2,000 for each person found. During the past four months, 18 long-distance truck drivers have been attacked by refugees from eastern Europe and China trying to get to Britain. Three of the drivers were stabbed, one seriously. Another two battered by iron bars and one was tied up and bashed on the head until he lost consciousness. [15]

4.3. Taxi industry

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Police kill taxi driver in Zambia

A taxi driver died on Monday after being shot by four Matero (Lusaka) police officers pursuing suspects on the run. According to the family, the taxi driver, who was operating with a friend, was hired by an unidentified man. When they approached their destination, the customer told the driver to stop and got out of the car with a parcel in his hands. A car was parked near the same place and when the customer got out of the vehicle, he was shot in the chest and died instantly. The police ordered the driver and his friend to get out of the cab and, just when they were coming out, they shot the friend who came out first but the bullet grazed through his jacket. The driver was shot in the hip and one bullet went through the ribs.

They were first taken to the police station and, later in the night, the driver was taken to the hospital by a police officer.

A police spokesperson said the police shot dead two suspects in Matero, one died on the and the other later died in the hospital. She said there was an exchange of fire and regrettable that the deceased was an innocent taxi driver.

Source: The Post, Lusaka, 14 Aug. 2002.

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Chappell and Di Martino estimated that *taxi drivers have up to 15 times the average exposure to occupational violence*. The high incidence of assaults on taxi drivers compared with other workers is consistent over time. In the United States, *taxi drivers account for*

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[15] A. Lee: Refugee attacks: British truckers fear for their lives, *The Straits Times interactive*, 17 June 2002.

nine per cent of all occupational homicides and have nearly 60 times the average rate of assault. The risks are highest for unmarked "gypsy" cabs that go anywhere for a fare.

Violence is a common experience for taxi drivers, although most incidents involve only shouting, swearing and threats. Taxi drivers are "popular" targets because they work alone, are unprotected, accept passengers whose attitudes to violence are unknown – and they carry cash. Table 4.1 deals with patterns of occupational violence amongst taxi drivers in Australian studies.

Assaulting a cabdriver carries little risk to the assailant. First, there is a very good chance it will not be reported to the police, and if it is reported, there is very little chance of the perpetrator getting caught and if he is caught and disputes the allegation, there is a very good chance the cabdriver will not be believed. [16]

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A day in the working life of a taxi driver in Delhi, India

I was forced to become a driver. My father had left behind several DLYs and DLTs (black and white and yellow cabs respectively). Our relatives were anxious to take those away. It was then that my mother let my elder brother become a driver, who started squandering whatever was left behind. She then decided that I should become a driver.

Taxi drivers, unfortunately, have no fixed hours for work. They may be flexible, but at times that too creates problems. You are on duty 24 hours a day, seven days a week. Even when I am unwell, at times I have to go. It is a question of money. Think of those who drive on lease. At times, they keep sitting the whole day and they get no customer, yet at the end of the day, they have to pay the stand owner a sum of Rs. 250 for a diesel vehicle per day.

Drivers are not sure when they may be called out. They have to sleep under the open skies, because in this country there are no set rules which would force stand owners to provide the basic amenities to drivers. No one is concerned with their welfare.

Drivers have absolutely no personal security. When someone calls up the stand, they just have to go. There is no way to check whether they are helping criminals run after a crime.

Source: Adapted from *Transport International*, No. 1, 2000, pp. 22-23

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The State of Victoria (Australia) taxi driver survey 1997 found that drivers experience an unacceptable high level of crime and violence as part of their job. 87 per cent of those surveyed had experienced fare evasion, nearly three quarters had experienced verbal abuse, one third had experienced assault, 14 per cent had experienced robbery. Few other individuals would have to experience such conditions as a routine part of their occupation. Further, the data concerning the incidence of this in the past 12 months indicate that it shows no sign of abating under current regulatory, social and economic conditions. [17]

According to the US Occupational Safety and Health Authority (OSHA), 510 taxi drivers were murdered on the job between 1992 and 1998. Nevertheless, death certificates were estimated to record only 72-81 per cent of work-related fatalities. The comprehensive ten-year evaluation by Castillo and Jenkins also found that taxi drivers had the highest rate of work-related homicides of any group (26.9 per 100,000 workers, compared with the average of 0.71). Another study estimated a homicide rate of 41.4 per 100,000 drivers. Half of all homicides involved robbery. The incidence of assaults was estimated through a survey of US taxi companies: 72 per cent had experienced passenger violence in the

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[16] B. Kabrick: *Criminal intent workplace violence*, paper presented at the Conference on violence as a workplace risk, Montreal, Canada, 29-30 Nov. 2001, www.taxi-l.org .

[17] F. Haines, Taxi driver survey – Victoria, www.taxi.vic.gov.au/survey, p. 29.

previous twelve months, most involved fire arms. Similar risks exist for Canadian taxi drivers.

High levels of risk are also evident in Europe. Elzinga conducted a national survey of taxi drivers in the Netherlands which demonstrated that in the period between October 1993 and October 1994 about 70 per cent of taxi drivers in the Netherlands was one or more times the victim of threats, bodily harm, theft, assault, damage to the cab or fare evasion. In the same year, 32 per cent of taxi drivers in The Hague were confronted with violence (excluding swearing) one or more times. [18]

One out of four Dutch taxi drivers felt regularly insecure on the job. In The Hague, 42 per cent of the drivers felt insecure. Surprisingly, however, taxi drivers felt more secure than public transport workers. Younger taxi drivers (between 20 and 30 years) and taxi drivers in the big cities feel as (in)secure during the week as during weekends, while drivers in smaller cities feel particularly insecure during weekends. All taxi drivers feel most insecure during the late hours (21.30-06.30). The feelings of insecurity have hardly changed in recent years: most interviewed drivers (54 per cent) feel as (in)secure as a few years ago. [19]

In Scotland, taxi firms were found to suffer disproportionately from violent attacks, threats, fraud and thefts. In South Africa, between 1 January 1996 and 30 April 2000, there were 1,096 taxi killings. In April 2000 alone, nine persons were killed in taxi violence (up 28 per cent from March 2000). [20]

Because 90 per cent of taxi drivers work under an unusual arrangement – that of "independent contractors" – it is very difficult to obtain statistics on the incidents of workplace violence that do not result in death. Cab drivers are not paid for the time they work. Rather, they pay to work, and they pay for a specified time, whether they are working or not. Since they often have to work 12 hours a day just to get by, they simply cannot afford to lose the time it would take to wait for police and make out reports after an assault.

For the small, but increasing, number of women who drive taxis, rape is an additional risk. An in-depth study of workers' compensation claims data in Washington, DC, over a ten-year period found that female taxi drivers had the highest risk of rape. The authors concluded that their study substantially underestimated the incidence of work-related rape. In a Sydney study, female taxi drivers reported constant verbal abuse and physical harassment from customers. Estimates of sexual assaults on male taxi drivers are quite unreliable. Another risk for male drivers is female passengers who threaten allegations of sexual advances unless a fare-free journey is provided. [21]

The preliminary results of a national survey of cab drivers in the United States on the reporting or not of assaults show that approximately 75 per cent of the assaults against cab drivers are not reported. Using the figures given in the OSHA report, that would mean an incidence rate of 735.2 per 1,000, making taxi and livery drivers more than twice as likely to be assaulted on the job as police officers, who were thought to have the highest rate of assaults. These results are not conclusive since they do not include drivers from many of

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[18] Middelhoven and Driessen, op. cit., p. 53.

[19] Middelhoven and Driessen, op. cit., p. 54.

[20] South African Institute of Race Relations: *Fast Facts – National Crime Trends*, June 2000, p. 4.

[21] Mayhew, op. cit.

the larger high crime areas. None so far from New York City, or Chicago or Washington, DC for example. As surveys come in from areas like those, the percentage of unreported assaults will likely rise even further.[22]

4.4.   Unregulated passenger services

Strike in West Africa after police kill taxi driver

Transport workers brought the capital of the West African state of Cote d'Ivoire to a standstill earlier this week in protest at the killing of a young minibus driver by traffic police.

The Federation of Professional Drivers' Unions of Cote d'Ivoire (FEYNCPCI), led by ITF unions Syndicat National des Chauffeurs de Transport Terrestre de Cote d'Ivoire and the Syndicat de Conducteurs de Taxi, called a 5-day strike within hours of the shooting of 20-year-old Kalilou Keita on Thursday 18 July in a working class district of the capital, Abidjan.

Source: ITF News Online, Issue No. 62: 26 July 2002.

The growth of unregulated passenger services in some countries, including "taxi" minibuses as well as informal owner-operated minicabs, has created a fiercely competitive, ill-disciplined industry in which drivers may be more at risk from each other than from violent passengers. South Africa, in particular, suffers from "taxi wars" in which gangster outfits literally shoot each other of the road.[23] It is estimated that more than half of the 5 million commuters countrywide use taxis in preference to trains and buses and an estimated 200,000 taxis ply the road daily. It has since become a saturated industry with competing interests and a breeding round for crime. But in tandem with this success story is a more sinister legacy – thousands of people have either died in road accidents or in bloody violence.

Some of the worst fighting has taken place between long-distance taxi organisations, which is not surprising given the lucrative routes they control. Linked into this are reports of hit squads, protection rackets and assassinations. To date, many operators remain illegal, operating without permits to undertake passenger transport services.[24]

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[22] Kabrick, op. cit., p. 4.

[23] Moving targets: violence to transport workers, *Transport International*, ITF, London, Mar. 2000, pp. 14-15.

[24] M.G. Dube: Omar's new deal for taxi commuters, in *Enterprise* (South Africa), Nov. 2001, p. 24.

5. Information collection and reporting on violence and stress in the transport sector

One of the major problems in collecting reliable data on violence and stress in transport is the amount of under-reporting. In most countries, data on violence and stress in the transport sector can be retrieved from traditional sources such as labour force surveys, social security reporting, crime surveys and similar sources. In some countries, however, surveys targeted on violence in the workplace have been conducted or special studies have been commissioned – either by governments or concerned employers' or workers' organizations and increasingly by individual companies – in order to get a better understanding of the magnitude of the problem, its personal and financial consequences as well as to develop and implement prevention programmes. Examples of some of these studies will be given below.

In the United Kingdom, the results of the Labour Force Survey (LFS) and the flow of injury reports under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) form the two main sources of workplace injury information for the Health and Safety Executive (HSE) and local authorities.

The latest results from the Labour Force Survey indicate that, in 1999-2000, about 1.03 million workers suffered from a work-related injury in Great Britain. There were 390,000 injuries to workers which led to more than three days' absence from work and so became reportable the HSE or a local authority under RIDDOR. Of these 390,000 reportable injuries to workers, 343,000 injuries were to employees. Employers, however, made injury reports on only 164,000 employees. These figures suggest that employers reported around 44 per cent of the injuries that should have been reported under RIDDOR in 1999-2000.

The position regarding self-employed people is worse. They made 1,395 non-fatal injury reports in 1999-2000, compared with 35,000 injuries estimated by the LFS. This suggest a reporting level of less than 4 per cent.

The level of reporting varies substantially between industries. The reporting levels confirm the suspected low reporting in agriculture and parts of the services sector. For the transport, storage and communication group, the reporting level is estimated to be 75 per cent.[1]

The Dutch government decided a few years ago that it lacked detailed information about the incidence and the development of violence. It commissioned a study to develop a monitoring instrument to establish the extent of violence against workers employed in public places or in places freely accessible to the public. The main conclusion of the study was that the extent of violence against these categories of employees was far greater than expected. The violence included both verbal forms of violence (abuse, sexual and racially discriminatory remarks) and physical violence (spitting, physical obstruction, slapping). Among the occupations studied were occupations that traditionally have to deal with violence as part of the job (police officials, penitentiary institutions) but also occupations where dealing with violence is not part of the job (train conductors, hospital employees).[2]

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[1] Health and Safety Commission: *Health and safety statistics 2000-01*, p. 9.

[2] L. K. Middelhoven, F. M. Driessen: *Violence against employees in the (semi-) public place*, Utrecht, 2001.

In the United States, the University of Iowa Injury Prevention Research Center took an important first step in April 2000 to meet the need to get a better understanding of the workplace violence phenomenon by sponsoring the Workplace Violence Intervention Research Workshop in Washington, DC. The goal of this workshop was to examine issues related to violence in the workplace and to develop recommended research strategies to address this public health problem. A report including a summary of the problem of workplace violence and the recommendations identified by participants at the workshop was published in 2001. [3]

The US Department of Justice at regular intervals publishes special reports on violence in the workplace based on data retrieved from the National Crime Victimization Survey (NCVS). As one of the largest continuous household surveys conducted by the Federal Government, the NCVS collects information about crimes, both reported and not reported to police. The survey provides the largest national forum for victims to describe the impact of crime and the characteristics of violent offenders. [4]

A survey by the French trade union GIIC-CGT among managers at the Paris transport authority, Regie Autonome des Transports Public (RATP) revealed that out of the 311 respondents only 20 feel that they are not in a stress situation, while 112 feel that they are often or very often stressed, and 96 (against 56) judge the stress as negative or rather negative. Among the causes of stress are: (i) the volume of work (197); (ii) temporary pressures (103); and (iii) hierarchical pressure (101). [5]

In Australia, around 2.8 per cent of all fatal traumatic work-related injuries are from occupational violence. However, the incidence of assaults in the high-risk taxi industry is unknown for a number of reasons:

(a) data are scattered across agencies (Roads and Traffic Authority, Department of Health, WorkCover Authority; Department of Transport);

(b) there is significant under-reporting;

(c) workers' compensation insurance claims statistics are only collected for employees in most Australian States and Territories – and many taxi drivers are hired under other arrangements;

(d) emergency health care facilities treating injured taxi drivers rarely forward data to occupational health and safety authorities;

(e) to prevent outbreaks of fear, violent incident reports can be withheld by taxi companies;

(g) surveys of taxi drivers are unlikely to provide a total "picture" of the incidence and severity of violence because of the "healthy worker" effect: only workers who are well remain in the job, and those who are ill or injured leave.

As a result of under-reporting, it is not known how many assaults on taxi drivers take place, how many passengers threaten drivers without inflicting injuries, if there are

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[3] J. A. Merchant, J. A. Lundell: *Workplace violence: A report to the Nation*, Iowa City, Feb. 2001.

[4] Department of Justice: Violence in the Workplace, 1993-99, *Bureau of Justice Statistics Special Report*, Washington, Dec. 2001.

[5] Options: Les cadres RATP contre-attaquent, Paris, No. 428, 22 avril 2002, pp. 16-17.

variations between owner, leaseholder or casual drivers, or if differences exist in patterns of violence between Australian cities. [6]

A taxi driver survey in the State of Victoria, Australia, found that about half of the taxi drivers (53 per cent) reported their victimization. The majority of those who reported incidents did so to the police (61 per cent), followed by the operator (57 per cent), the depot (32 per cent), whilst only a few, (9 per cent), made an incident report. The reasons for non reporting were – in order of importance – no one could do anything (38 per cent), no one would do anything (21 per cent), the incident was too trivial (21 per cent), it would take too long (14 per cent), other (7 per cent). The level of under-reporting may suggest that drivers feel isolated and left on their own to deal with the dangerous nature of their own workplace.

The level of reporting by drivers to Workcover was low (13 per cent). Many drivers stated that they were unaware that they could claim, or that they were not were covered, or that their injuries were too trivial. The low level of reporting in the taxi industry seriously reduces the possibility of variable premiums having any effect on risk reduction. Higher premiums for those with poor safety records (including high levels of victimisation) without addressing reporting issues would be more likely to lead to changes in reporting rates in the industry, not real reductions in risk. [7]

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[6] C. Mayhew, op. cit.

[7] F. Haines, Taxi driver survey- Victoria, August 1997, www.taxi.vic.gov.au/survey, pp. 22-24.

6. Prevention, reduction, management and coping strategies to address violence and stress

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Human suffering

"The human suffering that results from this level of violence at work should not be underestimated. Employers have a legal duty to protect the health and safety of workers and this includes the risk of foreseeable violence at work and putting controls into place to protect workers from it."

Source: Malcolm David, Head of Psychosocial Policy at HSE, 14 Oct. 1999.

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6.1. Public transport

Prevention is everyone's business. Each person in his/her area of responsibility is a potential participant in carrying out a policy in which vigilance and responsiveness enable detection, warning and prevention.

Governments have their role to play by pursuing active policies towards job stress and violence and their prevention. This not only relates to issuing modern legislation but also to stimulating its implementation by positive incentives and facilitating initiatives rather than by penalizing measures. Although the immediate impact of government policies on what actually happens in organizations should not be overestimated, job stress and violence are increasingly recognized as a national problem by all parties involved (employers, employees, professionals, scientists, and governments). Furthermore, in many countries a common need has evolved towards the reduction and prevention of job stress and violence.

The criminal law has long been used as a principal bulwark against the commission of acts of violence in all locations, including the workplace. Those who have failed to be deterred by the treat of punishment for traditional crimes of violence like homicide, rape, robbery and assault have, if caught and convicted, been subjected to personal sanctions by the criminal justice systems involved. In most cases these systems have regarded crimes of violence as meriting some of the most severe sanctions available. Harsher punishment has also commonly been prescribed for offences involving violence directed at certain workers while acting in the course of their duty. [1]

In a number of countries, such as Belgium and Switzerland, parliamentarians have urged the government to increase penalties for perpetrators of violence and aggression in means of public transport. [2]

Both the civil and common law systems provide important bases for legal action and avenues of redress for victims of workplace violence. Here too the scope of protection is broadening progressively. Employment injury legislation, including social security or workers' compensation, is generally the exclusive remedy for work-related injury and

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[1] D. Chappell, V. Di Martino: *Violence at work,* Geneva, International Labour Office, 1998, pp. 82-83.

[2] Switzerland: Motion Jutzet (00.3513) – Agressions sur des employés des transports publics. Modification du Code pénal suisse ou législation spéciale, 4 Oct. 2000. Chambre des représentants de Belgique, Doc. 50 1227/001, Proposition de loi, 4.May 2001.

disease occurring during, or arising from employment. Whether or not injury from workplace violence and stress is covered by specific employment injury schemes will depend on the interpretation of their particular legislative provisions.

An important and general issue for victims of violence is whether mental stress (even in the absence of physical injury) is compensatable. Since violent incidents at the workplace can produce stress reactions or have other psychological consequences, compensation for lost days of work or special counselling can be a significant issue for workers who are the victims of such violence or who witness violent incidents.

The Belgian federal minister of labour is of the opinion that being a victim of psychological harassment at work should be recognized as an occupational disease. In some cases of psychological harassment, the victim has physical and psychological symptoms of illness and is no longer able to go to work. If psychological harassment is recognized as an occupational disease, victims may get a compensation equal to 90 per cent of the lost income. [3]

In most countries, a duty of care is placed on employers for supervising and taking appropriate measures to protect workers and to prevent accidents, health hazards and dangerous situations. Organizations can have various reasons for developing a policy on undesirable behaviour. A serious incident can be the reason but also care for employees or the wish to be a good employer. The latter can be based on ethical considerations but can also be motivated by competitive pressures (competition for employees in times of low unemployment). Also, more and more employees realise that they can sue their employer for material and immaterial loss they suffer due to forms of undesirable behaviour in the workplace. Such claims, or the fear of them, are the motive for some organizations to develop a policy. [4]

An ex-train driver in the Netherlands, suffering from post-traumatic stress disorder, has filed a suit against the railway operator claiming that he has become unfit for work due to the many suicides he experienced during his work. He claims that the company is responsible for the loss of income because of the lack of care and counselling after such incidents. In a preliminary decision, the court decided that the company was liable. "The train driver has a good chance to win the case. The law has become very severe for employers. The Supreme Court (Hoge Raad) is rather inclined in these types of cases to opt for the victim. The escape possibilities for the company are limited." [5]

Unfortunately, there is no universal solution for prevention, only the recognition that by linking, coordinating and supporting specific, mutually reinforcing actions, one can obtain a policy which is genuinely effective, coherent and innovative. Any organized structure has a set of precautions and measures aimed at lessening known risks. Nonetheless, the various tragic events in the news each day illustrate that these preventive measures, in whatever area they may be, must be constantly reactivated, improved, adapted or refined.

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[3] M. Vandersmissen: Pesten op het werk mogelijk erkend als beroepsziekte, *De Standaard Online*, 18 Sep. 2002. See also: M. Vandersmissen: Grootste pesters zitten in ambtenarij, De Standaard Online, 18 Sep. 2002.

[4] TNO Arbeid: *Desired policies against undesirable behaviour*, (Hoofddorp), 2002, p. 79.

[5] C. Stolker, cited in J-D. Douma: Machinisten ziek van zelfmoorden, in *NRC Handelsblad*, Rotterdam, 11 Sep. 2002. See also: J. Colijn, Ch. Sanders: Smartengeld NS'er bij voor-trein-springer, in *DE Telegraaf*, Amsterdam, 7 Sep. 2002.

A distinction has to be made between policies aimed at the prevention of undesirable behaviour among employees (internal perpetrators) and policies aimed at the prevention of undesirable behaviour by clients and passengers (external perpetrators). In the first case, the emphasis is on measures such as codes of behaviour, protocols, support and counselling, management styles, and complaints procedures. In the second case, the emphasis is on protocols and building and workplace design. In designing and arranging the building and the workplaces of the employees, technical aids are used to discourage undesirable behaviour by clients and to improve the security of employees. Most policies in the transport sector are aimed at the prevention of aggression and violence by external offenders. They often also involve collaboration with public authorities and law enforcement agencies.

There are three general approaches to preventing workplace violence and stress:

–   *environmental:* adjusting lighting, entrances and exits, security hardware, and other engineering controls to discourage would-be assailants;

–   *organizational/administrative:* developing programmes, policies and work practices aimed at maintaining a safe working environment;

–   *behavioural/interpersonal:* training staff to anticipate, recognize and respond to conflict and potential stress and violence in the workplace.

Company policies to prevent violence and stress in the workplace can be called "good practices" if the policy is: (i) transferable; (ii) may inspire other organizations; and (iii) constitutes part of an integral approach or policy

Prevention is probably the most important part of any policy against violence and stress. Clear communication about what is acceptable or not acceptable in the organization, has an important preventive effect. There also has to be agreement about what can be done when rules are violated and to whom complaints can be addressed. The policy should also be communicated to users, clients and the general public.

Situational crime prevention techniques have been widely used in recent years to combat crime problems, including the problems of violence on public transport. These techniques comprise opportunity-reducing measures that involve the management, design or manipulation of the immediate environment so as to increase the effort and risks of crime and reduce the rewards as perceived by a wide range of offenders. A considerable body of evidence now exists supporting the effectiveness of a range of situational techniques in the reduction of crime including aggression on public transport. One advantage of this type of crime prevention approach in the prevention of violence on public transport is that it has been successful in reducing not just opportunities for violence but also in providing effective situational techniques to combat fear, incivility, graffiti and vandalism. [6]

A variety of community crime prevention strategies, aimed at changing the social conditions that are believed to sustain crime in communities, have also been aimed at reducing violence on public transport including reducing community fear of crime, neighbourhood incivilities, graffiti, vandalism, social disorder and delinquency. However, these programmes tend to target communities as a whole (rather than specifically target public transport), tend to de-emphasize the importance of reducing opportunities for

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[6] De Volkskrant: Treinverbod Schiphollijn voor dieven, www.volkskrant.nl, 27 June 2002.

violence, tend to lack evaluation, and when they do evaluate, tend to show only weak outcomes.

A number of programmes utilizing specific approaches aimed at specific problems have been effective in preventing violence on public transport. In its most recent effort to combat passenger violence, the Dutch railway operator, NS, has built a special training centre to train its employees on how to deal with aggression and violence. TrainStation, the name of the new centre, should put a stop to the increase in violence on platforms and on trains. Realistic situations from daily practice can be played out in the centre that is equipped with a real platform, a real train, a station hall and a ticket counter. With the help of actors impersonating "aggressive" travellers, employees will be trained in how to prevent escalations of violence. [7]

Railway vandals hit discordant note

An effort to stop vandalism by youths at a British railway station by playing classical music has been interrupted – by vandalism.

A few moths ago, speakers were installed at the station in Frinton-on-Sea, a town in southern England, and music by Beethoven, Mozart and Strauss was played from them. That ended last week, when vandals damaged the speakers.

A spokesman fro rail company First Great Eastern insisted that the program had been successful at stopping some teenagers from causing damage, and said that the speakers would be repaired.

Source: The IHT Online, 21 June 2002.

Based on the findings of the study on stress among driver-conductors, the Paris RATP has developed three guidelines for preventive action:

– *know in order to understand* (understand the risks and the preventive measures) – training to the exposed staff on "conflict and stress management";

– *understand in order to act* (explain the difficulties to better eliminate them) – interventions at the most local level possible, through "Technical Prevention Teams" (TPTs) at the first "signs" revealing stress or maladjustment (split holidays, tardiness, irritability);

– *act in order to prevent or repair* (anticipate the risk or limit its consequences) – the search for partnerships between public services, private companies, local government, associations, community health services and others.

RATP has felt it necessary to create an outside institute to bring in other partners such as the GMF, which enables the company to use its services as a platform, and INAVEM (National Institute for Aid to Victims and Mediation), to include the passengers in the preventive action. One of the duties of this institute, the IAPR (Institute for Post-traumatic Psychological Support, Prevention and Research), is to provide preventive surveillance round-the-clock seven days a week, with a team of psychologists who can be mobilized at any time through a toll-free phone number. [8]

The RailwaySafety recognizes that violence at work is a source of occupational risk that has attracted increasing attention over recent years. In response to this development,

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[7] D. Weesie, Trainingstrein NS voor omgaan met agressie, *de Telegraaf*, Amsterdam, 3 mei 2002.

[8] A. Henrion, op. cit.

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the safety objective in 2000-01 was to encourage the reporting of assaults and to raise awareness of the issue with staff. Due to this increased attention, the number of recorded assaults increased by 16 per cent in 2000-01. In its Annual Safety Performance Report, it states that "There is much evidence to indicate that train operators have been active in addressing assaults during 2000-01. Initiatives included:

– reaffirming company policy on violence at work;

– issuing handbooks to staff, which cover what to do if provoked, how to avoid trouble and what help is available;

– care, counselling and support for victims;

– courses for staff in high risk occupations on how to handle aggression;

– issuing personal attack alarms;

– targeting high risk locations by adapting rosters and concentrating security staff." [9]

Another approach to the problem of aggression and violence – joint action by employers and trade unions – can be found in the charter for the improvement of security in public transport signed in 2000-01 between several public transport companies, including the national railway operator, and the transport workers' union (SEV). Managements and employees have agreed to create a bipartite committee to collect data on violence and aggression, to analyse the incidents and to make proposals to diminish the risks of violence and aggression, to reduce the feeling of insecurity among passengers and staff and to give all necessary assistance to victims of violence. [10]

In an effort to reduce the continuous increase in vandalism and aggression in the Brussels public transport system, the operator has decided to introduce a series of preventive measures, including:

– immediate reinforcement of the surveillance services (general surveillance, dog brigade) as well as the introduction groups of two or three agents on each vehicle;

– the introduction of an aggression management programme including prevention, employee training and care and support for victims;

– follow-up with aggressors through contacts with parents or a social service;

– installation of video cameras and silent alarms;

– sale of tickets outside the vehicles or on board with credit cards;

– selective preventive action; and

– improved collaboration with police agencies. [11]

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[9] RailwaySafety: op. cit., p. 194.

[10] Information provided by the Swiss Transport Workers' Union (SEV), Section Safety and Health at Work, www.sev-online.ch. For a copy of the charter, see Annex 1.

[11] L'heure de pointe, www.stib.irisnet.be .

In France, the Groupement des Autorités Responsables de Transport (GART) promotes the conclusion of social safety plans at the local level which are partnerships between the law enforcement agencies, the judicial system, public services and civil society. These contracts should, among others, cover public transport, education and social assistance. The GART is convinced that any action should not only be aimed at public transport alone but at the wider society. Such action should be based on three points: prevention, dissuasion, sanctions. [12]

6.2. Taxi industry

Research in the Netherlands shows that a number of safety measures for taxi drivers have been introduced. Two-thirds of the interviewed taxi drivers (mainly in the three big cities) indicated that they themselves (or their company) have taken measures to increase their safety. A technical measure mainly used in the three big cities is the hidden alarm button which allows the driver to give a signal to the dispatcher. There also is a course on "Dealing with violence for taxi drivers".

Post trauma care measures are aimed at reporting and counselling related to an incident. However, only one out five drivers who was a victim of an incident received counselling by a representative of the company or the dispatchers' central. After two violent assaults, the counselling of victims was organized professionally. A driver who has been the victim of an assault or who was involved in a serious traffic accident can permanently contact a group of volunteer taxi driver for support and counselling. These volunteers have been given training and exchange experiences on a monthly basis. Professional counsellors stay in the background. The basic idea is that trained taxi drivers have enough have character knowledge to assist their colleagues. [13]

In Canada, the working group on the safety of taxi drivers in Montreal has recommended the creation of a fund to support victimized taxi drivers. Other recommendations include the increased use of debit/credit cards for fare payment and better cooperation between taxi driver associations and the police. In a survey among taxi drivers conducted by the working group, 58 per cent of the respondents were in favour of the installation of a driver safety screen and 46 per cent agreed to the compulsory installation of an alarm visible from the outside. [14] A taxicab driver safety programme has been developed by Taxi-L to ensure that all new and veteran taxi drivers fully understand and comprehend the basic safety rules that they need to follow and embrace. [15]

The taxi driver survey in the state of Victoria, Australia, aimed at "Understanding Victorian Taxi Drivers' experiences of victimisation and their preferred preventive measures. The survey outlined support for various measures by those who had experienced particular types of victimization. For drivers who had experienced victimization, video cameras and driver control of doors were highest in preference in terms of protection from crime and violence. In terms of solutions offered by this survey no one technique suggested (driver controlled doors, video cameras, GPS phones, training, alarms) received

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[12] GART: *Le GART se felicite de la determination affichee par l'etat*, www.gart.org, 10 Dec. 1997.

[13] For more details on other projects in the Netherlands, see Middelhoven and Driessen, op. cit., p. 56.

[14] Communauté urbaine de Montréal: Les outils existent pour faire cesser les agressions contre les chauffeurs de taxi, www.cum.qc.ca, 8 Apr. 1997.

[15] G. Barton: Taxicab driver safety, www.taxi-l.org .

overwhelming support. A range of measures, rather than one measure alone is likely to be more successful. From the drivers' point of view, it may be concluded that a combination of video cameras, driver control of doors (designed to keep people out) and driver protection screens could be expected to have the greatest effect. It was ironic that alarms of various descriptions received the lowest level of support, notwithstanding the fact that these devices that are mandated by law.[16]

The US Occupational Safety and Health Administration (OSHA), in consultation with taxi driver safety advocates, an industry trade association, and transportation regulators, has developed a fact sheet on "Risk Factors and Protective Measures for Taxi and Livery Drivers". The fact sheet lists ten protective measures to help prevent injury to drivers and speed up the response time to those who need help. The fact sheet was provided to the International Taxicab and Livery Association, the International Taxi Drivers Safety Council and the International Association of Transportation Regulators for distribution to their membership.[17]

6.3. Air navigation services

An effective strategy aimed at reducing stress among air traffic controllers should address both the causes and the consequences of stress, thus acting upon all factors involved concerning work organization, as well as the personal resources and social conditions of the controllers.

The possibility of making changes and improvements in job demands is determined mainly by technical factors related to the development of new flight control systems. Implementing new methods of automation and communication systems in air navigation services, for example, could profoundly change job demands and characteristics. One results of such changes could be a modification in conditions which are known to cause stress.

On the other hand, specific arrangements of work organization and careful attention to the psycho-physiological conditions of ATCs are just as important tools capable of reducing stress and improving the comfort and well-being of operators.

The Costa study [18]includes a number of examples of programmed interventions carried out by some ATC companies, agencies or institutions.

The Critical Incident Stress Management (CISM), though not unique to air traffic control, is a wide range of programmes and intervention strategies which have been designed to mitigate the impact of stress in personnel and to assist them in managing and recovering from significant stress.

The International Federation of Air Traffic Controllers' Associations (IFATCA) recognises the importance of stress management for air traffic controllers and recommends that, at regular intervals, air traffic controllers be provided with up-to-date information on stress management techniques. Comprehensive and confidential support services should be available at all times for air traffic controllers, support staff and their families. The

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[16] F. Haines: Taxi Driver Survey – Victoria, www.taxi.vicgov.au/survey .

[17] OSHA National News Release: OSHA recommends protective measures to help prevent violence against taxi drivers, www.osha.gov, 9 May 2000. The fact sheet is available on this website.

[18] G. Costa: op. cit., p. 8.

Federation endorses the use of professionally trained peers in the provision of CISM to colleagues experiencing critical incident stress (CIS), and that support services should also be made available to controllers involved in ATC incidents/accidents if the controllers so choose. [19]

Critical incident stress management

"On the psychological side, there is an urgent need for all the Member Associations to have a Critical Incident Stress Management (CISM) programme introduced. Not only has it been proven to help in disaster scenarios, but it also assists staff to return more quickly to operational duties following a disaster/incident. It has even been shown that staff remain operational for longer, following CISM intervention, effectively prolonging an ATCO's career. It is essential that ATCO's receive this psychological help after a serious incident or accident. IFATCA is very grateful to the Danish ATCA and our former President, Preben Lauridsen, who provided psychological (CISM) assistance to the ATCO concerned [in the mid-air collision over southern Germany on 1 July 2002] in Zurich, within 15 hours of the accident. Also to the DFS (Deutsche Flugsicherungs GmbH) CISM Team who provided CISM debriefings to more than 100 persons at Zurich ACC.

Source: Marc Baumgartner, President and CEO IFATCA, The Controller, Mar. 2002.

The CISM debriefing process includes the following phases:

– *Introduction:* where the ground rules, such as confidentiality, are set down.

– *Fact phase:* the situation is briefly reviewed.

– *Thought phase:* participants state their first thoughts on the worst part of the incident.

– *Reaction phase:* participants state their overall feeling or emotional reaction.

– *Symptom phase:* discussion on the symptoms which occurred during the incident, or within a few days.

– *Teaching phase:* the team leader provides reassurance that what the participants are experiencing is a set of normal reactions.

– *Re-entry phase:* participants ask questions about what has occurred, or what they might continue to experience.

– *Defusings:* a shortened version of a debriefing which can be provided by a peer or other trained team member to reduce the immediate effects of CIS. This involves one to three persons, should be done within 8 hours of the incident, should not last longer than 1.5 hours, and is usually led by a peer debriefer. [20]

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[19] The Controller, op. cit., p. 5.

[20] Thanks to Marc Baumgartner for his presentation during the 13th Africa and Middle East Regional Meeting of IFATCA, Abuja, Nigeria, 22-24 Oct. 2002.

7. Relevant studies, other literature and websites

7.1. Web sites

Canadian Centre for Occupational Health and Safety, www.ccohs.ca

Canadian Initiative on Workplace Violence (CIWV), www.workplaceviolence.ca . This is Canada's premier social research firm that focuses its attention on workplace violence from a Canadian perspective. This site is dedicated to the many individuals and organizations throughout Canada who are working to make Canadian workplaces safe, free from the debilitating effects of workplace aggression.

European Agency for Safety and Health at Work, (Bilbao, Spain), http://agency.osha.eu.int

Commission of the European Union, Brussels, Belgium, http://europa.eu.int

European Foundation for the Improvement of Living and Working Conditions, (Dublin, Ireland), www.eurofound.ie

European Trade Union Technical Bureau for Health and Safety (TUTB), www.etuc.org/tutb

Finnish Institute of Occupational Health (FIOH), Finland, www.occuphealth.fi

Institut National de Recherche et de Sécurité, France, www.inrs.fr

Conseil supérieur du travail social, Groupe de travail sur "Violence", www.social.gouv.fr

Bundesanstalt für Arbeitsschutz und Arbeitsmedizin : Federal Insititute for Occupational Safety and Health (FIOSH), Germany, www.baua.de

Health and Safety Authority (HSA), Ireland, www.HSA.ie/osh/

TNO Arbeid, Netherlands, www.arbeid.tno.nl

Centrum Gezondheidsbevordering op de werkplek (GBW), www.gbw.nl

Arbetslivinstitutet (National Institute for Working Life), Sweden, www.niwl.se

Department of the Environment, Transport and the Regions, Department for Transport, United Kingdom, http://www.mobility-unit.dft.gov.uk

Health and Safety Executive (HSE) , www.hse.gov.uk

Bully OnLine, www.successunlimited.co.uk, the world's largest Internet resource on bullying

University of Nottingham Business School, Institute of Work, Health and Organisations

Indian Institute of Technology (TRIPP), New Delhi, India, http://www.iitd.ac.in/tripp, transportation Research and injury prevention programme.

Bureau of Labor Statistics, United States, http://stats.bls.gov

Department of Health and Human Services, National Institute for Occupational Safety and Health, www.cdc.gov/niosh

Occupational Safety and Health Administration, US Department of Labor, www.osha-slc.gov

Taxi-L, www.taxi-l.org . The objective of TAXI-L is to provide a resource for significant documentation affecting the worldwide taxicab industry. It contains a library of significant documents not available elsewhere. It also contains links to other taxicab related sites that effectively contribute to a better understanding of this often overlooked, but important segment of typical municipal transportation.

University of California (Davis), Violence Prevention Research Program (VPRP), http://web.ucdmc.ucdavis.edu/vprp

University of Colorado, Center for the Study and Prevention of Violence (CSPV), http://www.colorado.edu/cspv . In an effort to establish more complete and valuable information to impact violence-related policies, programmes and practices, CSPV works from a multi-disciplinary platform on the subject of violence and facilitates the building of bridges between the research community and the practitioners and policy makers.

University of Iowa, Injury Prevention Research Center (IPRC) www.public-health.uiowa.edu/iprc

Workplace Violence Research Institute, Palm Springs, CA 92262, www.workviolence.com

7.2. Publications

Canada

Canadian Centre for Occupational Safety and Health

OSH Answers: *Violence in the workplace* (1999)

OSH Answers: *Workplace stress – General* (2000)

Canadian Initiative on Workplace Violence

Violence in the Workplace Prevention Guide – 2nd edition (157 pages). This Guide provides detailed advice on how you can develop a workplace violence prevention program. Includes specific prevention tips on a multitude of workplace and work-related travel situations as well as practical advice on how you can respond to specific violent situations. publications@workplaceviolence.ca.

Business & Legal Reports, Inc.

How to Prevent Violence in the Workplace covers how to recognize and stop potentially violent situations, and how to take precautions to reduce the chance of becoming a victim of violence; emphasizes personal safety and security techniques. www.workplaceviolence.ca

Europe

European Agency for Safety and Health at Work

Facts 22: Work-related stress (2002)

Facts 23: Bullying at work (2002)

Facts 24: Violence at work (2002)

T. Cox, A. Griffiths, E Rial-Gonzalez

Research on work-related Stress, European Agency for Safety and Health at Work, May 2000.

European Commission

Guidance on work-related stress "Spice of Life or Kiss of Death?", Employment and Social Affairs, Health and Safety at Work, European Commission, 1999, http://europa.eu.int/comm/employment_social/h&s/publicat/pubintro_en.htm

Communication of the Commission

Adapting to change in work and society; a new Community strategy on health and safety at work 2002-2006, European Commission, 2002, http://europe.osha.eu.int/ systems/strategies/future/=270

France

Christophe Soullez

Violences urbaines: Description and réponses institutionneles, Institut de Criminologie de Paris, Décembre 1997, www.mccccm.free.fr(html/ archivememoires_theses/ soullez/sommaire.html

Germany

Bundesanstalt für Arbeitsschutz und Arbeitsmedizin

Special Report S 49: M. Holzbecher, B. Meschkutat: Mobbing am Arbeitsplatz, 1998

Ireland

Health and Safety Authority

Violence at work, 2001 (?)

Netherlands

TNO Arbeid

Gewenst beleid tegen ongewenst gedrag: Voorbeelden van goed beleid tegen ongewenste omgangsvormen op het werk, (Hoofddorp), 2002.

This study provides examples of "good practices" in 16 Dutch companies that have introduced policies against undesirable behaviour.

Centrum Gezondheidsbevordering op de werkplek (GBW)

Druk, druk, druk op het werk, short pamphlet on work and stress

FNV Bondgenoten

Roodboek "Onveiligheid spoort niet", Apr. 2002

A trade union publication addressing violence and aggression in the railway sector.

L.K. Middelhoven, F.M. Driessen

Violence against employees in (semi)public places, Utrecht, Bureau Driessen Sociaal Wetenschappelijk Onderzoek, 2001

This study was commissioned by the Ministry of the Internal Affairs and Kingdom Relations and the Ministry of Justice. It looks at violence against eight selected occupational groups: police officials, officials in penitentiary institutions, public transport employees, public assistance employees, medical doctors, retail employees and taxi drivers.

J. van Soethout, M. Sloep

Evaluation Working Conditions Act on sexual intimidation, aggression and violence and bullying at work. Final Report. The Hague: Ministry of Social Affairs and Employment, 2000.

United Kingdom

Department of the Environment, Transport and the Regions, Department for Transport

Personal Security on Public Transport: Guidelines for operators, July 1998

Health and Safety Executive (HSE)

Work related stress: A short guide

Work-related stress – myths and facts: Fact sheet 1

Work-related stress – some of the causes: Fact sheet 2

Work-related stress – the consequences: Fact sheet 3

Work-related stress – findings of recent research: Fact sheet 4

Work-related stress – the future: Fact sheet 5

Tackling work-related stress – a guide for employees

Tackling work-related stress: A managers' guide to improving and maintaining health and well-being

Violence at work: The booklet gives practical advice to help you find out if violence is a problem for your employees, and if it is, how to tackle it. The advice is aimed at employers, but should also interest employees and safety representatives.

Preventing violence to staff: It explains the problem-solving process in more detail and includes nine case studies that show how it can work in practice.

Health risk management: A practical guide for managers in small and medium-sized enterprises (1995).

Bully OnLine

Tim Field: *Bully in sight:* How to predict, resist, challenge and combat workplace bullying, Success Unlimited, ISBN 0 9529 121 04

David Kinchin, *Post traumatic stress disorder: The invisible injury*, Success Unlimited, 2001, ISBN 0 9529 121 3 9

United States

Bureau of Labor Statistics, Compensation and Working Conditions Online

BRIEF: Fatalities and injuries among truck and taxicab drivers, Fall 1997, Vol. 2, No. 3.

G. Gray, D. Myers, P. Myers

Workplace Violence Provisions in Private Sector Collective Bargaining Agreements, Compensation and Working Conditions, Fall 1999, Vol. 4, No. 3, http://stats. bls.gov/opub/cwc

Department of Health and Human Services, National Institute for Occupational Safety and Health

Stress at Work, DHHS (NIOSH) Publication No. 99-101

Department of Justice

New Directions from the Field: Business Community, 145 KB PDF file. Provides practical advice for the business community on dealing with victims of workplace violence.

Department of Labor and Industry, Minnesota

Workplace Violence Resource Center: Violence in the workplace.

Federal Protective Service

What you should know about coping with threats and violence in the federal workplace

Occupational Safety and Health Administration, US, Department of Labor

Risk Factors and Protective Measures for Taxi and Livery Drivers, OSHA Facts (May 2000), 40 KB PDF file.

OSHA California

Guidelines for Workplace Security

OSHA Oregon

Developing an Effective Violence Prevention Program, Online Course 120.

Office of Personnel Management

Dealing with Workplace Violence: A Guide for Agency Planners, (1998)

This handbook is the result of a cooperative effort of many Federal agencies sharing their expertise in preventing and dealing with workplace violence. It is intended to assist those who are responsible for establishing workplace violence initiatives at their agencies. PDF version is available in two forms: as individual chapters, and as a single 1.78 MB PDF file.

University of California

Human resources and risk management – Workplace violence prevention

University of Iowa Injury Prevention Research Center

Workplace Violence: A Report to the Nation, (Feb. 2001), 331 KB PDF

This reports summarizes the problem of workplace violence and the recommendations identified by participants at the Workplace Violence Intervention Research Workshop in Washington, DC, April 2000. The workshop brought together 37 invited participants representing diverse constituencies within industry, organized labour, municipal, state, and federal governments and academia.

7.3. Legislation

Belgium

Welfare at Work Act, 4 Aug. 1996.

Loi du 11 juin 2002 relative à la protection contre la violence et le harcèlement moral ou sexuel au travail. (NATLEX database)

France

Modernization of Employment Act, 17 Jan. 2002.

Netherlands

Working Conditions Act, 1999. (Arbeidsomstandigheden wet (ARBO), Staatsblad 1999, p. 184.

Algemene Wet Gelijke Behandeling (Equal Treatment Act)

Sweden

Working Environment Act, 1977

Order on Victimization at Work, 1993 (AFS 1993:17)

United Kingdom

Protection from Harassment Act, 1997

Employment Rights Act, 1996

Annex

Table 2.1. Rate of violent victimization in the workplace, by occupational field, 1993-99, United States
Rate per 1,000 persons in each occupation

	Medical	Mental	Teaching	Law	Retail	Transportation	Other Occupation
1993	20.3	64.4	25.8	163.1	21.9	20.6	8.1
1994	16.7	63.7	19.3	156.4	22.8	24.1	9.6
1995	16.0	56.7	15.4	157.2	22.2	13.8	7.4
1996	11.8	63.9	16.6	125.9	20.4	12.6	7.3
1997	8.4	39.7	14.9	122.0	20.5	15.4	5.1
1998	9.2	49.3	18.9	88.5	16.2	18.3	6.6
1999	10.0	46.1	12.4	74.1	14.1	8.4	5.3
1993-99							
percent change	–51%	–28%	–52%	–55%	–36%	–59%	–35%

Source: National Crime Victimization Survey: *Violence in the workplace*, 1993-99, Dec. 2001, p. 3.

Table 2.2. Occupations with above average risk of violence at work, United Kingdom

High risk of being a victim of an assault (average risk = 1.2% per annum)		High risk of being victim of a threat (average risk = 1.5% per annum)	
security/protective services	(11.4%)	**public transport**	**(5.6%)**
Nurses	(5.0%)	security/protective services	(5.3%)
care workers	(2.8%)	other health professionals	(4.0%)
public transport	**(2.8%)**	retail sales	(3.5%)
catering/hotels/restaurants	(2.6%)	nurses	(5.0%)
other education and welfare	(2.6%)	management and personnel	(2.6%)
teachers	(1.8%)	other education and welfare	(2.3%)
retail sales	(1.8%)	catering/hotels/restaurant	(2.0%)
management and personnel	(1.7%)	teachers	(2.0%)
leisure/service providers	(1.7%)	cashiers/bank/money lenders	(2.0%)
other health professionals	(1.4%)	leisure/service providers	(1.9%)

Source: Violence at Work: Findings from the British Crime Survey, Home Office, October 1999, Table 3.1, data combined from the 1994, 1996 and 1998 surveys.

Table 2.3. Average annual rate of violent victimization in the workplace, by occupation of the victim, 1993-99, United States

Occupational field of victim	Number	Rate per 1,000 workers	Per cent of total
Medical			
Physician	71 300	16.2	0.6
Nurse	429 100	21.9	3.5
Technician	97 600	12.7	0.8
Other	315 000	8.5	2.6
Mental health			
Professional	290 900	68.2	2.4
Custodial	60 400	69.0	0.5
Other	186 700	40.7	1.5
Teaching			
Preschool	32 900	7.1	0.3
Elementary	262 700	16.8	2.1
Junior high	321 300	54.2	2.6
High school	314 500	38.1	2.6
College/university	41 600	1.6	0.3
Technical/industrial	7 400	12.2*	0.1*
Special education	102 000	68.4	0.8
Other	169 800	16.7	1.4
Law enforcement			
Police	1 380 400	260.8	11.2
Corrections	277 100	155.7	2.3
Private security	369 300	86.6	3.0
Other	359 800	48.3	2.9
Retail sales			
Convenience store	336 800	53.9	2.7
Gas station	86 900	68.3	0.7
Bartender	170 600	81.6	1.4
Other	1 383 100	15.3	11.2
Transportation			
Bus driver	105 800	38.2	0.9
Taxi cab driver	84 400	128.3	0.7
Other	350 500	11.7	2.8
Other	**4 720 100**	**7.0**	**38.3**
Total	**12 328 000**	**12.6**	**100**

Note: Rates are calculated using population estimates from the NCVS for occupations, 1993-99. The total number of victimizations in this table and in all other tables with detail for occupation differs from the total in tables without occupational detail because of the way teacher victimization was computed.

Details may not add total because of rounding.

* Estimate based on 10 or fewer sample cases.

Table 2.4. Average annual rates of aggravated and simple assault in the workplace, by occupation, 1993-99, United States
Violent victimization in the workplace

Occupational field	Total assault	Aggravated assault		Simple assault		Rate of simple to aggravated assault
		Number	Rate per 1,000	Number	Rate per 1,000	
All assault	11 579 400	2 286 900	2.3	9 292 500	9.5	4:1
Medical	878 700	96 200	1.4	782 500	11.4	8:1
Mental health	495 700	75 100	7.7	420 600	43.2	6:1
Teaching	1 211,200	121 300	1.7	1 089 900	14.9	9:1
Law enforcement	2 348 500	548 400	29.2	1 800 100	95.8	3:1
Retail sales	1833 700	420 600	4.2	1 413 100	14.1	3:1
Transportation	455 800	115 100	3.5	340 700	10.2	3:1
Other	4 355 900	910 300	1.4	3 445 600	5.1	4:1

Note: Rates are per 1,000 persons in the workforce.
Source: *Violence in the workplac*e, 1993-99, Dec. 2001, p. 5.

Table 2.5. Average annual rate of robbery in the workplace, by occupation, 1993-99, United States

Occupational field	Number	Total (%)	Rate per 1,000 workers
All robbery	**490 900**	**100**	**0.5**
Medical	8 200	2*	0.1*
Mental health	9 300	2*	1.0*
Teaching	32 300	7*	0.4*
Law enforcement	15 600	3*	0.8*
Retail sales	100 700	21	1.0
Transportation	82 600	17	2.5
Other	242 300	49	0.4

Note: Details may not add to total because of rounding.
* Estimates based on 10 or fewer sample cases.
Source: *Violence in the workplace*, 1993-99, Dec. 2001, p. 5.

Table 3.1: Railway workforce assaults by occupation in the UK (2000-01)

Train crew (front end)	5%
Train crew (rear end)	31%
Other on Board staff	4%
Revenue protection staff	25%
Platform staff	16%
Other	11%
Not recorded	8%

Source: RailSafety: *Annual Safety Performance Report* 2000/01, pp. 187-196.

Table 3.2: Patterns of occupational violence amongst taxi drivers in Australian studies

Forms of violence in past 12 months	Queensland (1996) (%)	NSW (1993) (%)	Victoria (1995) (%)
Abused	81	44.4	79
Threatened	17	19.3	–
Assaulted	10	15.2	40
Robbery involving violence	–	3.8	–
Robbery	–	11	24
Fare evasion	–	69.4	84

Source: Mayhew 2000.

Table 4.1.   Reportable assaults in the railway system in the UK

	Fatalities		Major injuries		>3 day absences	
	Number	% of all	Number	% of all	Number	% of all>3
1996-97 total	**2**	**1**	**665**	**2**	**3 866**	**3**
Rail (mainline)	0	0	12	5	172	14
Rail (other, e.g. LUL)	0	0	8	20	75	25
1997-98 total	**0**	**0**	**680**	**2**	**4 400**	**3**
Rail (mainline)	0	0	23	9	168	12
Rail (other, e.g. LUL)	0	0	9	19	135	28
1998-99 total	**1**	**0**	**633**	**2**	**4 621**	**3.5**
Rail (mainline)	0	0	13	4.9	200	15
Rail (other, e.g. LUL)	0	0	7	9.5	162	34
1999-2000 total	**0**	**0**	**686**	**2.5**	**5 034**	**4**
Rail (mainline)	0	0	19	7.7	236	18

Source: HMRI and HSE annual reports, cited in RailSafety, *Annual Safety Performance Report 2000-01*, p. 190.