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Workers in the Road Transport Industry**

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# **Trucking Tragedies: Why Occupational Health and Safety Outcomes are Worse for Subcontract Workers in the Road Transport Industry**

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## ***ABSTRACT***

*Over the past decade the rapid expansion in outsourcing/subcontracting has caused a significant shift in labour markets and work organisation within many industrialised societies. The occupational health and safety (OHS) consequences of subcontracting have received little attention from industrial relations researchers. This paper examines the OHS implications of subcontracting in the Australian road transport industry by comparing self-employed and employee transport workers. It is argued that self-employed truckers are more vulnerable to the vagaries of the market. This results in extended hours of labour, work intensification, and the breaching of traffic rules which impede production. Inadequate regulatory frameworks exacerbate these threats. The diminution of OHS amongst transport workers also affects other road users.*

## ***INTRODUCTION***

In the early morning of 20 October 1989 a semi-trailer carrying canned fruit from Brisbane to Sydney and driven by a subcontractor for a major transport company veered onto the wrong side of the Pacific Highway at Cowper (800 km north of Sydney) and collided with an interstate bus. Twenty people died, including the semi driver. Viewed by colleagues as a reliable operator, the driver had a blood-ephedrine level 80 times that of a chronic user, suggesting a tolerance built up over a long period (heavy use of ephedrine can cause hallucinations). In the past three years he had been booked for more than 29 traffic offences. This included five speeding offences (and one of not carrying a log book) in three different states over the six months immediately prior to the crash. During the subsequent public debate some industry association and transport company representatives identified ruthless timetables as a root cause of hazardous practices. Others admitted that road freight rates had been kept down because owner/drivers and small operators flouted road transport laws (see *Courier Mail*, 28 October and 8 November 1989; and 12, 25, 26, 31 January and 3 February 1990). However, proposed regulatory solutions ignored the subcontracting issue and instead focused on speed limiters, lower speed limits, national license and log book systems. The flaws in this response was soon revealed. Within months trucking 'cowboys' had found ways of tampering with speed limiters through outright disablement, altered tyres, removing gear-box cogs and use of a false signal 'whizzer'. Over the next five years NSW police alone issued 1,374 infringement notices on trucks without any device fitted (*Sydney Morning Herald* 7 April 1990:6 and 13 July 1996:4).

The foregoing incident and its aftermath highlight the issues which this paper seeks to address. Over the last 10-15 years there has been a rapid growth of subcontracting and other forms of marginal work in many industrialised societies. Outsourcing or subcontracting out of jobs has been associated with a range of OHS problems, decreased reporting of work-related illnesses, and a weakening of regulatory controls (see Mayhew et al. 1996). While owner operators have long been central to the subcontracting process in road transport there has been an increase in the proportion of self-employed drivers and in number whose employment status shifts at regular intervals. Safety problems associated with long haul transport has drawn the attention of police, regulators and researchers. Their over-riding focus has been community concerns with public safety on the roads. The OHS of drivers has been treated as an incidental issue, and then largely in terms of crash-related deaths (for an exception see

Williamson et al. 1992 and 1994). The potentially pivotal association between the extension of outsourcing, an increasingly pressured transport workforce and poorer OHS indices has been largely ignored.

This paper tries to remedy this deficiency. It is divided into six parts. The first part examines the underlying economic and employment structure of the industry which forms an important background to our analysis. Part two overviews OHS indices in the transport industry and highlights how the Queensland/Australian experience is consistent with the patterns of injury and illness found in the road transport industry of other countries. Part three describes the methodology used in our transport studies. Part four examines the links between subcontracting and OHS identified through our survey evidence together with that from other studies. These links form the basis for an explanatory typology. In part six the argument is drawn together.

## **PART 1: ECONOMIC, EMPLOYMENT AND REGULATORY STRUCTURE**

The road transport industry is segmented into courier, local freight, interstate and long haul transport. In practice these sectors often overlap, and drivers may move between categories over a working lifetime, due to business cycle fluctuations<sup>1</sup> or according to where jobs become available. As a result, it is often difficult to clearly differentiate between different sub-groups of the working population. Historically employee drivers were paid on a weekly wage basis but today many are paid on the basis of trips completed, cartage levels, or an hourly rate. Clear delineation of employment status is frequently difficult. A recent survey of outsourcing by firms employing at least 100 persons (and covering over 1600 workplaces. See Wooden and VandenHeuvel, 1996) confirmed both a general growth in subcontracting as well as its prevalence within road transport. Of all industries, construction and transport made most use of self-employed subcontractors. They also ranked highly in terms of using the employees of contractors (Wooden and VandenHeuvel, 1996:19,26-27). Across all Australian industries, contractors had little influence on their working hours and hiring organizations tended to exercise a high degree of control over them (Wooden and VandenHeuvel, 1996:v,21). Overall, road transport workers have few formal skills and limited labour market power. Some owner/drivers have bought their rigs as a result of redundancy payouts and are "locked in" to their jobs. Although employee drivers have greater mobility their job options have been limited by high levels of unemployment.

In all categories of employment, road transport can be categorized as a very competitive industry. As long ago as 1984 the National Road Freight Industry Inquiry included commercial conditions as a causal factor in heavy vehicle crashes (Young 1990). It has been suggested that, for a number of reasons, competition is becoming more intense, placing pressure on existing regulatory regimes and threatening to reverse historical improvements in safety (Stoop and Thissen 1997. For evidence of the association between increasing vehicle size and fatalities see Young 1990). Unlike some other factors (like changes to technology and environmental laws), subcontracting is simultaneously a reflex to competitive pressures which further intensifies the level of competition.

Profit margins are often minimal as owner/drivers compete for a limited number of contracts. Increasing income usually means working longer hours, driving longer distances, or loading

and unloading freight. Owner/driver must also find time to do vehicle maintenance and repairs. The types of freight carried also vary markedly, from live cattle to frozen food, and from heavy equipment to furniture or vehicles.

There is a geographic dimension to job competition within road transport. Table 1 identifies the geographical distribution of Transport and Storage workers across Queensland using Australian Bureau of Statistics (ABS) data.

**TABLE 1: Total Queensland Employment in The Transport Industry By Statistical Division**

	<i>Male</i>	<i>Female</i>	<i>Total</i>
Brisbane	22092	6258	28350
Central West	260	59	319
Darling Downs	2626	484	3110
Far North	3198	1147	4345
Fitzroy	3883	654	4537
Mackay	2316	438	2754
Moreton	4859	1705	6564
North West	715	131	846
Northern	3563	678	4241
South West	539	80	619
Wide Bay/Burnett	2055	447	2502
Off Shore/Migratory	30	9	39
Total	46136	12090	58226

(Source: ABS 1991, Population Census: matrix USQ6412).

From Table 1 it is clear that transport workers in Queensland are concentrated in the Brisbane metropolitan area (in the south east corner of the state). This concentration probably results from three inter-related factors: the interstate nature of much road transport work, the linkage between goods transport and major port facilities, and the larger population in the state capital which results in the movement of a range of items. Similar near metropolitan concentrations of transport labour occur in other Australian states and territories. The concentration of workers in restricted localities intensifies competition for work - especially amongst owner/drivers. This in turn affects their OHS status.

## *OHS and Road Transport Regulatory Controls*

Health and safety in the Australian trucking industry is covered by both road transport and OHS legislation. The former is complex (and more so for trucks carrying hazardous materials) but generally understood by most road users. On the other hand, the role of OHS legislation has been largely ignored. Under the principal OHS Act of every state and territory jurisdiction in Australia, employers are obliged to provide a safe system of work. Freight forwarding companies could be held legally responsible for the OHS consequences (including injuries resulting from crashes) of working conditions they impose on drivers through expected time of arrival schedules (ETAs), overloading etc. However, this option has not been utilized. Hopkins' (1992) study found that, while over 25% of workplace fatalities in New South Wales involved trucks (most long haul) not one fatal incident had been investigated by the NSW OHS agency (WorkCover) with a view to prosecuting the freight forwarder. A study of work-related fatalities in Victoria between 1987 and 1990 (Perrone 1994:17-18) identified six prosecutions but all concerned loading/unloading not the en-route transportation stage where subcontracting is so critical. Hopkins has called for precedent-setting court cases but the very fact that these practices are customary for the industry seems to mitigate against regulatory intervention.

*"... overworking their employees, is fairly common. Employees are expected to unload and load during the day, drive all night then unload and load the next day. If the driver is lucky he catches a few hours sleep along the way only to keep repeating this process until he collapses or runs out of freight depending on which comes first. Many companies see nothing wrong with this process, after all its the way the industry has always operated" (Freestone 1996:120).*

Changes to compliance strategies in road transport during the early 1990s arguably exacerbated the situation. Regulations on overloaded or defective vehicles were altered from a reliance on weigh bridges to a self-regulatory system, backed by on-the-spot fines. In the year 1993/94 the NSW Roads and Traffic Authority (RTA) issued 46,200 defect notices on heavy vehicles and a random survey of semis in the same year found that 11.3% were unroadworthy. (*Sydney Morning Herald* 20 November 1993:13 and 7 November 1994:12). The RTA also instituted a spy camera operation. This program revealed not only widespread speeding by heavily laden trucks but also a significant number of unregistered vehicles (an

average of 28 per month, *Daily Telegraph Mirror* 21 December 1995). Clearly, self-regulation has been interpreted as de-regulation in the transport industry.

Overall, transport regulations have focused on symptoms (speeding, overloading, drug use, excessive hours at the wheel, defective vehicles etc) rather than confronting factors which cause these practices to flourish (intense competition for contracts amongst a large number of suppliers, and the payment-by-results systems/ETA bonus/penalties imposed by freight companies). No jurisdiction has produced a code of practice for self-employed transport workers which specifically addresses OHS requirements in contracts, delivery time scheduling, duties of care, incentive payment systems, or a range of other OHS-related issues (see Mayhew and Quinlan. 1997a:163, 168). Driver risk can be compounded by handling unusual loads, working different shift schedules or driving on unfamiliar roads. Again, the competition and instability associated with subcontracting makes such scenarios more likely.

Apart from its fixation with symptoms, the key feature of transport regulations is that it is driven by a public concern with road safety concern not a concern with the occupational health of drivers. This reflects the political clout of road safety as against the relative insignificance of OHS for workers in Australia. Since the 1960s when it mandated seat belts, Australian regulators have acquired a reputation for innovative strategies on road safety encompassing driver behaviour, road conditions/design, speed limits and vehicle design. With regard to driver behaviour Homel (cited Wheatley 1996:282) observed:

*"... formal and informal sanctions and rewards interact and reinforce each other in complex ways ... Australia has adopted a model using a combination of enforcement [consequences strategies] and mass media campaigns [antecedent strategies] ... The combination appears to have had high paybacks"*

Transport workers and managers, especially subcontractors, are less susceptible to such methods than general road users because intense competition and the flow of rewards to cheaper suppliers provide a strong incentive to breach safety regulations. For this group, the 'road safety' regulatory regime ignores underlying causes and individualises the problem by concentrating on driver behaviour (and not the subcontracting process, including pressure from load-owners and freight-forwarders). For well over a decade government inquiries and police blitzes have detected but failed to negate widespread regulatory breaches (see *Sydney Morning Herald* 24 November 1984:2 and *Courier Mail* 3 December 1989:3). Work pressure



and survival imperatives have similarly undermined the introduction of speed limiters. In July 1996 the National Road Transport Commission came up with yet another individualised response by proposing a ‘three strikes and your out’ suspension of speeding truckers (*Sydney Morning Herald*, 13 July 1996:4). Traditional approaches to prevention are myopic. To continually ignore an arguably central cause of injury and fatal crashes is to invite subversion.

## **PART 2 OHS INDICES IN THE ROAD TRANSPORT INDUSTRY**

Road transport, especially long haul road transport (typified by interstate semi trailers), is a dangerous industry. Overseas and Australian evidence indicates that hazard exposures result in a high incidence of serious injuries (including fatalities), and many less serious injuries and chronic illnesses. Notwithstanding this, ILO data (1995) indicates that fatalities are declining in the United States, New Zealand, and the United Kingdom. Unfortunately, ILO data does not separate out injuries and fatalities by employment status.

Other data sets are more revealing. In the USA, the 1994 Census of Occupational Fatalities found that highway traffic incidents were the single biggest cause of work-related deaths, accounting for 20% of 6,588 fatal injuries at work. The report (BLS 1995a:1) noted that *“slightly over half of highway fatality victims were driving or riding a truck, half of which collided with another vehicle and a quarter jackknifed or overturned.”* Highway crashes and jackknifing accounted for 762 truck driver deaths or about two thirds of total US truck-driver deaths (BLS 1995a). This Census also noted that the incidence of work-related fatalities amongst self-employed workers was more than double that of employees. As already indicated, the risk extends beyond drivers. In the same year (1994) heavy vehicles were involved in 11% of the 40,676 motor traffic fatalities in the USA and 78% of fatalities involving medium or heavy trucks were occupants of another vehicle (NHTSA, 1996).

It is surely more than coincidental that three of the four highest risk occupations (truck drivers, farm workers and construction laborers) are jobs where the self-employed constitute a significant proportion of the total workforce. The pattern is similar for non fatal injuries and illnesses. Truck-drivers headed the list of the 10 most dangerous occupations (see BLS 1995b). Drivers constituted only 2.6% of the labour force but accounted for 7.3% of lost time injuries and illnesses. Other US research (Rogers 1996) found that manual handling was the major cause of injury to transport workers, with handling accounting for 44% of all injuries in the years 1989-91.

In Australia, road crashes are a major cause of occupational morbidity and mortality in the transport industry. Of all industry groups, transport and storage ranks second in terms of the level of fatalities and fourth in terms of work-related injuries and diseases recorded for employees in all industry groups (WSA Feb 1995). Workers within the road transport industry sub-group accounted for 43.7% of these injuries and diseases (WSA Feb 1995).

Those over the age of 55 years were markedly more at risk of injury and, on average, they experienced more severe injuries (WSA November 1995). While intoxication is sometimes blamed for crashes, available evidence indicates that it is rarely associated with fatal crashes involving articulated vehicles, and only occasionally with those involving rigid trucks (FORS 1995).

Further insights into patterns of injury amongst transport workers were derived from workers' compensation data. Interstate differences in recording claims preclude the use of a national data set. We therefore derived data from the Workers' Compensation Board of Queensland (WCBQ) which is the jurisdiction where our surveys were carried out. As with the US research findings, the majority of injuries amongst the Queensland transport employee workforce were sprains and strains normally associated with manual handling (Table 2).

**TABLE 2 Distribution of Workers' Compensation Claims By Queensland Transport Workers, 1991/92**

<i>Type of Injury</i>	<i>Most Frequent %</i>	<i>Type of Injury</i>	<i>Most Costly %</i>
Strain/Sprain	49.4%	Strain/Sprain	53.6%
Open Wounds	16.5%	Fractures/Dislocations	18.5%
Fractures/dislocation	15.4%	Other	13.2%
Bruises	9.8%	Bruises	5.9%
Other	5.9%	Open Wound	5.7%
Burns	1.6%	General	1.5%
Deafness	1.1%	Deafness	1.5%
General	0.2%	Burns	0.1%

(Source: based on unpublished data supplied by S. Campbell DWH&S, 1995).

The transport industry ranks amongst highest (along with construction and mining) in terms of the number and costs of compensation claims. In 1991/92 1671 transport workers made successful compensation claims in Queensland with a total cost of \$A7,446,990 or an average of \$A4456.60 each (unpublished data supplied by S. Campbell DWH&S). Yet these figures significantly understate the incidence of injury and disease in the transport industry and may present a misleading picture of the OHS experiences of subcontractors in particular. There are a number of reasons for this.

First, workers' compensation insurance (and hence claims data) in most Australian states exclude the self-employed, which includes the bulk of subcontractors. Official statistics (ABS 1995, cat 6203.0) indicate that around 17.2% of transport workers in Australia are either employers (many, small operators who also drive) or self-employed and, as such, ineligible for workers compensation. This figure is almost certainly an understatement given the fluid and ambiguous character of employment status in the industry. Moreover, since the self-employed work longer hours than do employees (ABS 1991: census table B24) they are exposed to workplace hazards over greater periods of time and are more likely to suffer both chronic and acute injuries and illnesses. As a Worksafe report observed:

*"... the exclusion of self-employed persons is likely to have a marked effect on data for industries where self-employed persons are common, for example, Agriculture, Forestry, Fishing and Hunting, Construction, Road Transport ..."* (WSA July 1994: xii).

Second, denied workers' compensation, the costs of caring for and treating injured self-employed workers are externalised onto general taxpayers, through Medicare and Social Security invalid pensions and sickness benefits. This also distorts the relative costs of road transport in comparison to competing forms of transport, notably railways, where outsourcing is less common - a hidden subsidy compounded by the failure tax heavy trucks for the road damage they cause (estimated at \$A50,000 per vehicle per year by the Federal Bureau of Transport Economics in 1991, *Sydney Morning Herald* 6 July 1991:5).

Third, in competitive industries like road transport the bonus/penalty rebate provisions adopted workers' compensation agencies in recent years may act more as a claims suppression mechanism than an incentive to improve OHS, further understating the actual incidence of work-related injury and illness (See WSA July 1994:23). Lacking qualifications, even those transport workers entitled to compensation may often be unwilling to take time off or seek treatment for fear of jeopardising their employment.

Before ending this discussion of OHS indices it is worth noting that the limitations in compensation coverage just mentioned have potentially significant implications for preventative strategies. In recent years the closer alignment of compensation and prevention agencies (even to the point of merger) in most Australia jurisdictions has meant that the data and concerns of the former have increasingly driven prevention activities. However, in

industries like road transport this may be a distorted basis for action, not only because around a fifth of the workforce excluded from workers' compensation and many others fail to make claims, but also because these exclusions affect a growing segment of the industry (subcontracting small firms and self-employed operators). A lack of resources or appreciation of these changes means that OHS agencies have largely ignored small operators and the subcontracting process.

Given the above, we hypothesized that the more acute pressures on self-employed or subcontractors transport workers in comparison with employees would lead to increased OHS problems. To test this, a research project was devised which compared OHS outcomes between the different employment status groups.

## **PART 3    METHODOLOGY UTILISED IN OUR TRANSPORT STUDIES**

Detailed information of both a qualitative and quantitative nature was derived from two surveys of truck drivers conducted in Queensland in 1990-91 and 1995. Both surveys sought to systematically compare the OHS status of employed and self-employer transport drivers, and to gain critical insights into the impact of subcontracting on OHS.

The 1990-1991 study (James et al. 1992a, hereafter referred to as S1) compared the OHS of employed and self employed road transport workers by analyzing injury patterns from secondary sources (the Workers' Compensation Board of Queensland [WCBQ], National Injury Surveillance Prevention Program [NISPP] hospital treatment data from a capital city and a rural town, ambulance treatment data from the same rural town, and Queensland Transport fatality data). Primary empirical data was then gathered from independent health care providers and a population study of 71 employed and self-employed drivers in the rural town. Each person was interviewed face-to-face and completed a detailed questionnaire with closed and open-ended questions. The qualitative and quantitative data from these interviews were collated, analyzed and compared with the secondary data and appear in summary form only in this article.

The second survey (hereafter identified as S2) entailed 46 face-to-face interviews with subcontract and employee transport industry workers in a city and metropolitan area. The detailed questionnaire and interview schedule was similar to that used in S1. Self-employed transport companies were selected from the telephone directory as well as major 'truck stops'. For the purposes of this second study (S2) we classified anybody who owned a business or independently contracted to transport goods and who employed fewer than five people to be a self-employed/subcontract worker. We also classified anyone who was hired on the basis of a weekly wage or set hourly rate of pay as an employee driver. As noted elsewhere (Mayhew and Quinlan 1997b), comparing the experiences of employee and self-employed workers is one of the most direct means of measuring the impact of subcontracting on OHS (although understating this by omitting OHS effects on employees arising from their competition with owner/drivers).

## **PART 4 FINDINGS: SUBCONTRACTING AND OHS CONSEQUENCES**

The relationship between outsourcing and OHS is a largely unexplored and hidden area. In most OHS studies this relationship has not been a variable for analysis, except in attempts to limit individual and corporate legal liability. We have attempted to expose the key processes at play.

### ***The Relationship Between Subcontracting and Diminished OHS***

At the outset it needs to be recognized that self-employed and subcontract workers are involved in small business enterprises which, in contrast to larger organizations, are generally under-resourced in terms of finance, manpower, OHS information and expertise.. Further, small business is frequently concentrated in the more dangerous sub-sectors of industry, and may compete for contracts from larger businesses which have adopted a policy of outsourcing their most hazardous tasks. Thus, small business transport workers may be involved in the disposal of hazardous wastes, or the long distance haulage of volatile goods, without a basic understanding of threshold limit values and without having seen a material safety data sheet on the substance. The externalization of OHS risks is seldom the primary goal. Rather outsourcing forms part of the organization's overarching policy of getting rid of excess economic drains, potential drains, or increasing the flexibility of labour. Nonetheless, intense competition amongst subcontractors encourages them to under-price bids and to work excessive hours to increase returns/cover costs - all of which have OHS consequences.

### ***Fatigue as a Form of Occupational Injury?***

We believe fatigue is both a major health risk and an endemic occupational health problem in its own right amongst long haul transport workers. We cite four sets of evidence to support this contention.

First, one significant finding from our 1995 study was that transport workers consistently defined fatigue and long working hours as problems during the interviews even though they stated that they had not had an occupational injury or illness. Typical was the statement: "*Normal people don't work 18 hours a day*". In all, 66% of the interviewees in S2 raised

fatigue, driving long hours, not enough time for all freight transportation-related tasks, sleep shortages, and stress as factors which increased the risks of crashes.

Second, considerable overseas and Australian evidence has identified long hours of work as a major source of fatigue and fatigue as a major source of crashes and fatalities in the road transport industry (See Young 1990; NRTC 1995; National Road Transport Commission, 1996:9-13; Williamson et al. 1992; Arblaster et al. 1995). The driving fatigue problem is exacerbated by the need for drivers to load and unload their vehicle, to drive in the early hours of the morning (clearly linked with an increase in fatal crashes, especially for older workers - see James 1993), and to conduct routine maintenance. Fatigue is compounded by poor diet, sleeping disorders such as sleep apnea (which affects 4% of middle-aged males) and drivers' inability to sleep during break periods (Odens and Fox 1995:859-66 and Williamson et al. 1992). A study of long haul truck drivers in the USA (Stoohs et al, 1995:619-23) found that obese drivers or those with sleep disorders had a two-fold higher accident rate per mile. An Australian study by Arblaster et al (1995:55) argued that key features of drivers' working conditions including poor diet and long hours were responsible for an array of other health effects including stress, obesity, lack of exercise, back problems and isolation.

Third, a number of studies have indicated that fatigue is a key factor in crashes (both collisions and single vehicle incidents) and is linked to the widespread use of alerting drugs (see Young 1990). Seven months before the Cowper smash one driver told a reporter:

*“Dangerous? I would rather travel up and down the roads with guys who are juiced on speed; at least they're awake. I think the roads would be dangerous if we didn't take it. Everyone takes it.”* (cited in *Sydney Morning Herald* 25 March 1989:6).

The combination of fatigue and drug use have been associated with changes in driver behaviour which increase OHS risks such as aggressive driving (Young 1990 and Arblaster et al. 1995). Over the past decade or more there have been repeated allegations (and hearsay evidence) that transport companies are involved in supplying stimulant drugs (see for example *Courier Mail* 27 January 1990:15 and Arblaster et al. 1995). In at least one recent case where a truck driver was convicted of causing death by dangerous driving, the presiding judge was convinced the practice had occurred (see *Crown v Brian Douglas Snewin*, unreported decision District Court of South Australia No.DCCRM-96-1293, 31 January



1997). Evidence of widespread drug use, and transport company tolerance if not outright connivance in this, indicate practices typically labeled as those of a few 'cowboy' operators are in fact systemic and an integral if informal part of the production process.

Fourth, fatigue problems are worse for self-employed/subcontract drivers, principally because of the economic pressures upon them, and their longer hours of labour. In our second survey (S2) 33.3% of the self-employed drivers raised the issue of long hours and chronic fatigue, in comparison to only 11.8% of employee drivers. The cumulative fatigue of repeated trips tends to overwhelm countervailing efforts at time scheduling of long hauls. *"Results indicate that a 10-12 hour trip is tiring no matter how the work is organized, and that the effects of accumulated fatigue may overshadow the effects of fatigue on a single 10-12 hour trip"* (Williamson et al. 1994: abstract).

### ***Work- Related Injuries and Illnesses Amongst Outsourced Transport Workers***

Our 1995 study of transport workers (S2) found that sprain and strain injuries were very common - a finding consistent with the 49.4% recorded in the secondary data set in Table 2. Self-employed and employee transport workers identified a similar range of occupational hazards and risks including fatigue, driving/traffic problems and manual handling tasks performed on the job. although We compared drivers' perceptions of hazards with the injury patterns. This revealed a tendency to understate manual handling risks (Mayhew et al. 1996).

Both surveys (S1 and S2) revealed significant differences between self-employed and employee drivers in terms of their labour process which had implications for OHS. Self-employed workers worked longer hours than did the employees; and more frequently worked at night, in the evenings and at weekends (see Mayhew et al. 1996). Similarly, a survey of 960 long distance haul drivers by Williamson et al. (1992) found that owner/drivers engaged by medium to large firms or working independently worked significantly longer hours than did their employee counterparts (with an average working week in the range of 62.5 to 75.4 hours per week). Our 1995 survey indicated that self-employed transport workers reported more frequent occupational injuries than their employee counterparts but took fewer days off afterwards. For example, 20% of the self employed had acute back strain and a further 13.3% had some form of chronic back injury while only 11.8% of the employees cited any form of back pain (S2). Self-employed workers also more frequently soldiered on in pain or in plaster following a fracture ((Mayhew et al. 1996).

The fact that only 27% of the self-employed drivers interviewed (S2) had any form of injury insurance was important. Most faced a significant financial risk if they suffered an incapacitating work-related injury or illness. In contrast, 88% of employee drivers interviewed were aware of their workers' compensation coverage. Because the self-employed frequently delay seeking treatment or ignore symptoms chronic conditions may develop, leading to permanent incapacity or premature retirement and imposing a major drain on community resources.

## **PART 5    TYPOLOGY AND EXPLANATION BASED ON OUR SURVEYS**

Based on these surveys and other research (see Mayhew and Quinlan, 1997b) we have constructed an typology to explain how OHS of owner/drivers is under even greater threat than that of employees in the transport industry.

### ***Economic and Reward Factors***

Low capital requirements to purchase a vehicle (aided by 'package' finance arrangements) and a lack of stringent training/qualification barriers means that entry to the road transport industry is relatively easy. Because owner/drivers usually outnumber the work available, freight forwarding companies have the upper hand in the pay/effort trade off and can offer minimal rates. Micro-economic reforms by successive federal governments have exacerbating economic pressures on the transport industry through increased use of competitive tendering, tariff cuts and privatizing an increasing range of services previously done in-house. The entry of large numbers of freight contract seekers results in an intensely competitive tendering process which encourages rate cutting, overloading, excessive hours of work, and the cutting back of a range of expenses including tyre replacement, maintenance etc. All of these practices have direct and serious implications for OHS. In 1989 for example a NSW Transport Department study of 150 heavy trucks revealed that 59% had unsafe brakes and some interstate drivers were deliberately disconnecting brakes on their trucks to save on wear and tear (findings confirmed by a second blitz some months later. *Courier Mail*, 3 December 1989:3). In the same year random checking in Queensland over a two month period detected 88 trucks with serious safety defects (*Courier Mail* 27 August 1989:15).

Competitive pressures are exacerbated by bonus and penalty payment systems imposed within straitjacket time deadlines for delivery and re-loading turnarounds. Already minimal rates of reward are cut by backloading (the practice of taking return loads at a highly discounted rate), especially where there is a greater demand for services between cities in one direction. The National Road Freight Industry Inquiry (1984 cited in Young 1990) found that problems for long distance drivers arose from a combination of competitive pressures and the weak and dependent position of owner/drivers and freelance operators. Scott (1984:31 cited in Young 1990:16) found that 61% of owner/drivers carried loads for only one company while a further 21% worked for only two or three companies. In both our surveys respondent owner/drivers

repeatedly referred to the competitive pressures on them. The following statements were typical:

*"Freight rates are going backwards. Big companies undercut the little guy. Lower than they were 10 years ago ..."; and "Under cutting rates - too many people going into it and squeezing the little guy out".*

It is clear that owner/drivers and employees paid on results work long hours to make up for very low returns.

*"The more work you get the more you get paid. So you are pushed to work. Fatigue is a killer"; and "Owner drivers go from A to B and look for their next load. Company drivers go from A to B unload and then sleep".*

A number of drivers surveyed conceded that drug use was a consequence of the pressure to work long hours:

*"Drugs in the industry - not as bad as some people think - pushed beyond their limits to do what they have to do. Some do but don't over do it. Some over do it and have accidents."*

Competitive pressures extend to the whole workforce, including employee drivers. Desperate for work, the latter have increasingly accepted jobs merely on a "job and finish" payment basis. The result is that employee drivers also work under bonus/penalty systems. Under-award payments have become endemic in the industry even if the problem is worst amongst owner/drivers. This is confirmed by Williamson et al's (1992) study of 960 long distance drivers which found that about 50% of independent owner/drivers reported that they were paid below award rates. This may still understate the problem because owner/drivers were twice as likely as employees to indicate that they were unaware of award rates. Similarly, Arblaster et al (1995) found that 54.5% of drivers employed by large companies received award rates, 36.4% received below award rates, and 9.1% of drivers were unsure whether they were receiving award rates. For drivers employed by medium-sized firms, the responses were 27.8% (award rates), 61.1% (below award rates) and 11.1% (unsure), while for drivers employed by small firms the responses were 25% (award rates), 62.5% (below award) and 12.5% (unsure). That is, the smaller the firm the greater the proportion of the labour force that was paid below award rates. Amongst owner/drivers the study found that only 11.1%

received award rates, 66.7% were paid below the award and 22.2% were unsure. In short, financial pressures are greatest on owner/drivers and those employed by small business.

Economic pressures can be directly linked to the extensive breaches of driving hours regulations which research has repeatedly uncovered (for a summary see National Road Transport Commission, 1996:33-34). Williamson et al. (1992) found that overwhelming reason given by owner/drivers for breaking hours regulations was the need to earn a living. For employed drivers, the primary reason for breaches was tight schedules imposed by companies with the need to earn a living being less significant (nominated as the leading factor by 30% of employed drivers as opposed around half of owner/drivers). We have already cited evidence that owner/drivers work longer hours than their employed counterparts.

Another response to economic pressures involves drivers carrying on working even when injured and often resulting in chronic injuries. Evidence of this was revealed in both our surveys (S1 and S2). It was a point reinforced by health care providers we interviewed in the 1990-91 survey (S1) who made comments such as:

*“I don’t think self-employed people tend to present as often...if they don’t get back to work then they’re in real strife”; and “...transport drivers, yes I see a reasonable number of those...long term-chronic problems that have developed because of the work role they’ve been adopting”; and “Usually you’ve got to try to force them (the self-employed) to stop work...at the moment, economically, things seem to be very poor.”*

Our surveys revealed a strong tendency of owner/drivers to see some OHS risks as unavoidable and ‘normal’ for the job; to overestimate their driving skills and resilience; and to see carelessness/inattention and other drivers as the major causes of injury in relation to crashes (James et al. 1992a and b). Drivers also understated risks in the industry - a characteristic feature of small business operators (see Eakin 1992). This set of attitudes is undoubtedly shaped by drivers’ perceptions that they cannot change the circumstances under which they must work.

Major transport companies, who are the key players in the industry, appear to take little account of OHS in their economic calculations or engagement practices with regard to

owner/drivers. Scheduling of loads and loading/unloading operations take no account of the time a driver may have to spend working continuously, or uncertain periods spent waiting for a load when they are unable to take a proper rest break (Hopkins, 1992:248). Owner/drivers operate in a context of isolation where they must devote considerable time to the pursuit of work and on activities like truck maintenance (although employed drivers for smaller firms are also liable to do maintenance). Time 'wastage' is not paid and therefore not part of management calculations. Nevertheless, it still contributes to fatigue and stress and the OHS risks associated with this.

### *Disorganisation*

The atomistic and competitive character of the industry also contributes to a level of disorganisation which makes the implementation of effective OHS management systems extremely difficult. Outsourced and employee transport drivers are fragmented and therefore have difficulty uniting to secure better management of the OHS risks they all face.

Historically, owner/drivers and employees historically occupied different segments of the long haul industry and worked under quite different conditions. In recent years this has altered so that employees are now frequently paid on a taskwork basis and are increasingly casualised. Indeed, it is often quite difficult to unambiguously assign a driver to either self-employed or employee groups. Frequently non-owning drivers will shift between employment categories from month to month, or even between different driving jobs. For example in our most recent study (S2), only 24% of our transport employees were paid on the basis of a standard weekly wage. The only factor we found which clearly delineated self-employed from employee drivers was that the employees never employed additional labour. With all other features there was always some element of employment status ambiguity. This variability in employment status has led to ambiguities in class identity and the choice of joining either a professional organisation or trade union.

Owner/drivers have normally preferred to see themselves as small business operators rather than as employees. This is reflected in attempts to form their own organisations such as The Independent Truckers Association instead of joining the Transport Workers' Union (TWU). Owner/driver organisations tend to be small and unstable, with activities focused on opposing government incursions into profit margins through petrol and registration taxes. Trucker

bodies have often identified the negative OHS consequences of ETAs but they have invariably shied away from seriously addressing the issue (James et al, 1992a).

For its part, the TWU has been trying to recruit owner/drivers since the late 1960s and by the late 1970s was attempting to set minimum contract rates (see *Transport Worker* March 1990:11-15). Prior to the Cowper smash the union was party to an initiative by the tripartite Australian Road Transport Advisory Committee to establish a code of safety for the freight transport industry (*Transport Worker* September 1989:7,9). The proposed code dealt with contractor obligations, driving hours and drugs. However, it did not address the subcontracting process and does not seem to have had much effect. It has vigorously opposed the tendency for the public to lay blame on drivers after incidents such as Cowper smash in 1989, drawing attention to the tight schedules under which drivers operate (see *Sydney Morning Herald* 28 October 1989:4 and *Transport Worker* December 1989:25). However, while public acceptance of 'victim-blaming' explanations of OHS appear to have declined in general, the same cannot be said about road transport. More recently the union has tried to abolish two-up driving and curb other hazardous practices (see Bray 1991; *Sydney Morning Herald* 14 January 1992:4).

Overall, the TWU's effort to contain and manage subcontracting have met with little success. The NSW branch of the TWU doubled its owner/driver membership between 1967 and 1988, However, owner/drivers as a proportion of total membership remained unchanged at 19% despite the rapid expansion of subcontracting during this period (Bray 1991). In our 1995 study (S2), we found that only 13% of self employed transport workers (compared with 71% of the employees) belonged to either an employer or trade union organisation.

The low levels of organisational membership mean that few self-employed transport workers have access to OHS information and support services. They also remain largely unprotected by the minimum standards on wages and hours accorded by industrial awards. In Queensland some road transport awards did explicitly cover owner/drivers (see Hanger, 1988). However, the TWU found it hard to extend award coverage to couriers and other transport workers in the federal jurisdiction (*Workforce*, Issue 1090 October 18 1996:5). In NSW, Queensland and the federal jurisdiction industrial tribunals were empowered to void harsh or unfair contracts - a power which originated in a specific recognition of problems in the road transport industry (see Mayhew et al. 1996). Though of some value, these protections have essentially had a

marginal effect. In 1996 the option was removed from the federal jurisdiction by the newly-elected conservative government which also made it more difficult for unions like the TWU to enrol self-employed members (Ginters, 1996:257). Overall, the union has met with limited success in these ventures, including efforts to enrol owner/drivers.

In sum, the isolation of subcontractors and the difficulty uniting them in any real geographical, ideological or time sense, compounds competition between them and exacerbates the fragmentation between employees and owner/drivers.

### ***Inadequate Regulatory Controls***

Established primarily with traditional employer/employee relationships in mind, OHS regulation has proved less than effective on sites or in situations where the self-employed work. In any process of production where a change of worksite is frequent, where there is a wide range of hazards, or where the workers are under great time pressures, there is an uphill battle to control OHS hazards and risks. Although the duty of care provisions of most principal OHS laws in Australia provide some recognition (through deeming provisions and other devices) of subcontracting relationships, this recognition is partial (as is the case with the Queensland Workplace Health and Safety Act, 1995) and has seldom been utilised by OHS agencies. This is especially the case in the road transport industry where the role of OHS laws is almost unrecognised. Where the regulations have not been written with these atypical situations in mind, the legal framework is inadequate and needs to be revised. Such atypical employment situations exist in the long haul transport industry, particularly for owner/drivers.

Widespread evasion of regulatory standards is an enduring feature of the transport industry despite numerous official inquiries and regulatory changes. Ongoing regulatory failure is, we would suggest, a direct result of a failure to address the underlying causes of regulatory breaches, most notably the economic pressures associated with subcontracting. Rather, existing regulations and compliance strategies focus on symptoms of the problem, such as excessive hours and speeding, and on drivers, rather than those who control the subcontracting process.

As stated earlier, road transport legislation has been the primary regulatory instrument and it has focused on vehicle safety and safe driving practices. Attempts to restrict driving hours



have been a common response by regulators but are likely to have limited effect so long as nothing is done to modify the contracting out system that is the impetus for working longer hours by those paid on the basis of their output. Driving time limits are difficult to enforce, especially in the context of interstate differences. Log books, while of some value, may be falsified (Young 1990). Nor do such regulatory controls address the freight forwarding practices, maintenance, freight loading responsibilities, and ETAs which contribute to excessive hours, fatigue and lack of sleep time for drivers. The self-employed in particular work hours which they know to be dangerous, as several quotes from our survey indicate.

*"People expect you to overnight even though it is illegal. Some people not getting enough sleep"; and "The biggest lie in safety is the big companies supposed to be so good on safety. A 23 year old meatworks driver hit a tree head-on about a week ago. There was 35 hours on his computer with no breaks"; and "...if you load at the Brisbane markets at 7.00 p.m. you have to be at the markets in Sydney by 5.00 am".*

Because the existing individualised regulatory regime fails to address the cause of breaches drivers are placed in a no-win situation. This is reflected in their apparently contradictory responses to regulation. For example, in the aftermath of the Cowper smash in 1989 some owner/drivers supported a Roadwatch Project in which motorists would be encouraged to report reckless truck drivers, arguing that they could not operate within the law while other drivers undercut them by flouting regulations (*Australian* 25 October 1989:5). Shortly thereafter, large numbers of drivers threatened to blockade highways in protest at new regulations which they believed threatened their livelihood. Another apparent contradiction is that many drivers see 'cowboys' as the problem even though they themselves break regulations.

In sum, the contradictory views of drivers' are a product of their isolation and powerlessness, something compounded by the regulatory regime's failure to address a subcontracting process (manipulated by large transport companies) that encourages hazardous driving practices. Recent federal initiatives (*Road Transport Reform [Truck Driving Hour] Regulations, 1997*) have tried to institute a more flexible driving-hours regime which takes account of economic pressures but not the subcontracting process that drives this. This failure (in both OHS and

road transport regulations), while not unique to Australia (see Trades Union Congress 1996), further compromises OHS standards.

## **PART 6 CONCLUSION**

The relationship between subcontracting and OHS has seldom been explored. It is a complex relationship not simply because of ambiguities in employment status but also because competition between contractors and employee workers may compromise the OHS of both. By comparing the OHS outcomes for self-employed and employee workers and linking this to work organisation, we have sought to show that subcontracting is central to an understanding of OHS in the road transport industry. Our finding was that while job tasks, and the hazard and risk exposures which accompanied these, were the primary determining factor for the "normal" injuries and illnesses amongst the transport workers interviewed, employment status was the second most important determining factor. The self-employed tended to work longer hours than did the employees. They were therefore exposed to the hazards and risks on-the-job for greater periods of time and suffered a greater burden of cumulative fatigue.

The employment status variation had one other important OHS effect. Subcontractors were under significant economic duress from overhead costs and loan repayment requirements. Since most had little or insurance cover, support following a work-related injury or crash was generally very limited, and few self-employed transport workers took time off work for recuperation.

The motor of economic rationalism, the necessity of under-cutting prices to win tenders, and the increased need for a more flexible labour force has resulted in more transport jobs being outsourced. Further, competition with outsourced labour has meant that the working conditions of employee drivers have begun to more closely resemble that of subcontractors, being paid solely on a task completion basis. In a climate of intense competition and shaved profit margins, payment by results systems have pressured drivers to work hours that often flout road transport laws, complete maintenance tasks during breaks, load or unload freight in the shortest turnaround times possible, and suffer infrequent sleep periods. These factors contributed to a cumulative burden of chronic fatigue, as well as an increased propensity to crash, an incentive to 'carry' bearable occupational injuries or illnesses, and a general diminution of the health status of transport workers.

Other studies (see for example Hopkins, 1992:247-248) have identified the connection between intense competition, payment by results systems, long hours, meagre returns and tight schedules as central to understanding OHS in the road transport industry. What we have

sought to show is that subcontracting plays a critical role, as a response to competitive pressures which, in the absence of effective regulation, significantly exacerbates OHS outcomes.

The OHS consequences of subcontracting are inflicted across all transport workers as well as onto other road users (causing an increased tax burden on the community). As the transport labour force becomes more economically pressured and more fatigued through increased hours of labour, standards of work performance deteriorate and crashes and near misses are more likely. Further, while the regulatory regime remains fixated with individual driver behaviour (occasionally tempered by an examination of road and heavy vehicles design) it is unlikely curb these problems.

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<sup>1</sup> Periodic recessions, such as that in 1992, have had the effect of forcing large numbers of owner/drivers into bankruptcy and the auctioning of hundreds of repossessed trucks. Some of these bankrupt drivers, will subsequently engaged as employees, often with small to medium transport companies who 'take-over' their debts, leaving them in a very dependent position. J Neal (transport operator and former wife of deceased driver) written communication with authors, 1983 and *Southern News*, 19 March 1992:1-2.