TRANSPORT INDUSTRY:
SYNTHESIS OF RESEARCH FINDINGS

Report

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safe work australia

SAFE WORK AUSTRALIA

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Preface

The Australian Work Health and Safety Strategy 2012-2022 (the Strategy) describes the transport industry as a priority industry for work health and safety. While much is known about work-related injuries and illnesses in this industry from the national workers' compensation dataset (NDS), we also need to know about hazard exposures, work health and safety attitudes and perceptions and work health and safety activities in this industry. This information will help to identify issues requiring prevention action and will ensure that resources and prevention efforts can be targeted appropriately.

This report summarises findings from transport industry employers and workers from seven existing Safe Work Australia data sources. The report presents areas where the Transport industry is doing well and areas for improvement in relation to:

- hazard exposures and workplace control measures
- work health and safety activities, and
- work health and safety perceptions and attitudes that may act as barriers or enablers to work health and safety.

This report presents findings from nation-wide studies of transport industry businesses and workers. Responses to the survey questionnaire were weighted to reflect the size, primary location and main industry of businesses in Australia. As is often the case with large surveys, the response rate was low. This increases the risk that the views and experiences of the study sample are biased and affects the extent to which those views and experiences can be generalised to the population of interest. In short, the survey provides potentially valuable information from more than 1000 businesses but we cannot be confident that the information is representative of the whole population. It is therefore important that estimates or comparisons, particularly those based on the relatively small number of medium-sized and large businesses, are seen as indicative or suggestive rather than representative or definitive. The findings in this report should be considered as descriptive. That is, there are no accompanying statistics to indicate the reliability of estimates or comparisons. As with all statistical reports, the potential exists for minor revisions over time.

This research report was written to inform the development of polices in relation to work health and safety in the Transport industry. The views and conclusions expressed in this report do not necessarily represent the views of Safe Work Australia Members.

Contents

Executive summary

Background

The transport industry is a priority industry in the Australian Work Health and Safety Strategy 2012-22 due to historic high rates of fatalities and injuries. The objective of this study is to examine how the state of work health and safety (WHS) in the transport industry compares with other priority and non-priority industries. The intention is to highlight areas needing targeted attention and where further research may have the potential to lead to the development of trial interventions to reduce fatalities and injuries, as well as improving work health and safety generally. The report uses data collected between 2008 and 2014 from six previous surveys and a case study of the evaluation of an intervention campaign.

The transport industry is compared with other priority and non-priority industries on a range of variables including:

- hazard exposures
- controls provided
- perceived causes of injuries
- health and safety practices
- compliance activities, time and cost, and
- attitudes and perceptions around risk taking and rule breaking.

Limitations

This report summarises findings from a number of Safe Work Australia data sources. Although most data sources included in this report are national, are based on random sampling and cover a wide range of issues, some caveats must be noted. The surveys are self-report surveys of employers and workers. The various data sources are not directly comparable and as a consequence, the report does not provide a reliable source of trends across time in the transport industry. The original surveys were general in nature and the questions were not specifically designed for the transport industry

Main Findings

The most frequent work related injuries or illnesses reported by transport industry workers were sprains and strains (43%) and chronic joint or muscle conditions (26%). The comparable rates for workers in other industries were 28% and 16% respectively. Workers in the transport industry were more likely to report being exposed to disease causing hazards such as airborne hazards (fumes, dust and gases), sun and vibration than workers in other industries. Transport industry workers were more likely than workers in other industries to report being exposed to airborne hazards and less likely to be provided with controls.

The top three causes of work related injuries nominated by transport industry employers were risk taking, unsafe work practices or procedures and manual tasks. The first two causes were nominated by substantially more transport industry employers compared to employers in other industries.

Employers and workers differed in their perceptions of how consistently safety practices were undertaken in the workplace. In particular, while about 90% of employers said that reporting accidents and discussing health and safety concerns were undertaken consistently only about 70% of workers agreed.

The findings suggest that employers in the transport industry spent more time on keeping records and finding information about WHS obligations compared to employers in other priority and non-priority industries.

Employers in the transport industry reported providing substantially more WHS training for their workers compared to employers in other industries.

The findings suggest that both employers and workers see WHS communication processes in the industry as reasonably effective. More than 80% of workers and employers agree that workers are informed about WHS concerns, that there is good communication about safety issues and that safety information is always bought to the attention of workers.

The findings suggest that workers see WHS consultation processes in the industry as less effective than managers. About 90% of employers agree that the business:

- considers workers' suggestions regarding safety compared to about 75% of workers
- gives workers the opportunity to express their views about WHS matters compared to about 80% of workers
- involves workers when proposing changes that may affect their health and safety compared to about 70% of workers, and
- involves workers in decisions about WHS compared to about 70% of workers.

Transport industry employers are more accepting of risk taking, rule breaking and minor incidents than employers in other industries. They differed from employers in other priority and non-priority industries with:

- 20% agreeing they break safety rules to complete work on time compared with about 6% in other industries
- 20% agreeing they consider minor incidents a normal part of daily work compared with 10% or less in other industries, and
- 10% agreeing that they accept dangerous behaviour as long as there are no accidents compared to less than 2% in other industries.

Transport industry workers and employers differed considerably in their acceptance of risk taking behaviour. About 45% of workers agreed that risks are unavoidable while only about 15% of employers agreed. About 40% of employers agreed that their workplace does not suit those overly concerned about being injured while only about 20% of workers agreed.

With regard to acceptance of rule breaking, transport industry employers agreed that:

- workers bend the rules to achieve a target (21%)
- workers ignore safety rules to get the job done (31%), and
- conditions at the workplace stop workers from following the rules (32%).

Only about 5-6% of employers in other priority and non-priority industries agreed with these statements.

Transport industry employers and workers differed considerably in their acceptance of rule breaking. About 30% of employers agreed that workers:

- ignore safety rules to get the job done compared to 6% of workers, and
- see conditions at the workplace as stopping them from following safety rules compared to 17% of workers.

An intervention campaign in the road freight transport industry showed that the interventions undertaken may have resulted in some changes in manual task safety practice. The findings suggest that regulators can change safety practice in the industry by working directly with businesses to raise awareness and providing tailored advice to assist businesses to comply. The evaluation highlighted the different issues experienced by different groups within the industry.

Conclusions

The study suggests that the transport industry performs more poorly in a range of areas than other industries which may contribute to the higher prevalence of workplace injuries and fatalities.

Many employers in the transport industry appear to acknowledge that unsafe work practices and risk taking are leading to the high levels of injuries and fatalities in the industry. This suggests that the design of work in the transport industry needs examination to understand why unsafe work practices persist and how they can be reduced.

The higher acceptance of risk taking and rule breaking in the transport industry compared to other industries is concerning. These may be key factors driving the high levels of injuries and fatalities. More concerning is the differing explanation for these behaviours by workers who are less likely to agree that they ignore safety rules. The findings suggest that workplace conditions and to some degree pressure from management stops workers from following safety practices highlighting work design as a problem.

The implementation of WHS practices in the transport industry is high with about three quarters of employers indicating that they consistently undertake WHS practices. Workers were less likely than employers to agree that reporting near misses, reporting accidents and discussing health and safety concerns were undertaken consistently. Workers perceive consultation about WHS as less effective than do managers. These processes are central to effective consultation about WHS in the workplace.

It appears that transport industry businesses spent more time keeping records and finding information compared to businesses in other priority and non-priority industries. Whether these administrative requirements are an issue or burden for transport businesses might need investigation.

Investigating and addressing the issues identified in this report can help to reduce the current high levels of injuries and fatalities in the transport industry.

Actions that may assist in improving work practices and the industry culture include:

- examination of the design of work in the industry to understand the reasons why unsafe work practices persist and how they can be addressed

- investigation of the distribution of biomechanical exposures and manual task related injuries in the industry will clarify whether these are concentrated within specific subsectors in the industry i.e. vans and light trucks less than ten tonnes gross vehicle mass (GVM), and
- collaboration between the industry and their WHS regulator to find ways of making work practices safer and to reduce acceptance of risk taking behaviour tailored to the different groups within this industry.

Context

Background

This report is one of a series of profile reports produced by Safe Work Australia. It focuses on the transport industry which is designated as a priority industry in the 2012-2022 Australian Work Health and Safety Strategy because of the high rate of injuries and fatalities. The report draws on research and evaluation studies carried out by Safe Work Australia.

The ABS labour force data showed that in 2012-13 there were 561 106 workers in the transport industry. The workforce was predominantly male (82%) and older (more than 25% were aged 55 or older).

In 2009-10 the Work Related Injuries Survey found that the injury rate for workers in the Transport and storage industry was 86 injuries per 1000 workers (ABS Cat. No. 6324.0). This was 25% higher than the rate for all Australian workers of 69 injuries per 1000 workers. The most common types of work related injuries experienced by these workers and the causes of injury are shown in Table 1. In 2009-10 the transport industry reported the highest incidence rate of serious claims at 24.0 claims per 1000 employees. This compared to the national average of 12.6 claims per 1000 employees.

Primary mechanisms leading to the higher rates of injury in this industry were carrying out manual tasks involving lifting, pushing or pulling objects, and falls on the same level.

Table 1: Types of work related injuries or illnesses and mechanisms by industry

	Transport %	Other priority Industry %
Type of injury		
Sprains/strains	43	28
Chronic joint or muscle condition	26	18
Cut or open wound	8	17
Mechanism		
Lifting pushing or pulling object	41	26
Hitting or being hit by an object	17	26
Falls on the same level including trips and falls	17	11

Source: ABS Work-related Injuries Survey 2009–10, Cat no 6324.0

Aims and structure of this report

The aim of this report is to describe how the state of work health and safety in the transport industry compares with other priority and non-priority industries. This will assist the transport industry and WHS regulators to focus on areas identified as potential WHS problems. The results cover the following:

- hazard exposures and use of controls
- work health and safety activities and what they cost
- finding information about WHS
- WHS communication and consultation
- WHS attitudes, perceptions and skills, and
- the effectiveness of WHS interventions in the transport industry.

Appendix A provides details of the studies used in the development of this report. Appendix B summarises the strengths and limitations of the findings.

Approach

The data used in this report were drawn from six previous surveys conducted by Safe Work Australia. Key aspects of the methodology for these surveys are summarised in Table 2. The surveys were conducted between 2008 and 2014 and sample sizes ranged between 762 and 4 500. In addition the report draws on the findings from the evaluation of an intervention campaign conducted by the Heads of Workplace Safety Authorities that aimed to reduce manual task injuries in the road freight transport industry.

- The data generally comprise businesses from ANZSIC division L – Transport, Postal and Warehousing. This ANZSIC division includes businesses engaged in the following areas:
- transportation of passengers and freight by road, rail, water or air
- goods warehousing and storage, and
- support services for the transportation of passengers or freight such as stevedoring, harbour services and airport operations.

The report compares the transport industry with other industries that also have higher rates of fatalities and injuries (priority industries) and with non-priority industries. In addition differences between the perspectives of workers and employers are examined. Due to the qualitative nature of the findings, there are no accompanying statistics such as confidence intervals to indicate the reliability of estimates or inferences.

Strengths and limitations

This report summarises findings from a number of Safe Work Australia data sources (see Table 2). Although most data sources included in this report are national, are based on random sampling and cover a wide range of issues, some caveats must be noted. The surveys are self report surveys of employers and workers. Where possible these surveys used previously established survey questions.

Table 2: data sources used in this report

No.	Data source	Sample population	Design	Comments
1	National Hazard Exposure Worker Surveillance Survey 2008 (NHEWS 2008)	4500 workers aged 18–64 years across Australia (391 transport workers	CATI, random digit dialling, oversampling of priority industries.	Unweighted
2	Motivations, Attitudes, Perceptions and Skills Survey 2009 (MAPS–2009)	762 workers over 18 years old working in one of the five priority industries across Australia (167 transport workers)	CATI, random digit dialling, quotas set by industry, age groups and state/territory	Unweighted
3	Work Health and Safety Perceptions Survey of Work-ers 2012 (WHSP-W-2012)	1311 workers over 18 years of age across Australia (77 transport workers)	CATI, dual frame (mobile and landline) sample from SampleWorx	Data weighted by state/ territory, sex, age and occupation
4	Work Health and Safety Perceptions Survey of Employers 2012 (WHSP-E-2012)	1052 employers across Australia (54 transport employers)	Paper based, drawn from a random sample of 10 000 businesses from the ABS Australian Business Register	Data weighted by business size, industry and state/ territory
5	Regulatory Burden Survey 2013 (RBS-2013)	1503 employers across Australia (50 transport employers	Paper based, drawn from a random sample of 10 000 businesses from the ABS Australian Business Register (this is a different sample from WHSP-E)	Data weighted by industry, business size and state/ territory and accounted for low response rates
6	Health and Safety at Work Survey 2014 (HSW-2014)	2350 employers across Australia (173 transport employers)	Paper and online, drawn from a random sample of 10 000 businesses from the ABS Australian Business Register	Data weighted by state, industry and state/territory
7	HWSA intervention campaign 2008-9 - Manual tasks in road freight transport	Road transport businesses in participating jurisdictions (244 businesses pre intervention, 237 post intervention)	Paper based, quota samples from Dunn and Bradstreet list of businesses	Unweighted

Due to differences in the study design and the availability of survey weights, the various data sources are not directly comparable. As such, the report does not provide a reliable source of trends across time in the transport industry. Those two reasons are also why comparisons of workers and employers are limited to findings from the two more comparable Work Health and Safety Perceptions Surveys. Because the numbers of transport industry businesses in the RBS 2013 and WHSPS 2012 were small there were limits on the capacity to report on subgroup analyses e.g. comparisons by size of businesses. The original surveys were general in nature and the questions were not specifically designed for the transport industry

The report covered a large amount of information available from six data sources while attempting to be as concise as possible. As such some of the findings and conclusions may appear too simplistic without adequate evidence to back them up. Interested readers are referred to original project reports in Appendix A for further information. It is noted that the original project reports from the five surveys are general and are not focussed on the transport industry alone.

Information on exposures and control measures provided for specific hazards are all self-reported. It is possible that workers may not be aware of the higher order control measures in the workplace such as ventilation. Information on hazard exposures was also limited to the hazards that were included in the NHEWS survey. Common safety hazards in transport such as falls from vehicles, being hit by moving objects and hazards associated with the use of machinery were not included in the NHEWS survey.

Main Findings

Hazard exposures and use of measures to prevent workplace hazards in the transport industry

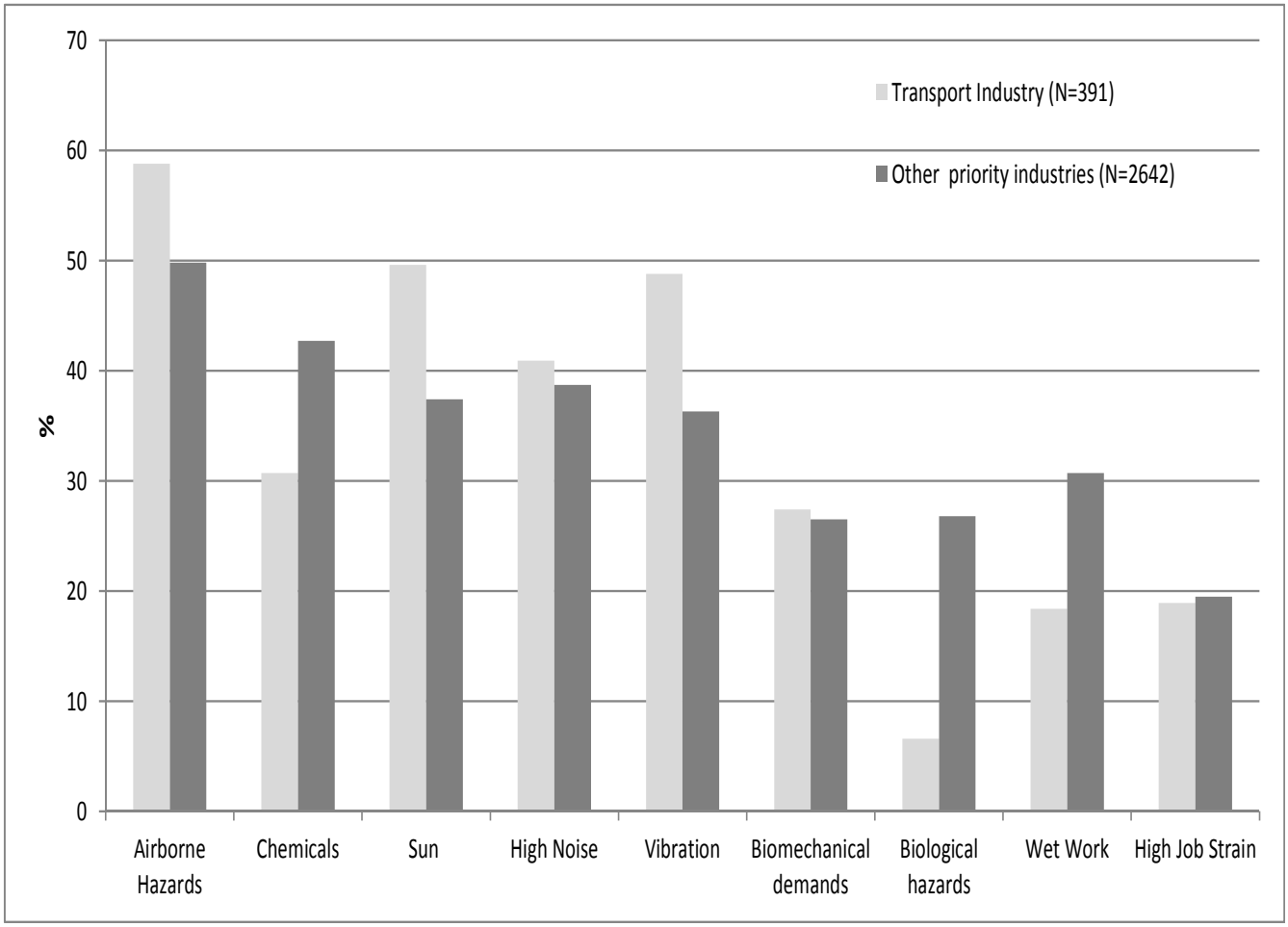
The findings summarised in this section are drawn from the National Hazard Exposure Worker Surveillance (NHEWS) survey. A summary of the method for this survey is available in Table 2 and further details are provided in Appendix A.

Self-reported exposure to hazards

Figure 1 shows hazard exposures for workers in the transport industry compared to workers in other priority industries. Some of the hazards are composite measures (e.g. job demands and biomechanical demands). The top three disease causing hazard exposures reported by transport industry workers were airborne hazards (i.e. fumes, dust and gases) (60% compared to 50% for workers in other industries), sun (50% compared to 38%) and vibration (50% compared to 37%). Workers in other industries were less likely to report exposure to all three of these hazards.

Despite their higher rates of injuries resulting from biomechanical demands workers in the transport industry reported similar levels of exposure to biomechanical demands compared to workers in other priority industries. It is not clear why this should be the case but findings from the evaluation of an intervention campaign in the road freight industry suggest that drivers of vans and light trucks (less than ten tonnes GVM) are at greater risk of exposure.

Figure 1: Hazard exposures compared with workers from other priority industries



Provision of control measures for specific hazard

Each worker who reported exposure to a particular hazard was asked about provision of control measures in the workplace for the hazard. For descriptions of control measures for each of the nine disease-causing hazards included in this report see Appendix A. Of workers in the transport industry exposed to high job demands, 38% report not being provided with controls compared to 30% in other industries. Of those transport workers exposed to noise, 20% report not being provided with controls compared to 12% in other industries.

Twenty eight per cent of transport workers exposed to airborne hazards report not being provided with controls compared to 15% of workers in other industries. This means that transport workers were both more likely to be exposed to high job demands, noise and airborne hazards and less likely to be provided with controls. For all other hazards considered the proportion of exposed workers provided with controls in the transport industry was broadly similar to other industries. These survey results do not allow conclusions about the appropriateness of the controls provided or whether the controls were used.

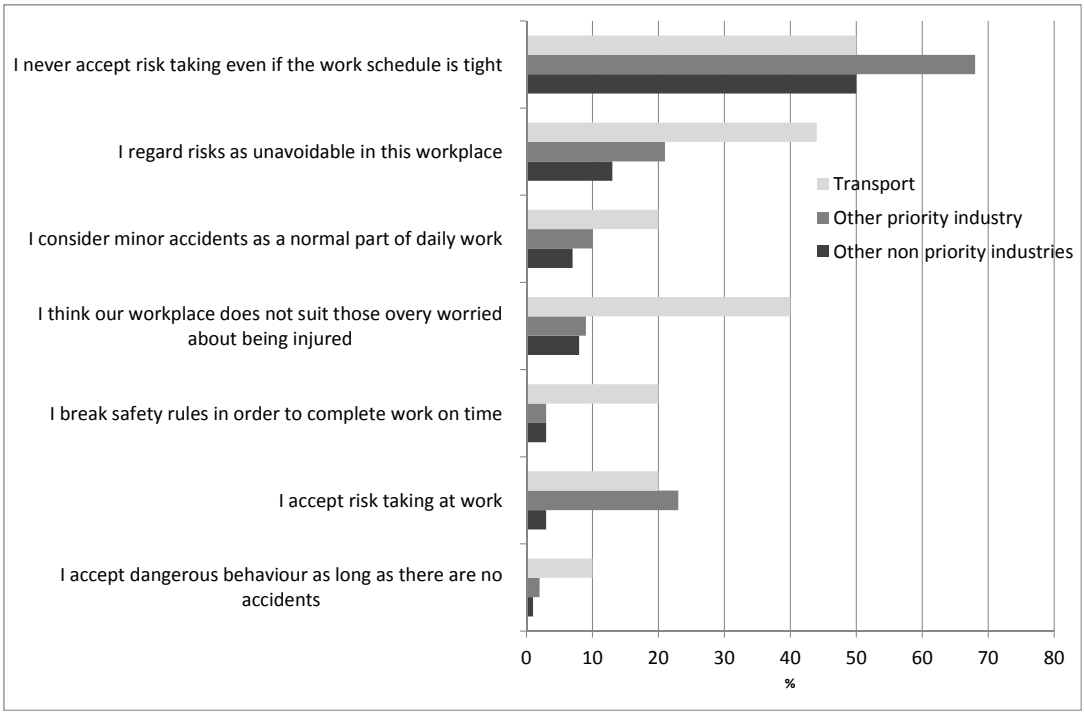
Work health and safety attitudes and perceptions

Risk taking and rule breaking

The WHS Perceptions survey collected information on the acceptance of risk taking in the workplace. Figure 2 shows a comparison between employers in the transport industry and those in other priority and non-priority industries. Transport industry employers are far more likely to agree that they:

- consider minor accidents a normal part of daily work (20% compared with 10% or less),
- think our workplace does not suit those overly worried about being injured (40% compared with 10% or less), and
- accept dangerous behaviour as long as there are no accidents (10% compared to less than 2%).

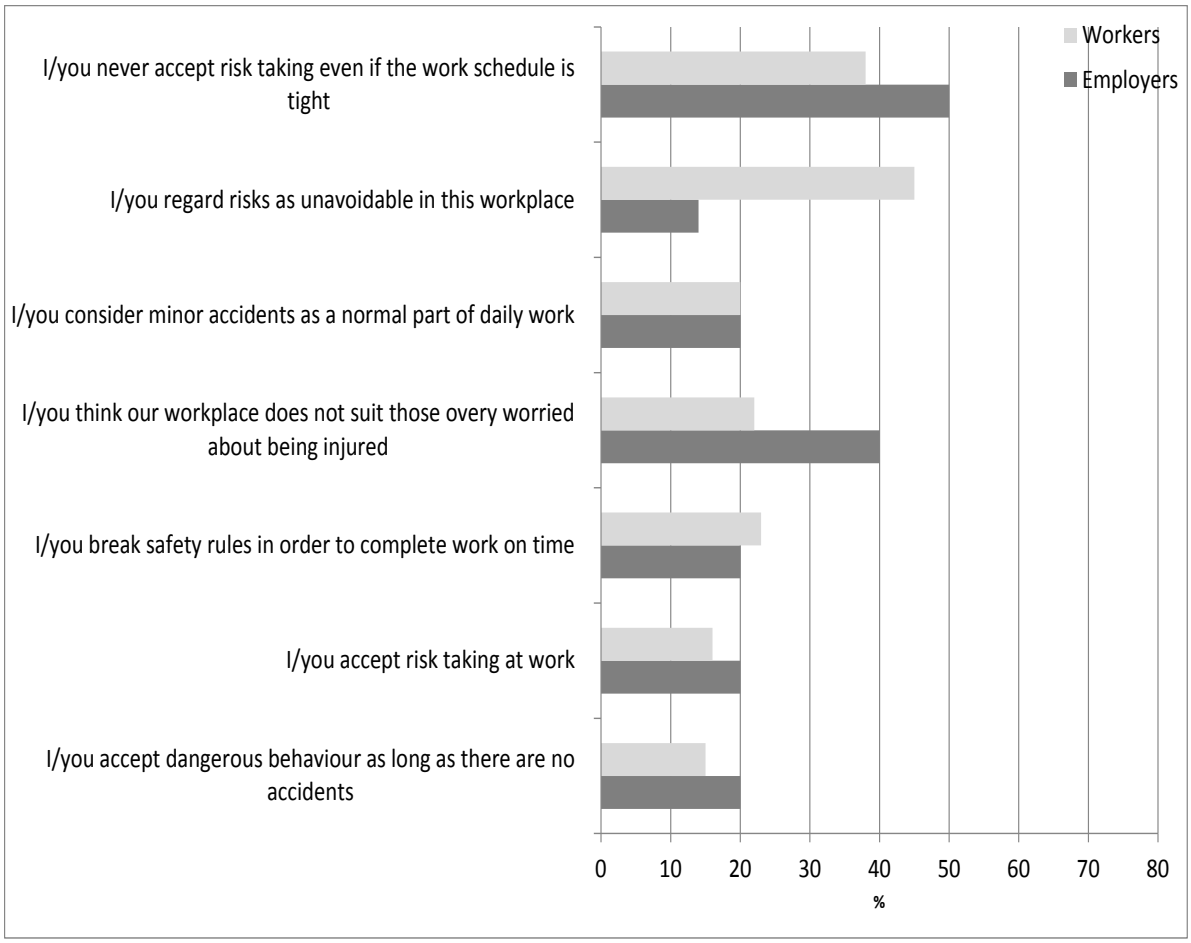
Figure 2: Agreement with risk taking statements by industry (employers)



The results in Figure 3 show that there are some differences in acceptance of risk taking between employers and workers.

- 50% of employers never accept risk taking even if the schedule is tight while only about 38% of workers agreed
- 45% of workers thought that risks are unavoidable in the workplace compared to about 15% of employers, and
- 40% of employers think the workplace does not suit those overly concerned about being injured compared to about 20% of workers.

Figure 3: Agreement with risk taking statements by transport industry workers and employers

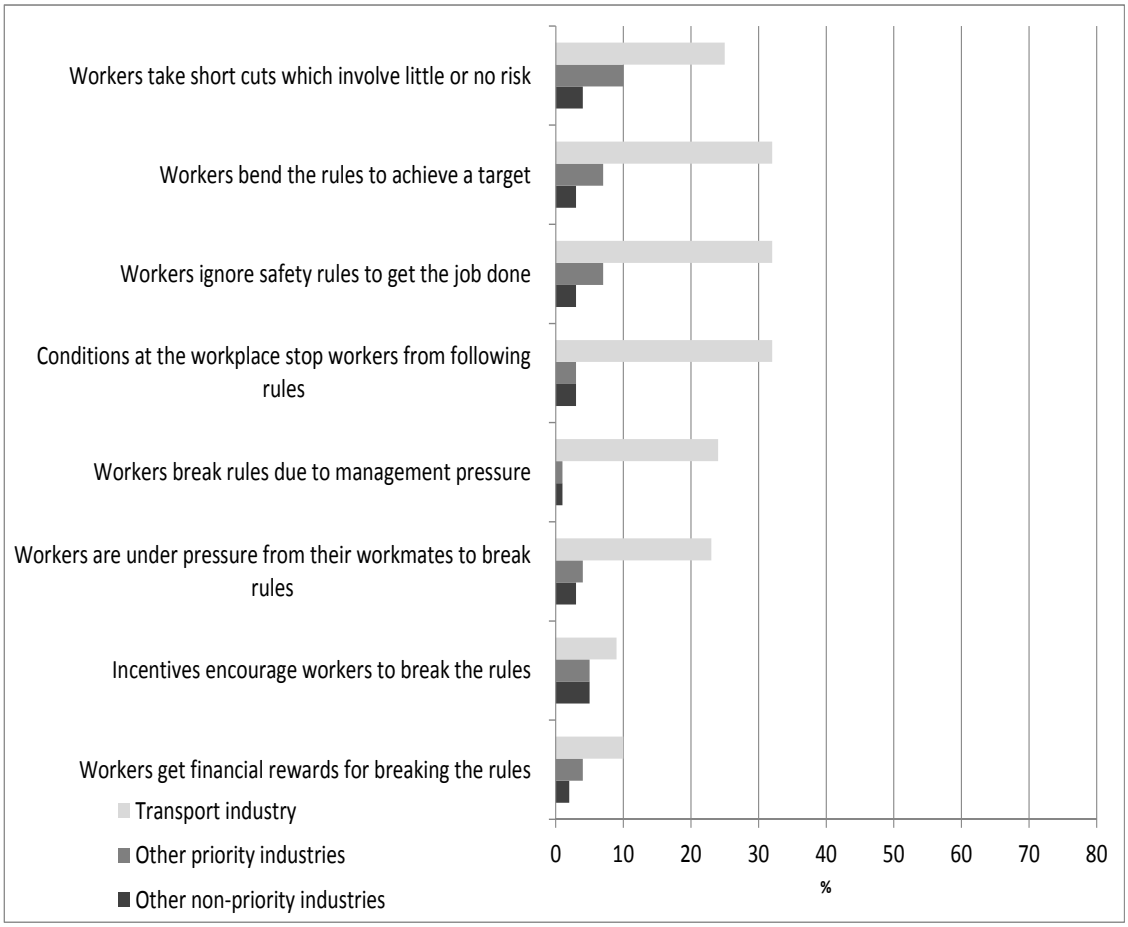


The WHS Perceptions survey also collected information on the acceptance of rule breaking in the workplace. Figure 4 compares agreement with statements about acceptance of rule breaking by employers in the transport industry with employers in other priority and non-priority industries. The results show that transport employers were more likely to agree with all statements about acceptance of rule breaking compared to employers in other priority and non-priority industries. About 30% of transport industry employers agreed that:

- workers bend the rules to achieve a target
- workers ignore safety rules to get the job done , and
- conditions at the workplace stop workers from following the rules .

Only about 5-6% of employers in other priority and non-priority industries agreed with these statements.

Figure 4: Agreement with rule breaking statements by industry (employers)



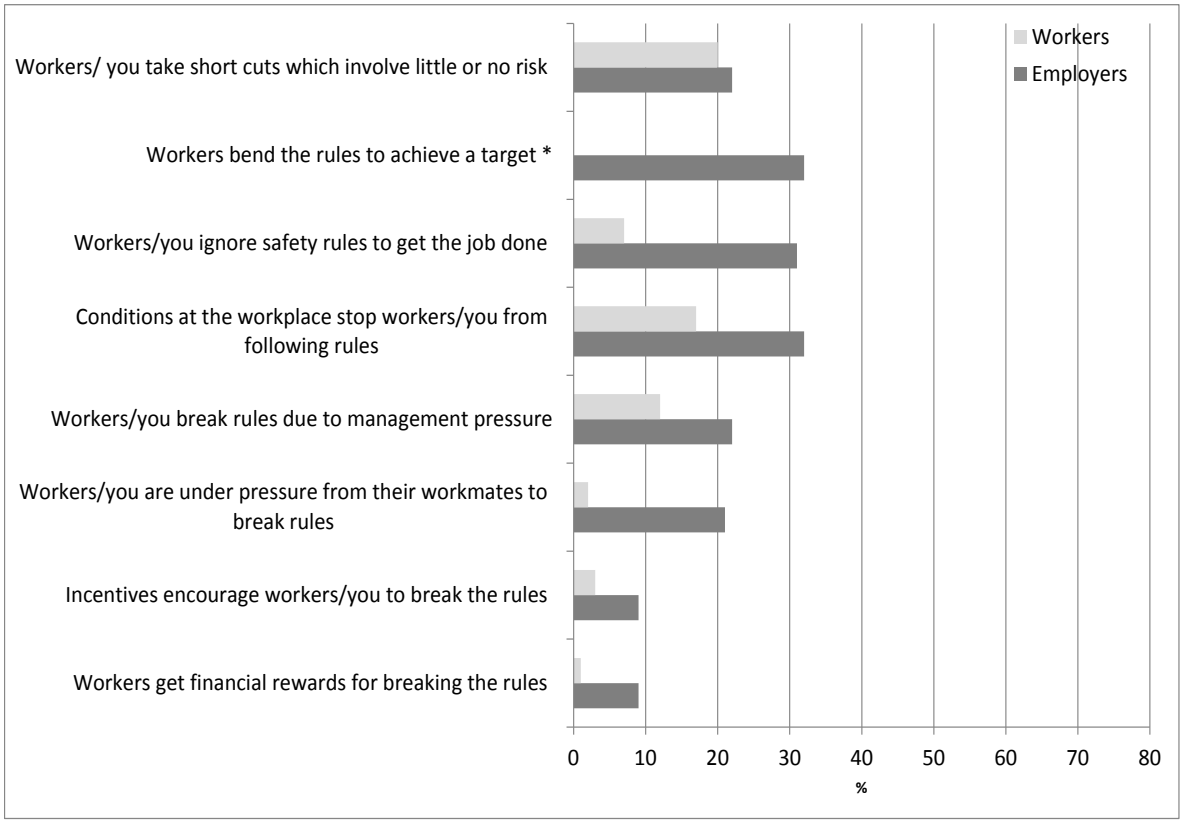
31% of transport industry employers agreed that workers ignore safety rules to get the job done compared to only 6% of workers

There were also striking differences between workers and employers in the transport industry on acceptance of rule breaking.

Figure 5 shows that employers were more likely than workers to agree that workers:

- ignore safety rules to get the job done (31% compared to 6%)
- see conditions at the workplace as stopping them, from followings safety rules (32% compared 17%)
- break rules due to management pressure (22% compared to 12%)
- see incentives as encouraging them to break rules (9% compared to 3%) and
- get financial rewards from breaking the rules (9% compared to 1%).

Figure 5: Agreement with rule breaking statements for transport industry employers and workers (note * item not asked for workers)



Perceived causes of work-related Injuries

The Work Health and Safety Perceptions survey 2012 provides a view of perceived causes of injury by employers in the transport industry. For a summary of the method for this survey see Table 2 and Appendix A. Table 3 shows that the top three causes of work-related injuries nominated by transport industry employers were risk taking (37%), unsafe work practices or procedures (37%), and manual tasks (34%). The top three causes of work related injuries nominated by employers in other priority industries were the worker being careless (66%), just not thinking (50%), and manual tasks (33%). While manual tasks appear to be a common issue in all priority industries, employers in the transport industry differ from those in all other industries in nominating risk taking and unsafe work practices or procedures as their top two perceived causes of injury.

Table 3: Main causes of work-related injury nominated by employers (WHSPS 2012 E)

Cause of inujry	Industry		
	Transport %	Other priority Industry %	Other non priority industry %
The worker being careless	15	66	52
Just not thinking	18	50	43
Manual tasks	34	33	18
Risk Taking	37	18	10
Unsafe work practices	37	10	9
Pressure or stress	26	13	20

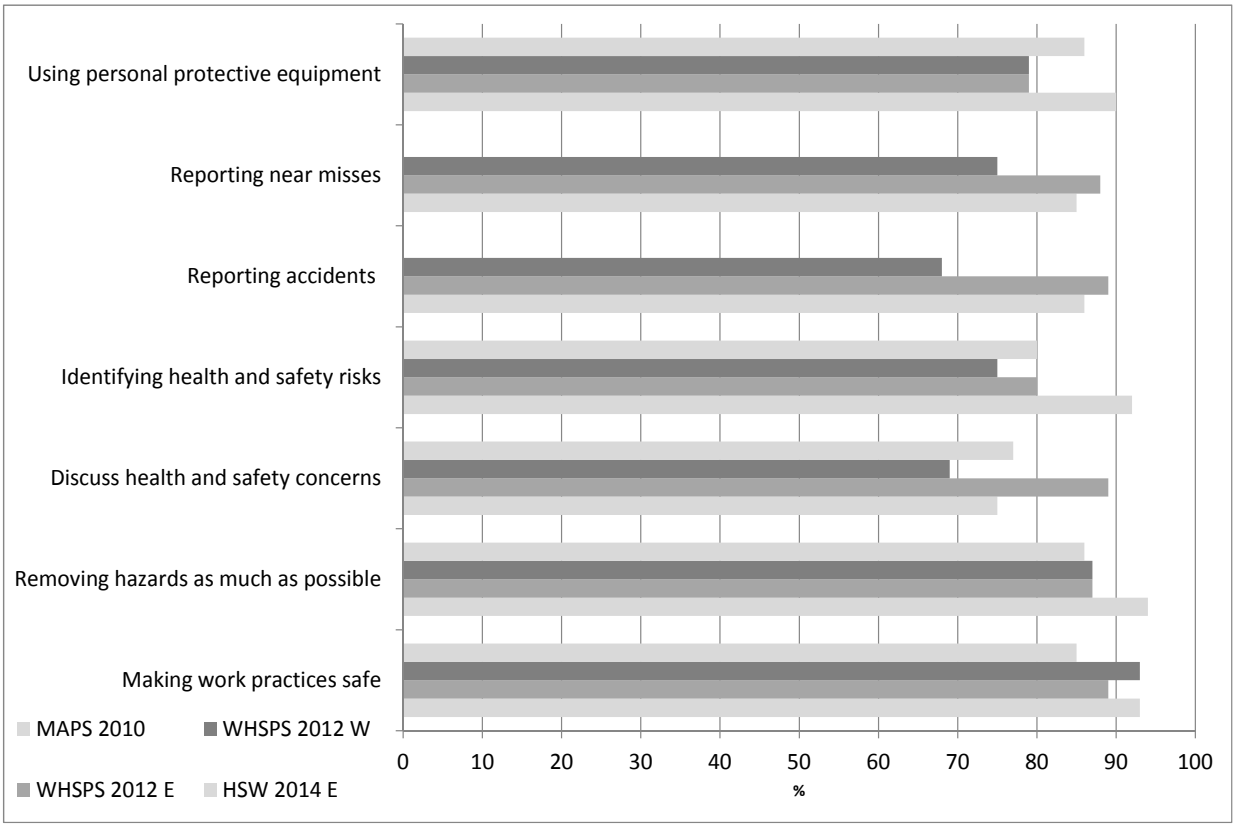
Work Health and Safety Activities

Safety practices

How consistently safety practices were undertaken in the workplace was measured using data from workers in 2010 and 2012 and employers in 2012 and 2014. Figure 6 below shows that close to 90% of workers and employers in the transport industry reported that the following practices were undertaken consistently in their workplaces: removing hazards as much as possible and making workplaces safe.

Employers were more likely than workers to indicate that reporting near misses, reporting accidents and discussing health and safety concerns were undertaken consistently in the workplace. While about 90% of employers agreed that "reporting accidents and discussing health and safety concerns" was undertaken consistently only about 70% of workers agreed.

Figure 6: Safety practices reported as undertaken consistently in the workplace by transport industry employers in 2012 and 2014 and workers in 2012



Work health and safety compliance and how much it costs

The Regulatory Burden Survey (2012) collected information about activities undertaken by businesses and the amount of time and money that businesses spent on these activities. Table 4 below shows the WHS activities undertaken by transport industry businesses compared to businesses in other industries. Transport industry businesses were more likely to have implemented procedures (30%) and undertaken training to address bullying (31%) compared to businesses in other priority industries (19% and 9% respectively). Transport industry businesses were less likely to have implemented safety measures (52%), identified safety issues or problems (13%), implemented procedures dealing with fatigue (15%), or talked to other businesses about WHS matters (24%) compared to businesses in other priority industries (77%, 25%, 29% and 44% respectively).

Table 4: WHS activities undertaken by transport industry business compared to businesses in priority and non-priority industries

Item	Industry		
	Transport %	Other Priority Industry %	Other non priority industry %
employed an extra worker or work health and safety expert	18	19	8
identified safety issues or problems	13	25	31
implemented procedures to address bullying	31	19	26
provided protective clothing or equipment	75	83	66
purchased staff training externally	19	29	22
undertook internal staff training	49	50	57
ran toolbox sessions	30	34	22
implemented safety measures	52	77	72
replaced plant or equipment earlier than expected	39	41	27
accompanied inspector on workplace inspection	18	18	22
implemented procedures dealing with fatigue	15	29	24
undertook training on bullying	30	9	14
engage a lawyer for work health and safety matters	3	3	6
changed contracts to comply with work health and safety laws	15	18	20
ran information sessions	37	35	25
talked with other businesses	24	44	43
talked with workers including contractors	60	66	56

The findings in Table 5 show that transport industries businesses spent more time on keeping records and finding information, compared to businesses in other priority and non-priority industries. For all other administrative activities transport industries businesses spent a similar amount of time to other businesses.

Table 5: Time spent by businesses on WHS administrative activities

Time spent	Industry		
	Transport %	Other priority industry %	Other non-priority industry %
	Keeping records required for compliance		
Less than 30 minutes	67	65	75
30 minutes - 1 hour	0	23	16
More than 1 hour	32	12	9
	Applying to your work health and safety authority for licences, etc.		
Less than 30 minutes	96	83	86
30 minutes - 1 hour	2	10	9
More than 1 hour	2	7	5
	Checking worker competency for tasks, e.g. licences		
Less than 30 minutes	77	65	76
30 minutes -1 hours	19	23	14
More than 1 hour	4	12	10
	Notifying the work health and safety authority when required		
Less than 30 minutes	97	96	89
30 minutes - 1 hour	2	3	9
More than 1 hour	1	1	2
	Finding information about your work health and safety obligations		
Less than 30 minutes	68	80	78
30 minutes -1 hour	29	10	12
More than 1 hour	3	10	10

Table 6 shows the cost to business of conducting selected WHS activities. The results suggest that compared to businesses in other priority industries transport industry businesses spent more on implementing procedures dealing with fatigue, undertaking training dealing with bullying and implementing procedures dealing with bullying. Some caution is required in interpretation of these figures as amount spent is strongly associated with business size.

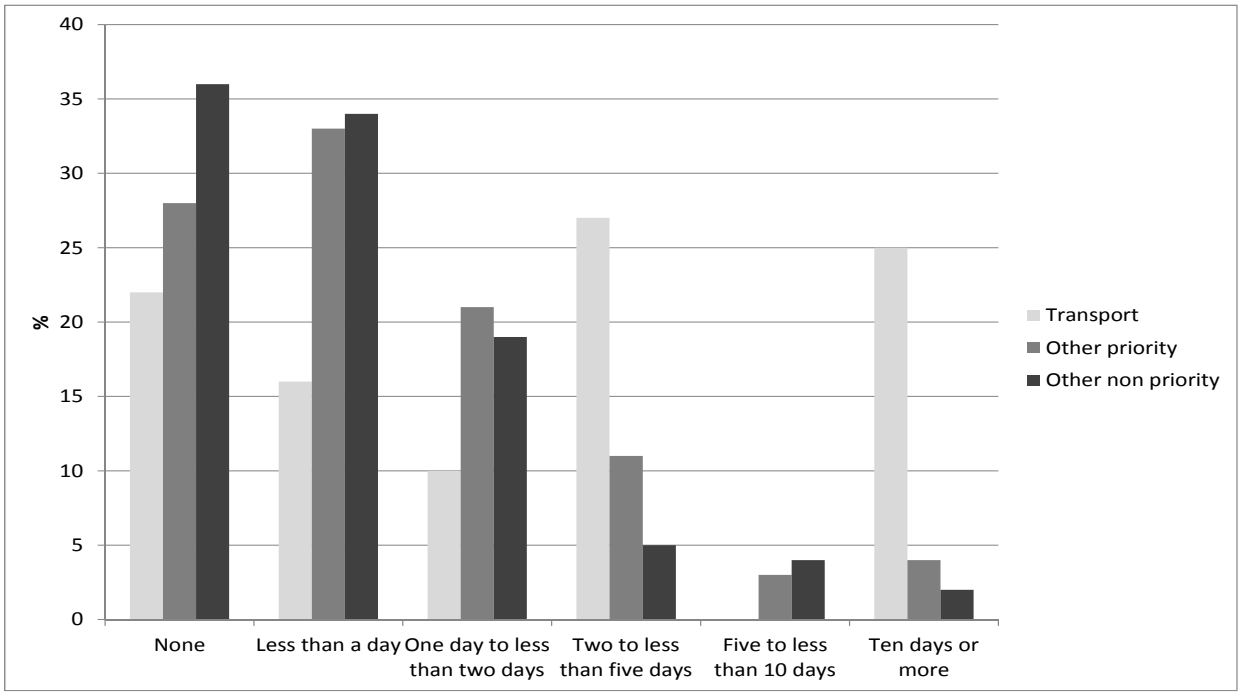
Table 6: Percentage of businesses who incurred costs for selected WHS activities that spent $1,000 or more on the activity in the 2012 calendar year

Item	Industry		
	Transport %	Other priority industry %	Other non-priority industry %
Employ an additional worker or engage an expert dedicated to WHS matters	7	53	53
Identify safety issues or problems	4	30	20
Put procedures in place to prevent or respond to bullying	88	5	15
Provide PPE	22	32	31
Purchase staff training externally	15	49	49
Undertake staff training externally	7	19	22
Run toolbox sessions for supervisors and workers	9	22	15
Put in place safety measures	15	25	14
Replace plant and equipment earlier than expected for WHS reasons	13	61	56
Accompany an inspector when they carry out an inspection of your workplace	57	4	17
Put procedures in place dealing with fatigue	23	4	18
Undertake training dealing with bullying	91	7	17
Make use of a lawyer for WHS matters	37	77	28
Make changes to contracts to ensure compliance with WHS laws	9	5	35
Run information sessions for staff and managers on WHS laws	6	5	14
Talk about WHS matters with other businesses you work with	27	19	23
Talk about WHS matters with workers including contractors	7	2	10

Work Health and Safety training provided

The WHS Perceptions survey collected information on the amount of WHS training provided to employees. Figure 7 below shows that in 2012 transport industry employers provided a higher proportion of training to their workers than employers in other priority and non-priority industries. About 45% of transport industry employers provided more than two days WHS training per year compared to less than 20% of other priority and non-priority industry employers. Twenty five per cent of transport industry employers provided 10 or more days WHS training per year compared to less than 5% for other priority and non-priority industry employers.

Figure 7: WHS training provided to workers by industry



Finding information about work health and safety

Sources of information about work health and safety

Table 7 shows the top sources that were used to get information about work health and safety nominated by employers in 2014. As in other priority industries transport industry employers were most likely to source their WHS information from employer / industry associations and the media. While government documents and publications are one of the top three sources for other priority and non-priority industries, only 18% of transport industry businesses indicated these as a source of information.

Table 7: Main sources used to get information about WHS by industry WHSP 2012 - E

Information source	Industry		
	Transport %	Other priority Industry %	Non-priority industry %
Employer/ industry associations	30	38	25
Media (e.g. magazines, newspapers, television, radio)	25	36	29
Government documents and publications e.g. laws and codes	18	33	33
Industry pamphlets and newsletters	19	25	18

Table 8 compares the main sources from which something was learnt about work health and safety (in the past 12 months from the 2012 survey data) nominated by employers and workers in the transport industry in 2012 (this information was not collected for workers in 2014). The top three sources from which something was learnt about work health and safety for employers were the internet (38%), supervisors and managers (37%) and experience doing the job (32%). By contrast the top three

sources used by workers were training courses (39%), media (29%) and meetings at work (26%). Employers who reported learning about WHS from supervisors/managers reflect WHS managers completing the survey.

Table 8: Sources from which something was learnt about work health and safety for employers and workers in the transport industry

Information Source	Employers	Workers
Media (e.g. magazines, newspapers, television, radio)	28	29
Meetings at work	14	26
Training courses (e.g. work, TAFE, apprenticeship, university)	1	39
Internet	38	-
Email at work	15	12
Supervisors / Managers	37	24
Experience / Doing the job itself	32	15

Work health and safety communication and consultation

The WHS Perceptions survey provides insights into communication and consultation within the transport industry. Figure 8 compares transport industry employers' and workers' perceptions of the effectiveness of WHS communication processes. The findings suggest that workers consistently rate WHS communication processes as less effective than managers do.

Figure 8: Effectiveness of WHS communication for employers and workers in the

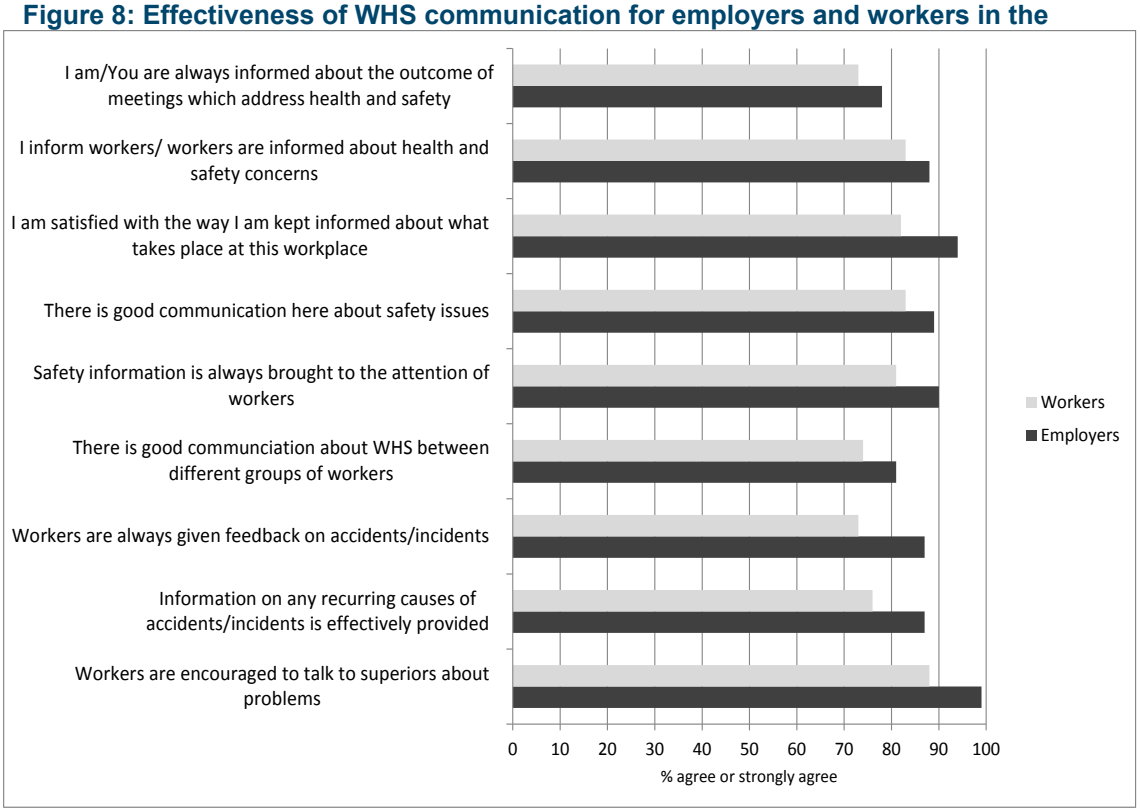
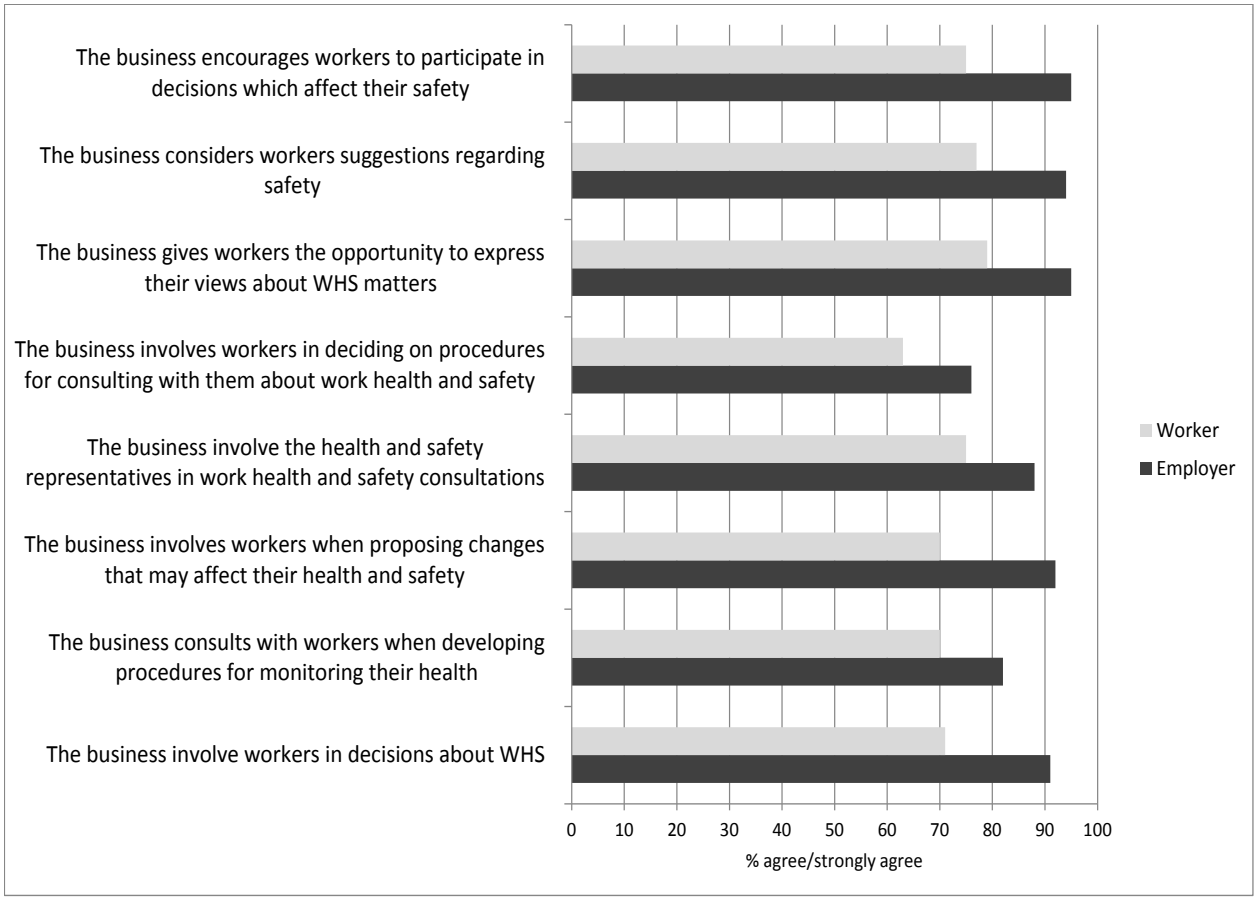


Figure 9 compares employers and workers perceptions of the effectiveness of WHS consultation processes. The results show that there is a consistent pattern for workers to rate consultation processes as less effective than employers. The size of the differences between employers and workers tends to be greater for consultation

compared to communication. About 90% of employers agree that the business:

- considers workers' suggestions regarding safety compared to about 75% of workers
- gives workers the opportunity to express their views about WHS matters compared to about 80% of workers
- involves workers when proposing changes that may affect the health and safety compared to about 70% of workers, and
- involves workers in decisions about WHS compared to about 70% of workers.

Figure 9: Effectiveness of WHS consultation for employers and workers in the transport industry



Evaluation of an intervention campaign in the road freight transport industry

This final section of the report presents findings from an intervention campaign conducted in 2008-09 that aimed to reduce manual task related injuries and musculoskeletal disorders in the road freight transport industry. The aim is to illustrate ways that have been used successfully by regulators which potentially could be applied to issues highlighted in this report.

The intervention campaign involved a mix of workshops with business, distribution of guidance material and inspections. The evaluation found that by working directly with the industry, regulators were able to provide specific information that raised awareness and enabled nearly half of the managers taking part to improve safety practice in their business.

The exercise highlighted the different issues experienced by different groups within the industry. For example the greatest impact of manual tasks hazards was felt by businesses operating vans and light trucks of less than 10 tonnes gross vehicle mass.

Many drivers acknowledged they were aware of safe WHS methods but were not able to use them due to the work environment and time pressure. Results indicated that owner-drivers were less influenced by the campaign interventions compared to owners and managers of employing businesses. Difficulties contacting owner-drivers highlighted that workshops are probably not the preferred way of influencing this group about safe work practices. Other ways of working with them need to be considered.

Findings suggest that the apparent acceptance of unsafe work practices in the industry may be due to the economic pressures on the industry and the uncontrolled nature of the physical environment in which work is carried out especially for van and light truck drivers.

The issues highlighted in this report such as acceptance of unsafe work practices could in part be addressed by regulators working directly with industry participants to raise WHS awareness and provide the industry with specific information to enable businesses to improve their safety practice. A pertinent finding is that a one size fits all approach does not work in the transport industry. The distinct differences in the way owner-drivers operate compared with employing businesses suggest tailored approaches are the way to go.

Appendix A: details of data sources used in this report

This appendix includes a summary of key transport industry demographics for each of the data sources used in this report.

National Hazard Exposure Worker Surveillance Survey, 2008

The 2008 National Hazard Exposure Worker Surveillance (NHEWS) Survey was a telephone survey (n=4500). The survey aimed to estimate the prevalence of occupational disease causing hazards in Australian workers. The NHEWS survey contained questions asking workers about whether they worked with specific hazards (e.g. whether they worked in direct sunlight). It also collected information on control measures for each hazard. The NHEWS survey focussed on the five national priority industries identified in the first Australian National OHS Strategy (2002-2012) and hazards that were associated with priority occupational diseases in Australia at the time.

Profile of respondents

A total of 391 transport workers across Australia participated in this survey. The most common age group was the 45 – 54 years age group followed by the 35 – 44 years age group (33% and 28%, respectively). 76% of workers were male. About 40% of the workers in this industry were Machinery Operators and Labourers, 18.9% were Clerical and Administrative Workers and 13% were Technicians and Trades Workers. Eight reports from NHEWS-2008 are available on Safe Work Australia website.

Supplementary tables for NHEWS-2008

Hazard	Definition of an exposed worker
Sun	Self-reported exposure to sun for 4 or more hours a day during the week preceding the survey
Wet work	Self-reported exposure to hand washing 20 or more times a day and/or hands immersed in liquids for more than two hours per day during the week preceding the survey
Biomechanical demands	Self-reported exposure to eight measures of biomechanical demands whose combined exposure score was at the upper 25th per centile
Job demands	Self-reported exposure to eight measures of psychological job demands whose average score was at the median for the sample or above
Noise	Self-reported exposure to loud noise* the week preceding the survey
Vibration	Self-reported exposure to hand/arm and/or whole body vibration the week preceding the survey
Biological hazards	Self-reported exposure to biological materials the week preceding the survey
Chemical hazards (dermal)	Self-reported exposure to working with chemicals in the week preceding the survey
Airborne hazards	Self-reported exposure to dusts and/ or gases, vapours or fumes the week preceding the survey
Note: * defined as noise so loud that you would have to raise your voice to be heard to speak to people who are at one arm's length away from you. This has been reported to be roughly equivalent to 85 dB(A).	

Variable	Definition
Control measures for sun exposure	Whether PPE and/or administrative controls are provided for sun protection. Administrative controls for sun exposure were reorganising work outside peak UV hours, providing covered areas and reorganising tasks/timing/location. PPE control measures for sun included provision of sunscreen, protective clothing, hat or sunglasses.
Control measures for noise	Whether PPE and/or other control measures for noise are provided. PPE measures for noise were provision of ear muffs or ear plugs. Other control measures for noise were training on how to prevent hearing damage, rotating jobs, placing noisy equipment in an isolated room, purchasing quieter machinery whenever possible and signage.
Control measures for vibration	Whether PPE and/or other control measures for vibration are provided. The PPE measure for vibration was provision of gloves. Other control measures for vibration were provision of vibration dampeners, vibration absorbing seats, purchasing products with less vibration and training.
Control measures for airborne hazards	Whether PPE or administrative/engineering controls are provided. PPE measures for airborne hazards were provision of masks and respirators. Administrative/engineering control measures for airborne hazards were providing ventilation systems and reducing time spent in places with airborne hazards.
Control measures for chemicals	Whether PPE or other control measures for chemicals are provided. PPE measures for chemicals were provision of gloves and protective clothing. Other control measures for chemicals were labelling and warning signs, washing facilities, training on safe handling of chemical products or substances.
Control measures for biomechanical demands	Whether training or engineering/redesign controls are provided. Training for biomechanical demands was provision of manual handling training. Engineering/redesign controls included provision of lifting equipment, provision of trolleys, changing layout of the job, and changing the size and shape of loads.
Control measures for job demands	Whether training/counselling was provided or whether their workplace had an anti-stress/anti bullying policy. Training was on how to manage stress.
Control measures for wet work	Whether PPE or other control measures were provided for wet work. PPE measures for wet work include provision of gloves, barrier cream or moisturisers. Other control measures include limit the time spent with hands immersed in water or liquids, provide labelling and warning signs, and provide OHS training on working with water or other liquids.
Control measures for biological materials	Whether PPE or other control measures are provided for biological materials. PPE include provision of gloves, masks, protective clothing and safety goggles. Other control measures include labelling and warning signs, safety cabinets, ventilation systems, sharps containers, biohazard bags, isolation and providing training on safe handling of biological materials

Motivations, Attitudes, Perceptions and Skills (MAPS) Survey, 2009

The Motivations, Attitudes, Perceptions and Skills (MAPS) Survey was conducted in 2009-10 using a telephone survey. Those who were eligible to participate in the study were people over 18 years of age who were in paid work or had been at some time in the past six months and worked in one of the five priority industries at the time – Construction, Agriculture, forestry and fishing, Manufacturing, Transport and storage and Health and community services. There were quotas set by industry, age groups and by state or territory. It is noted that the sample is not representative and therefore, the results cannot be generalised. However, the sample was obtained randomly and covered all states and territories.

Profile of respondents

The majority (72%) of workers in transport were males and were 35 to 44 years of age. The vast majority (86.8%) worked for an employer and 9% were self-employed. The majority (77.8%) had been in the industry for more than five years. The final report from this study is available on the Safe Work Australia website.

Work Health and Safety Perceptions Worker and Employer Surveys, 2012

The Perceptions of Work Health and Safety surveys aimed to provide a baseline measure of work health and safety attitudes, beliefs and actions shortly after the model WHS laws were introduced. The surveys targeted four types of respondents: employers, sole traders, health and safety representatives and workers. There were four separate questionnaires tailored for the four types of respondents. However, all four questionnaires covered similar themes and questions. This report presents findings from the worker and employer surveys.

Work Health and Safety Perceptions Worker Survey, 2012

The worker survey was conducted using Computer Assisted Telephone Interviews (CATI) during September to October 2012. The survey used a dual frame approach (both landline and mobile). A sample for random digit dialling was purchased from the commercial sample provider SampleWorx with an aim of completing 650 interviews from landline numbers and 650 interviews from mobiles. For the landline sample, the qualifying respondent was chosen by asking to speak with the person who had the most recent birthday of all those in the household who were at least 18 years of age and had worked in paid employment (for an employer) in the past 6 months. For the mobile sample, the person who answered was qualified to answer the survey if they were at least 18 years and had worked in paid employment (for an employer) in the past 6 months. A total of 1311 interviews (transport n= 59) were completed out of 5618 in scope contacts, giving a response rate of 23%.

The worker survey data were weighted by state/territory, sex, age and occupation to match population proportions obtained from the August 2012 quarter of the Labour Force Survey. This report presents findings from this weighted dataset.

Profile of respondents

Based on the weighted data, 82% of transport workers were male and the most common age range was 25-39 years old (41%). About four in ten (37%) of workers were from small workplaces (1-19 employees at respondent's workplace), 35% of workers were from medium workplaces (20-199 employees at workplace) and 17% were from large workplaces (200 or more employees at workplace).

Work Health and Safety Perceptions Employer Survey, 2012

The employer survey was a paper based survey, conducted from October 2012 to January 2013. A random sample of 10 000 employing businesses were drawn by the Australian Bureau of Statistics for this survey and the same sample is used for the survey of sole traders. The sample took into account the number of businesses in each industry. A total of 1052 employers completed the survey of which 54 were in transport. Taking into account the completed interviews by sole traders (n=520, not presented in this report), the response rate was about 16%. The data were weighted by business size, industry and state/territory. The data presented in this report are limited to the employers.

Profile of respondents

Based on the weighted data, 82% of transport workers were male and the most common age range was 25-39 years old (41%). About four in ten (37%) of workers were from small workplaces (1-19 employees at respondent's workplace), 35% of workers were from medium workplaces (20-199 employees at workplace) and 17% were from large workplaces (200 or more employees at workplace).

Work Health and Safety Cost of Compliance (Regulatory Burden) Survey, 2013

The Regulatory Burden Survey was conducted to collect information from businesses on the cost and other impacts of complying with the model WHS laws. The survey was conducted from April to June 2013 and examined costs incurred by businesses in 2012. The RBS was a postal survey using a random sample of 10 000 Australian businesses from the Australian Business Register drawn by the Australian Bureau of Statistics. There were two different survey forms: the sole trader survey and the employer survey. The data presented in this report are limited to the employers. A total of 1504 employers completed the survey and 49 were in transport.

Profile of respondents

Based on weighted data, the vast majority of transport businesses (92%) were small businesses (1-19 employees). Most (82%) transport businesses had been in operation for five or more years. In 2012 44% had a turnover of $200 000 to $1 999 999.

Health and Safety at Work Survey (HSW-2014)

The Health and Safety at Work (HSW) Survey was conducted from June to August 2014. It was conducted to measure the impact of model WHS laws on businesses 18–30 months after the laws were introduced in most Australian jurisdictions. The survey sought information on the following:

- sources of work health and safety information
- awareness and effect of officer duties
- perceptions of work health and safety and risk management activities
- cost (time and money) of adopting and complying with the model WHS laws; and
- Health and Safety Representative (HSR) training, costs and activities.

The survey included owners, senior managers, Chief Executive Officers and Chief Financial Officers in businesses that employed workers as well as owners of non-employing businesses ('sole traders' or partnerships). The Health and Safety at Work Survey was a paper-based questionnaire posted to a random sample of 10 000 businesses in June 2014. Respondents also had the option to complete the questionnaires online. The Australian Bureau of Statistics drew the sample from businesses listed on the Australian Business Register which contains all businesses that apply for and receive an Australian Business Number. The Australian Bureau of Statistics considered the size, primary location and industry of each business when drawing the sample. The data were weighted by business size, industry and state/territory. A total of 2350 businesses participated in this survey of which 173 were transport businesses.

Profile of respondents

Based on weighted data, 74% of transport industry respondents were sole traders or non-employing businesses. About 23% were small businesses (1-19 employees) and 3% were medium businesses (20-199 employees). Approximately 40% of transport businesses had a turnover of $50 000 to $199 999. Five per cent of transport respondents had a turnover of $2 million or more.

Manual tasks in the Road freight transport industry 2008-9 National HWSA intervention campaign: Evaluation report

This study evaluated the effectiveness of WHS regulator intervention for the Delivering the Goods Safely National Manual Tasks in Road Transport Freight Campaign 2008-9. The evaluation comprised pre and post campaign surveys of independent samples of owners/managers and owner drivers in the industry. The post campaign survey included a group of owners/managers and owner drivers who had either attended a workshop or been audited during the campaign and a second group who had no direct contact with the campaign.

Profile of respondents

The pre campaign survey was conducted between 4 December 2008 and 22 January 2009 and collected data from 151 owners/managers and 93 owner drivers. The post campaign survey was conducted between 28 April and 26 May 2010 and collected data from a sample of 150 owners/managers and 87 owner drivers. The pre and post campaign surveys used quota samples from the Dun and Bradstreet list of Australian businesses. The post campaign survey also included a list of businesses which had received an intervention during the campaign.