

Safety Impacts of Alcohol & Other Drugs in Construction

The impact of alcohol and other drugs (AOD) consumption continues to be a significant issue for workplace safety and performance in Australia—particularly within the construction industry. While most Australian jurisdictions have identified this as a critical safety issue, limited information is available about the extent or effect of AOD usage on the workplace, or how employers can effectively and efficiently address the issue.

To address such a scarcity of information, this project set out to evaluate the use of AOD within the Australian construction industry and work with employer and employee groups across the infrastructure and building sectors to develop an appropriate industry policy. The aim was to have the policy adopted across construction workplaces nationally, with the ultimate goal of generating broad cultural change across the industry.

A total of 494 workers across a number of Australian worksites were surveyed about their general use of AOD. 58% of respondents scored above the cut-off for risky or hazardous alcohol consumption, while 15% of these scored above the cut-off for being significantly at risk. Only 7% of respondents indicated that they considered that they might have a problem with their drinking habits. Other drug use was also identified as a major issue.

Results from the national evaluation support the need for evidence-based, preventative and tailored educational initiatives to effect cultural change

Goals

This project sought to evaluate the relationship between the use of AOD and the safety impacts within the Australian construction industry. A national approach across the Australian construction workforce - involving government representatives; employers and employees; unions; and other key industry stakeholders and experts was adopted. The ultimate goal has been to engender a cultural change in the workforce - to render it unacceptable to arrive at a construction workplace with impaired judgement resulting from the use of AOD.

Industry driven

The two-year project was guided strategically by a national industry steering committee that has met on six occasions over the period. The Committee comprised representatives from:

- John Holland
- Australian Constructors Association
- Australian Workers Union
- Austroads
- Civil Contractors Federation
- Construction, Forestry, Mining and Energy Union
- Engineers Australia
- Master Builders Australia
- Office of the Federal Safety Commissioner (observer)



The research

Volunteers from construction worksites around Australia were surveyed to gain an assessment of the general use of AOD in the Australian construction workforce. The majority (464) of the 494 respondents were male, with an average age of 35.7 years. Most respondents were employees, with 85 participants employed as contractors. Respondents were spread across a range of organisational roles, with the majority of respondents classifying themselves as a tradesperson (155). Other roles were identified as:

- Labourer (117);
- Plant operator (68);
- Administration or engineering role (53); and
- Supervisor (47).

To ensure a globally accepted measurement tool was used, the World Health Organisation Alcohol Use Disorders Identification Test (AUDIT) was adopted. The AUDIT examines responses to 10 questions which fall into three domains:

- Quantity and frequency of alcohol consumption (screens for possible risk of hazardous consumption);
- Abnormal drinking behaviour (may indicate early or established alcohol dependence); and
- Negative consequences related to alcohol consumption.

In addition to the ten AUDIT questions, four supplementary questions were included in the survey to probe self-rated dependency and past other drug use.

Semi-structured interviews were also conducted across a number of roles within the company to identify major issues and themes. Questions centred on perceptions towards AOD use in the workplace and attitudes and perceptions towards existing AOD workplace policies.

What the research tells us

Fifty-eight per cent of respondents scored within the range for risky or hazardous alcohol use. Of these, 65% returned scores that indicated they were at risk of harmful consumption; 20% returned scores that showed they were at high risk of alcohol problems; and 15% returned a score that warrants further diagnostic evaluation for alcohol dependence.

It is also important to consider the overall scores in the context of the three individual AUDIT domains that specifically examine consumption, dependency and alcohol-related problems (see Table 1).

Table 1: Mean AUDIT scores for each domain

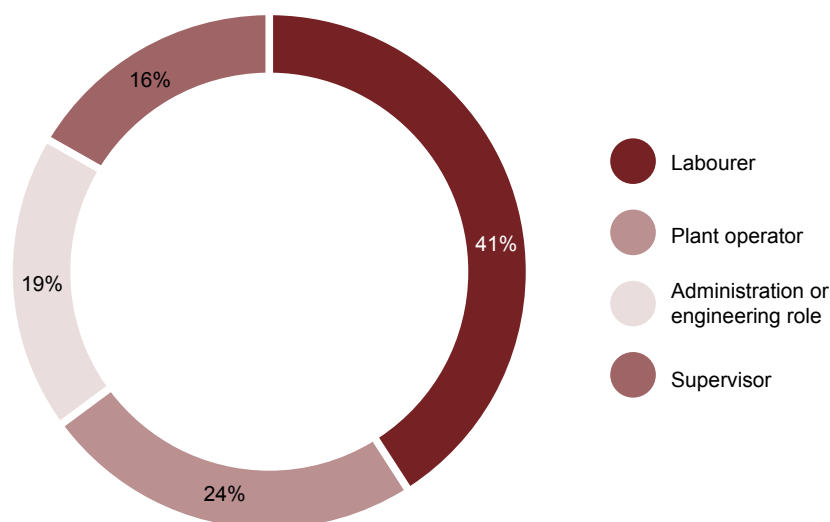
AUDIT Domain	Mean (SD)	No. of respondents (and %) who scored at or above the cut off
Domain 1: Consumption	6.17 (3.1)	300 (61%)
Domain 2: Dependency	1.38 (2.1)	79 (16%)
Domain 3: Alcohol related problems	2.48 (3.1)	291 (59%)

Note: Max score for domain one is 12 (scores ≥ 6 indicating a risk of alcohol related harm). Max score for domain two is also 12 (scores ≥ 4 indicating possible alcohol dependence). Any score in domain three warrants further investigation.

Seven per cent of respondents reported that they either possibly or definitely had a problem with drinking. A further four per cent of respondents reported that they were unsure. Fourteen per cent of respondents reported that it would be either fairly difficult or very difficult to cut down or stop drinking over the next three months.

Of those who scored above the AUDIT score for hazardous alcohol use (58% of the total sample), 74% reported that they do not have a problem with drinking and 55% reported that it would be either very easy or fairly easy to cut down or stop drinking.

In terms of prevalence, 59% of respondents reported they had used marijuana/cannabis in their lifetime, with 15.8% having used it in the last year. Forty per cent had used ecstasy or meth/amphetamine type substances in their lifetime, with 31.6% having used it in the last year.



The interviews

The structured interviews identified a number of important issues.

Links to reduced safety and productivity levels as a result of general use of AOD were confirmed by all of those interviewed in safety advisory positions. Overall, there seemed to be a general lack of understanding and knowledge surrounding the physical and psychological effects of AOD use and how they might impair performance. This was despite the overall attitude that the use of AOD is detrimental to workplace productivity and safety.

In terms of prevalence, AOD use was perceived as a major issue that continues to worsen. It was considered that this decline was of particular concern in relation to other drug use, due to detection being problematic; changes in drug type 'popularity'; and the increased use of synthetic forms of illicit drugs. Prescription medications and other legal stimulants such as energy drinks were also identified by safety staff as a major concern.

While existing policies and programs were generally seen as effective by participants, there was overall support for the development of more comprehensive and tailored educational initiatives for workers within the construction industry. In particular, participants emphasised the need for educational and preventative programs—rather than focusing on the consequences of AOD use after it has become a problem.

A specific need was identified to educate younger employees about coping with the lifestyle that can accompany highly paid, project-to-project work. Acknowledging and understanding the different rationale of "career" workers as distinct from "it's just a job" workers was also highlighted as an important consideration in terms of how to communicate educational messages most effectively to younger employees. Implementing a mentoring type initiative was also suggested as a way of communicating knowledge, experience and advice to younger employees.

In terms of improved communication and education about the effects of AOD use, respondents identified a need for the delivery of clear and simple information via brochures, fact sheets, posters, and videos. Training sessions were also suggested as an opportunity to focus on a particular safety issue in depth. Participants responded positively to the proposed development of a web-based resource.

Fear for job security was highlighted as a common barrier to seeking help or advice about AOD at work.

Other issues included: the importance of management support and maintaining a healthy and open relationship between supervisors and team members, with a strong commitment to preventing harm caused by AOD; and the consistent communication of policies and expectations from day one of the project. Related to this was the importance of ensuring that sub-contractors are subject to the same policies and practices that employees are subject to in their regular practices. Consideration of the culture of specific occupational groups was also identified as being important. Finally, educating therapists and

counsellors who are made available to employees about the culture of the construction industry was identified as something that could be of great value.

These results indicate that, as in the general population, a proportion of those sampled in the construction sector may be at risk of hazardous alcohol consumption. As general AOD use does not necessarily translate into workplace AOD use and impairment, these results do not tell us about when those in the 'at risk' group are consuming alcohol. A proportion of those 'at risk' will consume alcohol in their own time, whereby their behaviour has no relevance to their performance at work. For others though, alcohol risk will translate into workplace risk. The evidence from this research does not allow any accurate indication of what this risk might be.

While many in the current sample appear to be at risk of hazardous alcohol consumption, a large proportion of these respondents claimed not to have a drinking problem. Many of these respondents also indicated that it would be fairly easy to cut back or stop their drinking behaviour. These results suggest that those who may be at risk are unaware that a problem may exist, further highlighting the need for educational programs to increase knowledge and awareness of the effects of AOD. Other drug use remains a huge concern.

Benefits to industry

This project has fundamentally contributed to a greater understanding of AOD consumption rates, patterns of use and the associated levels of risk within the Australian construction industry. With a stronger grasp of the extent and severity of the problem, we are better equipped to understand the causes, impact and consequences of AOD within the cultural and operating context of the construction workplace – and importantly, how to respond effectively.

This has been the first scientific evaluation, at a national level, of the use of AOD in the construction industry. The outcomes will be invaluable to the development and delivery of appropriate, up-to-date strategies and tailored materials targeted at the unique needs and characteristics of the construction industry. Importantly, this project has brought together national employer, employee, union and government groups and, within a safety culture framework, has adopted an educative and non-punitive approach to the management of AOD use in this industry. Project outcomes have been coordinated nationally and these aim to contribute to a change in culture towards improving safety in the construction industry—to render it socially unacceptable to arrive at a construction workplace with impaired judgement as a result of AOD usage.

A cultural change management program and implementation plan has been developed by the research team in consultation with all project partners and industry stakeholders. The aim is that this will be adopted by employers nationally. A key component of the implementation plan is the uptake of an online educational tool that has been specifically developed for managers and supervisory/safety staff.

This study is of major significance for Australia within the current context of harmonisation of industrial legislation in occupational health and safety and Federal and State Government investment to improving workplace safety and overall population health.

The Sustainable Built Environment National Research Centre (SBEnc) is the successor to Australia's CRC for Construction Innovation. The SBEnc is a key research broker between industry, government and research organisations servicing the built environment.

The SBEnc is continuing to build an enduring value-adding national research and development centre in sustainable infrastructure and building with significant support from public and private partners around Australia and internationally.

Benefits from SBEnc activities are realised through national, industry and firm-level competitive advantages; market premiums through engagement in the collaborative research and development process; and early adoption of Centre outputs. The Centre integrates research across the economic, social and environmental sustainability areas in programs respectively titled: Driving Productivity through Innovation; People, Processes and Performance; and Greening the Built Environment.

This research wouldn't be possible without the ongoing support of our industry, government and research partners:



Project partners:

- WA Department of Treasury
- QLD Department of Transport and Main Roads
- NSW Roads and Maritime Services
- John Holland
- Queensland University of Technology
- Curtin University
- Swinburne University of Technology
- Australian Constructors Association
- Australasian Procurement and Construction Council
- Australian Workers Union
- Austroads
- Civil Contractors Federation
- Construction, Forestry, Mining and Energy Union
- Engineers Australia
- Master Builders Australia
- Office of the Federal Safety Commissioner (observer)



For further information:



Professor Herbert Biggs
Queensland University of Technology
Email: h.biggs@qut.edu.au