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**”Biological mechanisms,  
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in the 24h society”**



**BOOK OF ABSTRACTS  
AND PROGRAM**

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## Alcohol Consumption in Shiftworkers Compared to Dayworkers

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### Objectives

The detrimental effects of excessive alcohol consumption are well documented. There is evidence that shiftworkers consume more alcohol than dayworkers, using alcohol as a sleep aid to compensate for sleep difficulties associated with shiftwork schedules. This study investigated drinking patterns in people working outside a typical Monday-Friday daytime work schedule, compared to dayworkers.

### Method

This study included the 2006 and 2007 waves of the Household Income and Labour Dynamics Survey of Australia, which has a sample representative of the Australian population. A subset of workers who were not in full-time study and worked a single job were selected, excluding participants who did not drink alcohol (1262male, 1007female, mean age=41.6y SD=11.3y). Using the 2001 Australian Government alcohol guidelines, which were in effect during data collection, alcohol consumption for risk of short-term harm (7+ standard drinks for men and 5+ for women) was investigated. The number of people who drank alcohol nearly every day or every day was also examined.

### Results

Nearly 11% of participants reported consuming alcohol at levels risky for short-term harm. Having a child less than 17years (OR=0.53, 95%CI=0.32-0.88), higher job demands (OR=0.74, 95%CI=0.61-0.89), working more hours than preferred (OR=0.58, 95%CI= 0.36-0.95) being female (OR=0.47, 95%CI=0.27-0.81), and being older (OR=0.89, 95%CI=0.87-0.92) were associated with a reduction, and being a shiftworker (OR=2.05, 95%CI=1.18-3.57) with an increase in the odds of drinking alcohol at short-term risky levels.

Nine and a half percent reported consuming alcohol at short-term risky levels at least weekly. Having a child less than 17years (OR=0.39, 95%CI=0.21-0.72), higher job demands (OR=0.70, 95%CI=0.55-0.88), being female (OR=0.29, 95%CI=0.16-0.54), and being older (OR=0.91, 95%CI=0.88-0.94) were associated with a reduction, and increased work-family strains (7-point scale, OR=1.33, 95%CI=1.11-1.60) and being a shiftworker (OR=2.26, 95%CI=1.64-4.39) were associated with an increase in the odds of consuming alcohol at such risky levels at least weekly.

Nearly 18% reported consuming alcohol in any amount near daily or daily. Working more hours than preferred (OR=1.64, 95%CI=1.10-2.44) and being older (OR=1.09, 95%CI=1.07-1.12) were associated with an increase, and being female (OR=0.22, 95%CI=0.14-0.37), and being a shiftworker (OR=0.35, 95%CI=0.20-0.61) were associated with a decrease in the odds of consuming alcohol daily or near daily.

### Conclusions

Results suggest that shiftworkers may be more likely to consume alcohol at levels considered to be risky for health in the short-term. In contrast, they appear less likely to drink alcohol daily. This is suggestive of a ‘binge drinking’ pattern of behaviour.

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