



MONASH University

Engineering

# Too drunk to ride?

Insights on cyclists' behaviour and attitudes towards alcohol, drugs and cycling

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**Institute of Transport Studies (Monash)**

The Australian Research Council Key Centre in Transport Management

# Why alcohol and drugs impact cyclist safety

- Negative physiological impacts
  - Balance
  - Psychomotor and cognitive skills
    - slows responses
    - alters senses

Intoxication = ↑ injury severity + ↑ hospital stay

Study aim

Identify cyclist attitudes towards  
and use of  
alcohol and drugs

Study method

In-depth interviews

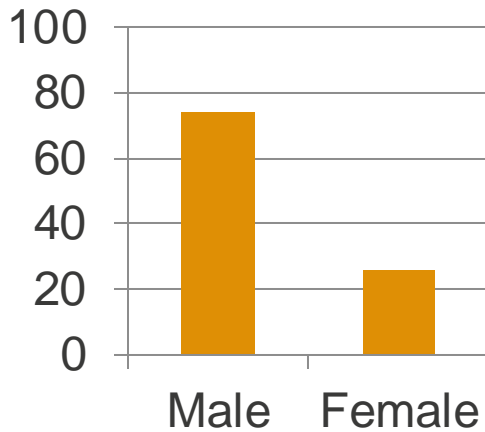
Post-crash

Sandringham and Alfred Hospitals

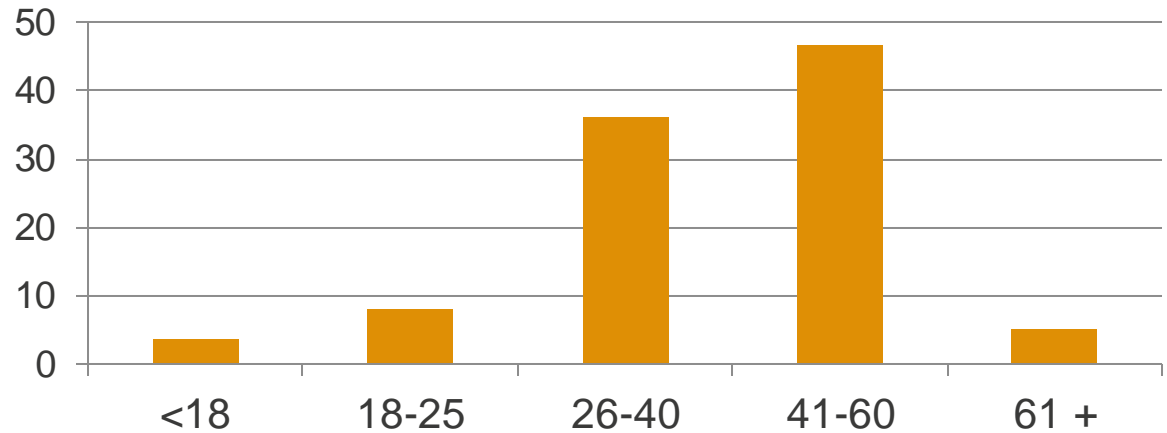
n=158

# Participants

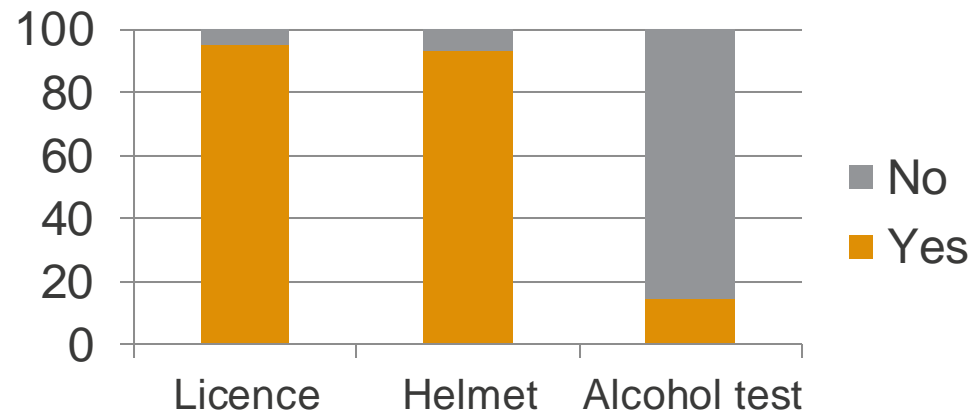
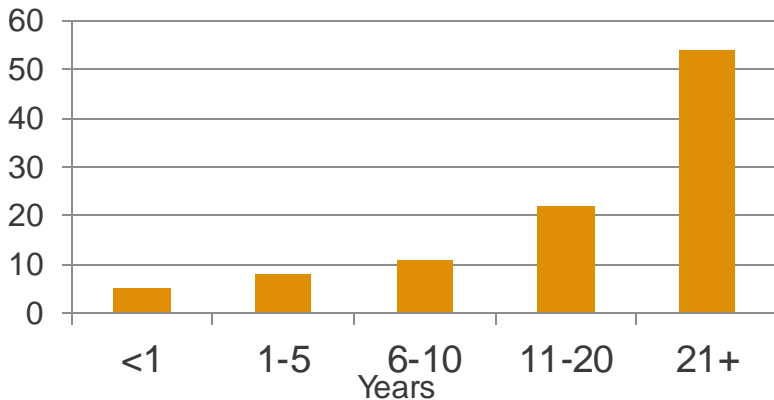
## Gender



## Age



## Cycling experience





**Alcohol**

Can a cyclist  
be over  
0.05?

No

BAC 0.05

Breathalysed

Yes

Summary offence

Sobriety test

# Alcohol – attitudes

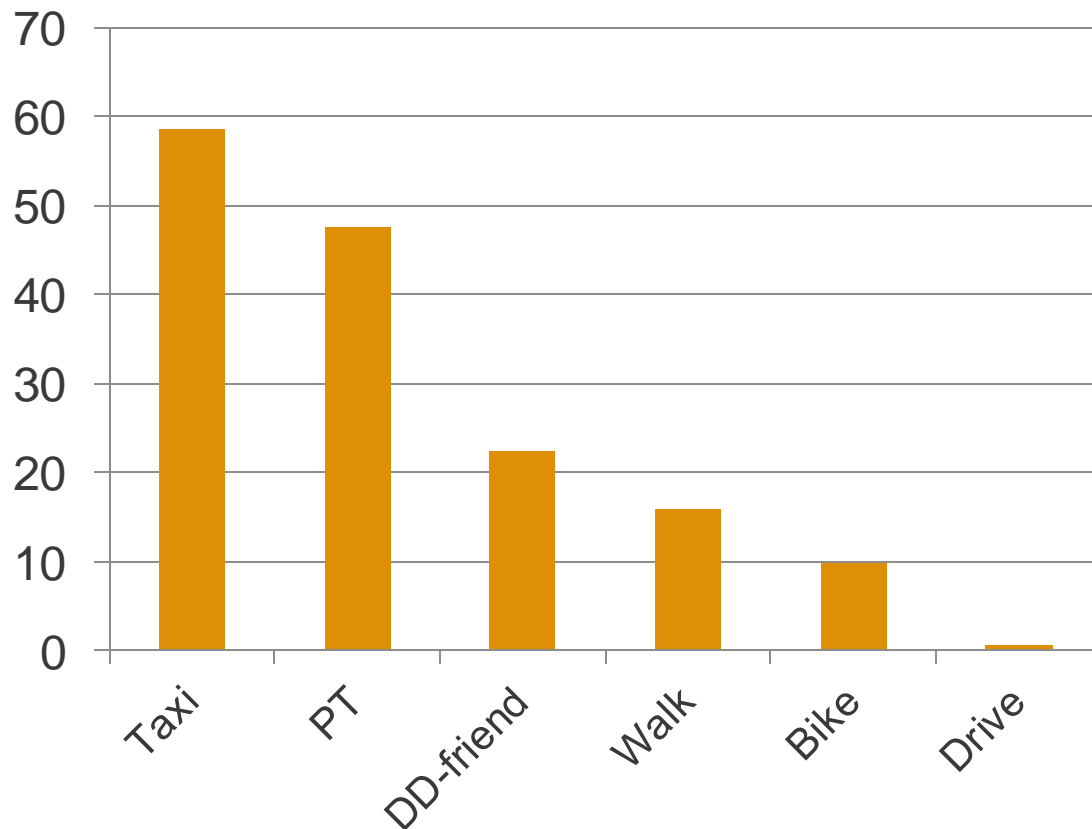
alcohol negatively affects cycling skills

97.4% agreed

3 disagreed

- Male
- Aged over 26 years
- Driver's licence
- Not tested for alcohol
- Helmet
  - yes (1); no (2)

# Alcohol – usual transport mode when intoxicated



Bike 9.9%



# Alcohol – use

Tested 23/158

- Cyclist characteristics
  - Gender, age, licence, helmet use
- Crash characteristics
  - Location, time of crash, single/multiple vehicle, day of week
- Injury severity outcome

Stat. sig.

Age (p=0.02)

Single vehicle (p=0.05)

# Alcohol – test results

Tested 23/158



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Gender

Age

Cycling experience (yrs)

Transport mode

Crash

- Location
  - Day/time
  - Injury outcome
-



**Drugs**

# Drugs – attitudes

## drugs negatively affects cycling skills

91.5% agreed

Some drugs worse than others?

55.9% Yes  
marijuana: impact reaction time, balance  
*Cocaine, speed, ecstasy, hallucinogens, heroin or 'anything the police would check for'*  
negative impact

42.1% no experience/didn't know

1.3% declined

0.7% no difference

# Conclusions

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In-depth study = new insights

Small sample size – few comparisons were stat. sig.

Important road safety issue

- Cyclists are likely to be less predictable when intoxicated
- Potentially higher risk of crash – greater self-harm
- Potentially higher risk to other roads – direct crash involvement or crash avoidance

# Conclusions

## Hospital testing for alcohol and drug use is low

To determine prevalence of alcohol and drug and the role of substances in crashes – more testing of cyclists is needed

## Attitudes towards alcohol and drug use

Majority = negatively impact cycling skills

## Future directions

Road safety campaigns that address substance use need to be broadened beyond drivers – cyclists and pedestrians

# Acknowledgements

## Sponsors



**Alfred**Health



**Sandringham**  
HOSPITAL





# Thank you Questions?

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