

Report on Voluntary Breath Testing at Splendour in the Grass 2017



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EXECUTIVE SUMMARY

STEER Voluntary Breath Testing "VBT" positively changes drink driving behaviour by making person-to-person connections in the drinking environment i.e. where choices about celebrating and driving are made. STEER breath testing volunteers offer patrons a free voluntary breath test and provide information associated with safe celebrating and safe driving. STEER breath testing is currently a regular part of many major music Festivals.

The STEER VBT program received an overwhelmingly positive response from Splendour patrons. Most people came in curious to check their Blood Alcohol Concentration (BAC) some never having had a breath test. Many patrons were surprised their actual BAC was significantly different to their estimated BAC.

Breath testing volunteers actively engaged patrons in conversations about standard drinks, the rate bodies process alcohol, and safe transport options. The volunteers provided over 1500 breath tests and conducted over 100 surveys with Festival patrons. The surveys give a snapshot of patron drinking and driving intentions at Splendour:

- 51% were female
- 92% were under 39 years old
- 40% of patrons were intending to or thinking about driving
- 27% of patrons had no idea of their BAC
- 58% of under 20 year olds had no knowledge of standard drinks
- 40% of under 20 year old patrons had no idea of their estimated BAC
- 79% of green P plate patrons had a BAC over 0.0
- 42% of full licence holders intending to or thinking about driving had consumed 3-4 standard drinks.

STEER recommends:

- increasing provision of voluntary breath testing at festivals, community events and private functions as a practical way to increase awareness of standard drinks and BAC in the community
- specifically targeting P plate patrons
- increasing focus on positive "Plan A" type messages
- delivery of a public awareness campaign including harm minimisation benefits of drinking low/mid strength alcohol

INTRODUCTION

Australia is deemed to have the most successful Random Breath Testing "RBT" program internationally, having maintained RBT programs in all states since the 1980's. Among the general population, personal contact with random breath testing has the strongest deterrent impact on drink driving 1 .

The STEER Voluntary Breath Testing program complements police random breath testing and positively changes drink driving behaviour by making person-to-person connections at the coalface, i.e. where choices about safe celebrating and safe driving are made. STEER Breath testing volunteers offer patrons free voluntary breath tests and provide information and resources associated with safe alcohol consumption and safe safe driving.



Vision

The STEER Breath testing vision is to positively change drink driving behaviour at festivals, community events & private functions likely to involve consumption of alcohol and driving.

Objectives

STEER objectives at large festivals, community events and private functions are to:

- 1. increase awareness of standard drinks
- 2. monitor number of standard drinks consumed
- 3. increase awareness of estimated BAC, thus ensuring drinking and driving choices are well informed
- 4. increase awareness of alcohol processing by the body
- 5. increase likelihood those intending to drive will choose a safe celebrating option
- 6. provide an accurate measure of BAC at festivals, community evens and private functions
- 7. change intention to drive for who test over their legal limit

STEER Voluntary Breath Testing was initiated in 2013 with support from a Foundation for Rural and Regional Renewal ABC Heywire Youth Innovation Grant and Transport for NSW.

¹ Terer, K. Rick Brown, R (2014). Effective drink driving prevention and enforcement strategies: Approaches to improving practice. Australian Institute of Criminology. Trends and Issues in Crime and Criminal Justice. No 472. February 2014

BACKGROUND

Regional areas are disadvantaged by a lack of safe transport options. This results in many young people, particularly males, making unsafe transport choices. In the 5 years from 2005-2010 there were 1,367 reported crashes in Byron Shire involving 17-20 year olds 2 . Alcohol is a contributing factor in 15% of fatal crashes for young drivers aged 17-25 3 .

In December 2016, Tweed/Byron police charged 19 drink-drivers over one weekend and another 86 drivers tested positive to drugs. The three day operation saw the region retain its unwanted crown as the state's most dangerous place to drive. Traffic and highway patrol command assistant commissioner Michael Corboy described the results of the operation as:

"...staggering, considering the high road toll. Despite the death toll on our roads, which now sits at 357, and the numerous warnings about drink and drug-driving, I am dumbfounded by how many drivers we have caught impaired during the operation. The Tweed/Byron Local Area Command is ranked number one in the state for alcohol related crashes, and there is an average of seven fatal crashes in the command every year. This is not a statistic to be proud of. It is a disgrace. 4"

Research suggests patrons ready to change at-risk drink driving behaviour may benefit from a brief intervention presented in an interesting way in their drinking environment ⁵.

Splendour is an annual 3 day music festival held at North Byron Parklands, Yelgun NSW. Festival capacity is 30,000 patrons each day. Some patrons opt to stay offsite and drive to/from the Festival each day. Splendour is a licensed event.

² Road Traffic Authority (NSW): crashes in the 17-20 yr age group in Byron Shire from 1/7/2005 to 30/6/2010.

³ Safer Drivers Course for Learners (Roads and Maritime Services NSW) crashes for young drivers aged 17-25, 2011.

⁴ EchoNetDaily. 5Dec2016. http://www.echo.net.au/2016/12/tweed-byron-states-dangerous-place-drive

⁵ Reilly, D., Van Beurden, E., Mitchell, E., & Dight, R. (1998). Alcohol education in licensed premises using brief intervention strategies. Addiction, 93(3), 385.

WHAT WE DID

STEER Voluntary Breath Testing provided over 1500 voluntary breath tests and conducted over 100 surveys with Festival patrons.

Safe Celebrating and Driving Info

The breath tests represent over 2000 conversations with Festival patrons in which STEER volunteers increased patron self awareness associated with safe celebrating and safe driving. The conversations with patrons included...

- inquiring into the patron's awareness of standard drinks & providing appropriately matched information
- inquiring into quantity of alcohol consumed by patron over a period of time
- asking patrons to estimate their BAC
- providing accurate information about how bodies process alcohol e.g. "there is no way to speed up the rate your body gets rid of alcohol... time is the only way to sober up"
- providing information about safe celebrating e.g. where to get water, and the importance of eating and resting
- providing suncream
- providing information about alternative transport options e.g. Festival bus services, taxi and Uber pick up points

STEER Voluntary Breath Testing collaborated with the State Library of NSW to provide "standard drink" pocket guides to increase patron awareness regarding definition of standard drinks and how to translate quantities consumed into these standardised measures.

Sustainability

Splendour 2017 saw increased environmental measures from Festival organisers, who aimed to create a "greener" event. STEER supported this initiative by using bio-degradable paper straws for breath testing in order to reduce potential Festival litter. Used straws were collected and placed in the festival recycling bins.

Surveys

Participants undertaking voluntary breath testing were asked to complete a short survey including quantitative and qualitative questions ⁶. The purpose of the surveys was to ascertain individual awareness of BAC limits in the context of their stated number and type of drinks. Basic demographic information was also collected, such as age, gender and driving licence type. Survey participants were asked to nominate their motivation for undertaking the voluntary breath test. The collection of motivational information was used to evaluate how voluntary breath testing is perceived and valued by the community, and to ascertain whether it is primarily used for personal education or as a justification for drinking and/or drink driving . All information was collected voluntarily and anonymously.

⁶ refer to Appendix for the Survey Questions

Plan B

STEER collaborated with Transport for NSW and Roads and Maritime Services (RMS) NSW to promote the *Plan B: If You Are Drinking Don't Drive* message. Information and resources included Plan B posters (refer to Appendix for an example Plan B poster), promotional material, and t-shirts. Some patrons at the STEER voluntary breath testing stall joked about the Plan B options as they were waiting for a breath test, demonstrating engagement with and awareness of the information.



Breathalysers

STEER provided the majority of breath tests on AlcoMeasure and Alcolizer Wallmount Units with some demonstration tests on a BACTrack Pro personal breath testing device. All units were calibrated immediately prior to the Festival.

The Alcolizer Wallmount breath testing unit was supplied through the RMS. The wall mount breath testing units used at Splendour In the Grass Festival were compliant with the Australian Standard for Blood Alcohol Testing Devices for Personal Use (AS3547). These units have a minimum calibration period of 30 days. Patrons using the units were advised their blood alcohol concentration can rise for up to two hours after the last drink, and that it can take ten hours or more for blood alcohol concentration to return to zero after a high blood alcohol level is recorded. The Alcolizer wall mount units are pre-programmed to not show BAC readings above 0.1.

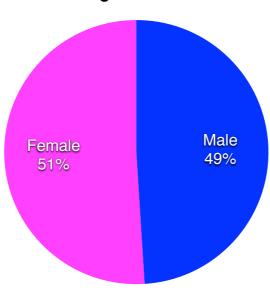




Profile of Survey Respondents

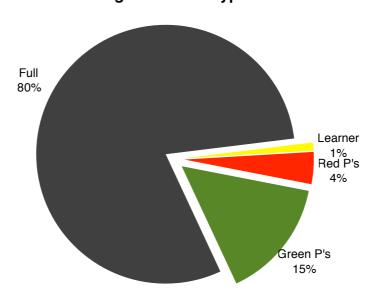
Gender

Fig 1: Gender



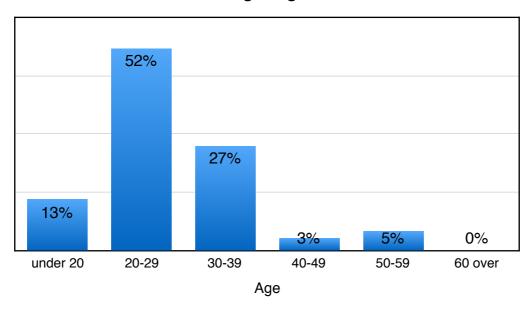
Licence Type

Fig 2: Licence Type



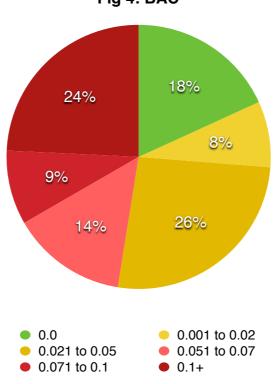
Age

Fig 3: Age



BAC

Fig 4: BAC



52% of all patrons had a BAC under 0.05

Quantitative Results

Motivation for Voluntary Breath Testing

Almost half of all patrons presented for a voluntary breath test based on curiosity about their blood alcohol concentration. Over 1/3 of all patrons had a breath test based on an intention to drive.

Anecdotal evidence suggests only a minority of drinkers who had a voluntary breath test were not genuinely using the service for personal information and assessment of their condition. That said, even those patrons using the breath tester as a 'blow high' game would have learnt something about the effects of their alcohol consumption on their BAC.

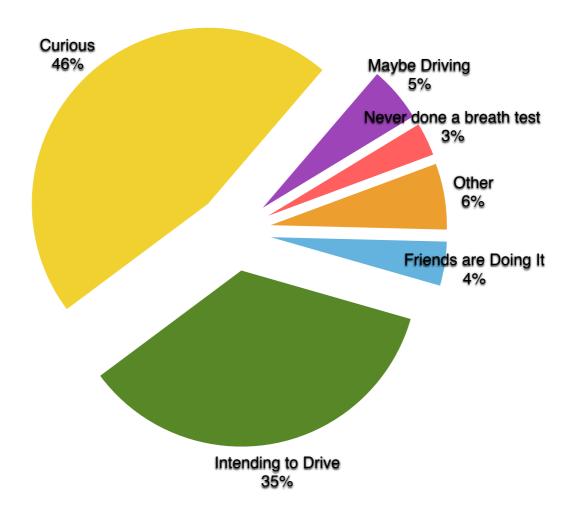


Fig 5: Motivation for Voluntary Breath Testing

40% of patrons surveyed had a breath test as they were thinking about or intending to drive.

Knowledge of Standard Drinks

Critical to increasing individual awareness of the effects of alcohol is increasing awareness of Standard Drinks and the amount of alcohol being consumed. STEER volunteers asked patrons if they knew what a standard drink was.

Knowledge of standard drinks increased with age of patrons.

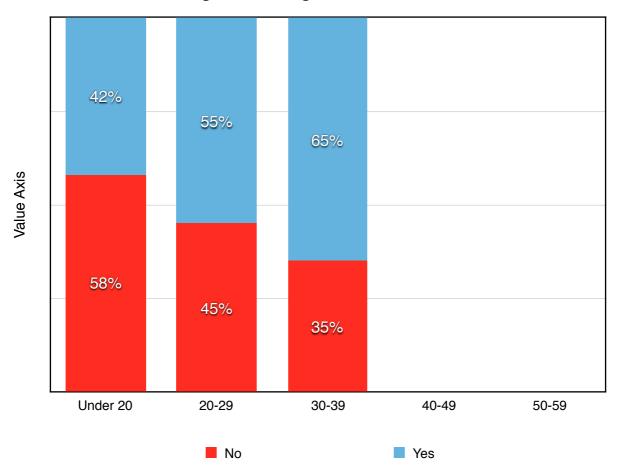


Fig 6: Knowledge of Standard Drinks

NOTE: results for 40-59 and 50-59 omitted due to low sample size

58% of Under 20 year olds had no knowledge of standard drinks.

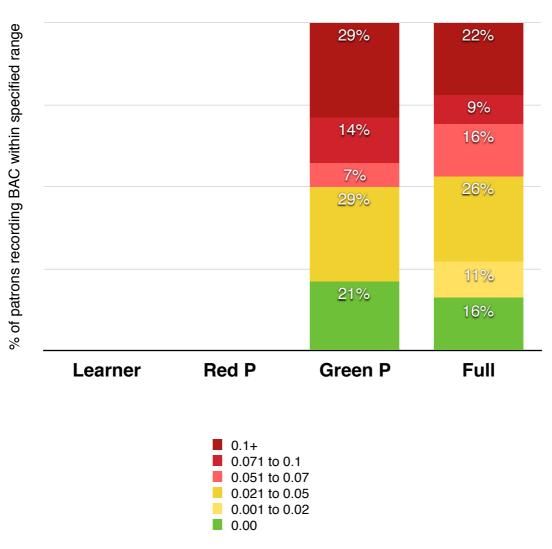


Fig 7: BAC relative to Licence Class

NOTE: results for L and Red P omitted due to low sample size

79% of Green P platers had a BAC over 0.0

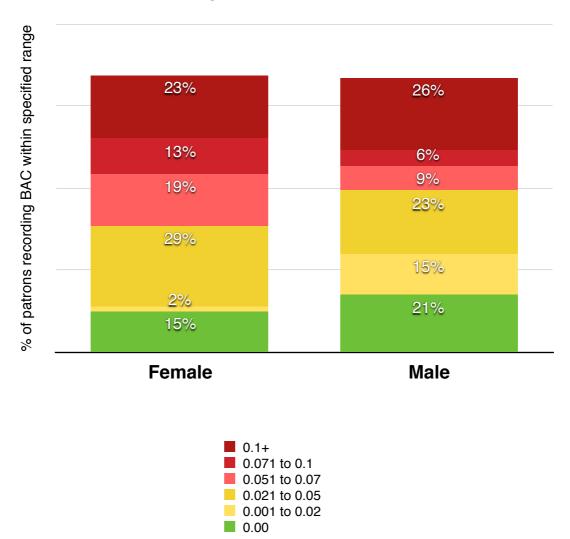


Fig 8: BAC relative to Gender

60% of males recorded BAC's under 0.05 compared to 46% of females.

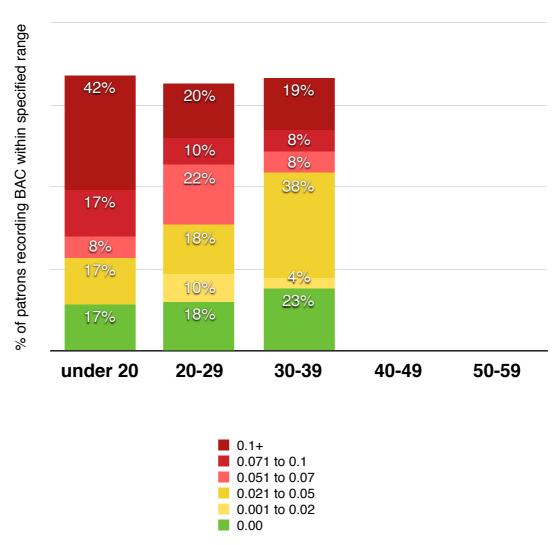


Fig 9: BAC relative to Age

NOTE: results for 40-49 and 50-59 omitted due to low sample size

65% of 30-39 year olds had a BAC under 0.05 compared to 33% of under 20 year olds

Estimated vs Actual Blood Alcohol Concentration

Patrons were asked to estimate their BAC prior to a breath test and were given the option of 'no idea' if they could not guess at their BAC. STEER found many patrons mentioned they were returning for a voluntary breath test having had one previously and/or at a previous Festival e.g. Falls Festival. We noticed that these patrons tend to have an increased awareness of their Estimated BAC, however empirical evidence is required to support this observation.

19% of patrons estimated within +/- 0.01 of their actual BAC indicating good self awareness of their BAC. As an example, if such a patron had an actual BAC of 0.04, they would estimate a BAC between 0.03 and 0.05.

At the other end of the scale, 32% of patrons estimated within +/- 0.05 of their reading indicating little self awareness of their BAC As an example, if such a patron had an actual BAC of 0.04 they would estimate a BAC between 0.0 and 0.09.

27% of all patrons had no idea of their estimated BAC or estimated in excess of +/- 0.05 relative to their actual BAC.

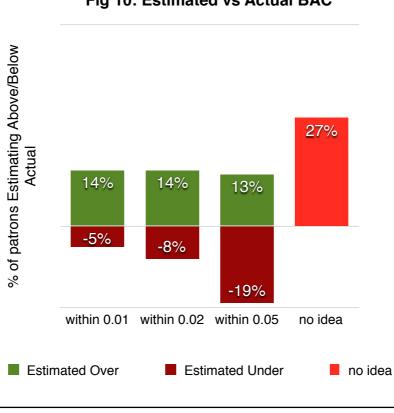


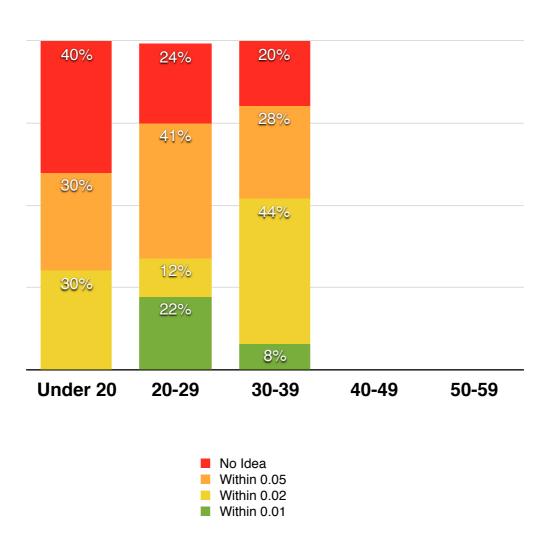
Fig 10: Estimated vs Actual BAC

27% of patrons had no idea of their BAC.

Estimated vs Actual Blood Alcohol Concentration relative to Age

Amongst the age groups, those best estimating their BAC were 20-29 year olds of whom 22% estimated their BAC within +/- 0.01. Least accurate were under 20 year olds of whom 40% had no idea of their BAC and none estimated their BAC within +/- 0.01.

Fig 11: Estimated vs Actual Blood Alcohol Concentration relative to Age



NOTE: results for 40-49 and 50-59 omitted due to low sample size

40% of under 20 year old patrons had no idea of their estimated BAC.

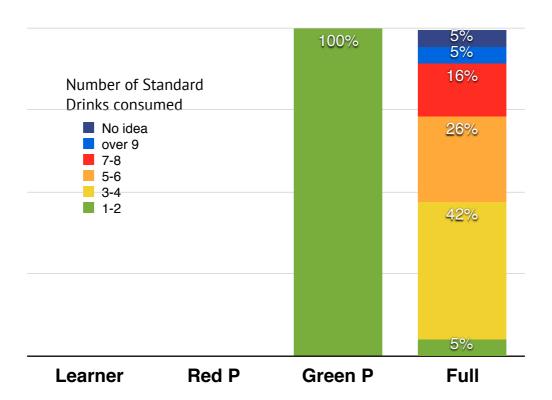
Those Intending to drive

100% of those intending to drive home had been drinking alcohol. This is expected given those not drinking alcohol would be unlikely to present for a voluntary breath test.

Fig 5 shows 40% of patrons were intending to or thinking about driving home prior to a voluntary breath test.

Almost half of full licence holders intending to or thinking about driving had consumed between 1-4 standard drinks.

Fig 12: Standard Drinks Consumed Vs Licence Type for those Intending to Drive



NOTES: results for L & P omitted due to zero sample size. Results for Green P skewed due to low sample size.

42% of full licence holders intending to or thinking about driving had consumed 3-4 standard drinks.

Qualitative Results

The main themes to emerge from the qualitative data are reported below:

- Patrons appreciated voluntary breath testing service
- Patrons recognised the educative value of voluntary breath testing for increasing awareness of BAC
- VBT prompted change of driving intention for those patrons intending to drive and testing over their legal limit
- Patrons were surprised by the extent to which their estimated and actual BACs' differed

General Feedback from Patrons

Below is a selection of quotes from the qualitative data:

"You guys are legends."

Estimated BAC: no idea Actual BAC: over 0.1

> 30-39 y.o. male, Full Licence, Curious No idea how much drunk over whole day

"I came coz the music was great. Valuable service and great DJ..."

Estimated BAC: 0.02 Actual BAC: 0.015

40-49 y.o. male, Full Licence, Other 7-8 std drinks over 4-6 hrs

"My boyfriend is pissed, so seeing if I can drive"

Estimated BAC: 0.0 Actual BAC: 0.0

20-29 y.o. female, Green P, Maybe driving 1-2 wines over 2-4 hrs

"doing this to show my daughter responsibility"

Estimated BAC: 0.05 Actual BAC: over 0.1

40-49 y.o. female, Full licence, Intending to drive 3-4 std drinks over 4-6 hrs, stop drinking and retest

"I've never been pulled over so I wouldn't know".

Estimated BAC: 0.02 Actual BAC: 0.017

20-29 y.o. male, Full Licence, Intending to drive 7-8 spirits over 4-6 hrs

Alcohol Consumption and BAC Awareness

A recurrent theme in breath testing stories is 'surprise'. Many patrons were surprised by the extent to which their estimated and actual BACs' differed. Patrons who arrived in groups and had been drink-for-drinking with their mates were generally shocked at how different individual BAC's were. Some drivers had no idea of the legal BAC limit applicable to their licence type. Patrons drinking mid strength alcohol tended to over estimate their BAC.

Below is a selection of responses pertaining to patrons' surprise at their BAC estimations:

"My last drink was 4.5 hours ago. I am surprised"

Estimated BAC: 0.05 Actual BAC: 0.0

30-39 y.o. female, Full Licence, Intending to Drive

3-4 beer/ciders over 4-6 hrs

"Really surprised I was over!"

Estimated BAC: 0.02 Actual BAC: 0.056

20-29 y.o. female, Full Licence, Curious no idea # beers over who day

"Will come back just to make sure".

Estimated BAC: no idea

Actual BAC: 0.0

20-29 y.o. male, Full Licence, Intending to Drive

3-4 ciders over 4-6 hrs

"I have no idea of the legal driving limit"

Estimated BAC: 0.02 Actual BAC: 0.01

20-29 y.o. male, Full licence, Intending to drive

3-4 beer/ciders over 4-6 hrs

Changing Intention-to-drive for those who tested over their Legal Limit

There is a critical difference between a stand alone breath testing machine and a STEER breath testing machine accompanied by a supportive and encouraging STEER volunteer. It is possible a patron testing themselves at a possibly uncalibrated stand alone breath testing machine may look for excuses to drive home if they record a BAC over their legal limit e.g.

- "I am only a little bit over"
- "... there won't be any police"
- "I drive this way all the time and nothing has ever happened"
- look around to make sure no-one else has seen their reading and pretend it didn't happen

However, it is highly likely a patron engaging in a STEER Voluntary Breath Test on calibrated machines will be encouraged by a STEER volunteer to choose one of the following options if they record a BAC over their legal limit:

- be forwarded towards buses, taxis and Uber
- be prompted to drink water & Alcoternatives
- be supported to find time to reduce their BAC and retest before driving
- be suggested to get a lift with friends and/or stay onsite

Of those intending to drive home who recorded a BAC over their legal limit, STEER recorded some of the following intention-to-drive changes:

"So I won't be driving!"

Estimated BAC: 0.07 Actual BAC: over 0.1

50-59 y.o. male, Full Licence, Intending to Drive, 7-8 std drinks over 4-6 hrs

Intention Change: Stay onsite

After breath test "I am full knackered. Gotta see which mate can drive home."

Estimated BAC: 0.05 Actual BAC: over 0.1

20-29 y.o. male, Full Licence, Intending to Drive, no idea # std drinks over whole day

Intention Change: Get a lift w/ a friend

"Shit!"

Estimated BAC: 0.02 Actual BAC: over 0.1

20-29 y.o. female, Full Licence, Intending to Drive, 5-6 std drinks over 4-6 hrs

Intention Change: Get a bus/taxi/Uber

CONCLUSIONS & RECOMMENDATIONS

- Fig 10 shows 27% of all patrons had 'no idea' of their estimated BAC. STEER suggest increasing provision of voluntary breath testing at festivals, community events and private functions as a practical way to increase awareness of standard drinks and BAC in the community
- Fig 6 shows 58% of Under 20 year olds had no knowledge of standard drinks. Fig 7 shows 49% of green P plate patrons had BAC over 0.0 indicating they had been drinking alcohol. Fig 11 shows 40% of under 20 year old patrons had no idea of their estimated BAC. STEER suggest targeting P plate patrons with voluntary breath testing at festivals, community events and private functions as a practical way to increase awareness of standard drinks and BAC
- Fig 12 shows 42% of full licence holders intending to or thinking about driving had consumed 3-4 standard drinks. 100% of patrons surveyed and intending to drive home had been drinking alcohol. This indicates the majority of breath testing patrons are missing the Plan B message of "if you are drinking, don't drive". STEER suggest increased focus on positive "Plan A" type messages e.g. "if you are driving, drink water and Alcoternatives"
- Patrons enjoy and appreciate STEER Voluntary Breath Testing. The majority of people only experience breath testing when/if they are pulled over by police for a random breath test (RBT). Opportunities for individuals to check BAC are extremely limited. STEER voluntary breath testing gives patrons an opportunity to assess their own blood alcohol levels in a non-confrontational, non-litigious, supportive and positive context. STEER suggest voluntary breath testing is a highly engaging and greatly appreciated opportunity for individuals in the community to learn more about their BAC and the personal effects of alcohol consumption
- Patrons drinking mid strength alcohol were generally unaware of the likelihood of a
 greatly reduced BAC relative to drinking full strength alcohol. STEER suggest delivery of
 a public awareness campaign including harm minimisation benefits of drinking low/mid
 strength alcohol e.g.
 - water is the best choice
 - 'Alcoternatives' such as juices/soft drinks are good choices
 - low/mid strength alcohol is a reasonable choice
 - pre-mixed spirits are an OK choice given their consistency of alcohol/volume
 - wine, champagne & neat spirits are some of the worst choices due to their high alcohol/volume
- A proportion of patrons were testing themselves to demonstrate positive behaviour to friends and 'prove' their soberness. These interactions represented a great opportunity to highlight differences in BAC amongst a peer group who often state they are drinkfor-drinking with their mates. STEER suggest voluntary breath testing provides a highly effective platform on which to engage with young drivers in a peer positive environment and from which to deliver key road safety messages in the drinking environment.

THANK YOU

STEER Voluntary Breath Testing is a community program and relies on widespread community support to exist and evolve. We would particularly like to acknowledge and thank:

- all breath testing patrons for taking part and giving their feedback
- our breath testing volunteers
- GreenPack for sustainable paper straws
- Transport for NSW and RMS NSW for Plan B & breath testing resources
- State Library NSW for standard drink information
- Splendour organisers and staff for their support









CONTACT

We appreciate your questions, comments and suggestions regarding STEER breath testing.

STEER are often asked "Who pays for you guys to do this?". Good question. We have previously received and are grateful for support from local and state Government, local & corporate businesses, community organisations and patron donations. Currently the STEER Voluntary Breath Testing program is maintained largely by the good will of our volunteers.

A range of benefits are associated with the STEER Voluntary Breath Testing program for government, business, community organisations and patrons:

- reduced incidence of drink driving related harm
- positive person-to-person connections across a range of defined target markets with identifiable psychographic segments
- exposure to highly engaged and appreciative breath testing patrons
- collaboration in data design, collection and analysis
- provision of aligned safe celebrating and safe transport related products/services

STEER welcome partnering with government, business, community organisations and patrons aligned with the vision "to positively change drink driving behaviour at festivals, community events & private functions likely to involve consumption of alcohol and driving".

For general information on STEER Voluntary
Breath Testing visit

www.steerproject.org.au/breathtesting

For information about partnering with STEER Voluntary Breath Testing visit

http://steerproject.org.au/wp-content/up-loads/2017/02/6Feb17_STEER-Partnership-Proposal.pdf

We welcome sharing data files and resources associated with the STEER Voluntary Breath Testing program for aligned purposes.

Please contact Phil Preston STEER Project coordinator

Mobile 0414 809 330

Email phil@steerproject.org.au Website www.steerproject.org.au



APPENDIX

Survey Questions

Gender

Male Female

Age

Under 20 20-29 30-39 40-49 50-59 Over 60

Licence Type

None Learner Red P Green P Full

What motivated you to have a breath test?

Intending to drive

Maybe driving

Just curious

Friends are doing it

My wife/husband/qf/bf/children told me

Never done a breath test

Other

BEFORE TESTING: what is your estimated BAC?

No idea 0.0 0.02 0.05 0.07 0.1+

AFTER TESTING: what is your actual BAC?

What type of alcohol have you consumed?

Beer & Cider Mid Strength Beer Wine Spirits

Do you know your standard drinks?

Yes No

How many standard drinks have you consumed?

No idea 1-2 3-4 5-6 7-8 over 9

Over what period of time have you been drinking?

Under 1hr 1-2 hrs 2-4hrs 4-6hrs All day

After breath testing what is your intention?

Stop drinking and retest later

Drive home safely

Get a lift with a friend

Get a bus/taxi/Uber

Stay onsite/nearby

Other

We'd love your thoughts, feedback and suggestions about voluntary breath testing.

Plan B

The Plan B drink driving campaign began in August 2012. It is about making positive choices to get home safely after a night out, highlighting that driving is not an option. With practical options to avoid drink driving, Plan B takes a humorous and positive approach designed to engage the community about making alternative arrangements to get home after a night out.

For more information: http://roadsafety.transport.nsw.gov.au/campaigns/planb.html

