Quantitative and Qualitative Study of NSW Drivers’ Knowledge, Attitudes and Behaviours in Relation to Fatigue

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Introduction

- In 2012, fatigue was a factor in 17% fatalities & 9% injuries on NSW roads.
- Key risk factors include lack of sleep, long hours awake, driving at night & driving without rest.
- Fatigue cannot be objectively measured easily & no legislation exists for light vehicles.
- Public education is therefore a key behavioural countermeasure.
- In 2012, knowledge, attitude & behaviour research was conducted to inform future countermeasures.

*P = preliminary data
Methodology

• Online survey n=1,002 NSW drivers
  – Metro and regional
  – Previous surveys in 2001 & 2006

• 8 x 1.5 hour mini focus groups
  – Males and females 17-79 years
  – Sydney & regional locations

• Literature review by Transport and Road Safety (TARS) Research, UNSW assisted survey development
Results
Current Driving Behaviour

- Drivers do not plan short trips
- Limited planning for long trips

More Spontaneous

Younger drivers
Planning mainly for car

Families
Plan around kids needs

Older drivers
Plan around mealtimes

More Planned
## Reasons for taking a break

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need toilet/bathroom break</td>
<td>66%</td>
</tr>
<tr>
<td>* Need to stretch legs</td>
<td>56%</td>
</tr>
<tr>
<td>Hungry/thirsty</td>
<td>53%</td>
</tr>
<tr>
<td>Need petrol</td>
<td>41%</td>
</tr>
<tr>
<td>* Need to take a break from staring at the road/refresh eyes</td>
<td>36%</td>
</tr>
<tr>
<td>* Feel tired/drowsy</td>
<td>34%</td>
</tr>
<tr>
<td>Passenger requests a break</td>
<td>24%</td>
</tr>
<tr>
<td>* Start to lose concentration</td>
<td>22%</td>
</tr>
<tr>
<td>Reach a town/pleasant area</td>
<td>19%</td>
</tr>
<tr>
<td>* See a rest area</td>
<td>17%</td>
</tr>
<tr>
<td>Young children in the car</td>
<td>15%</td>
</tr>
<tr>
<td>* See a Stop.Revive.Survive sign</td>
<td>13%</td>
</tr>
<tr>
<td>Reach a set journey time/number of kms</td>
<td>7%</td>
</tr>
<tr>
<td>None of the above</td>
<td>2%</td>
</tr>
</tbody>
</table>
Understanding of Fatigue

- Fatigue increasingly perceived as serious, but less so than other road safety issues

Base: All survey respondents (2012 n=1002). Q. There are four factors which have a major influence on death and serious injury on NSW roads. Using the slider below, where 0 is not at all serious and 10 is extremely serious; please show how serious you believe the following factors to be on death and serious injury on NSW roads (2001, 2006 & 2012)

Base: All survey respondents (2012 n=1002) Q. Which, if any, of these driving behaviours do you believe are morally wrong? (2001, 2006 & 2012) * NOTE: A BAC of 0.06 was measured in previous years.
Understanding & Experiences of Fatigue

• Fatigue only recognised as an issue on long trips
• But is also experienced on short trips

Incidence of Experiencing Fatigue

*not asked in 2001

Base: All survey respondents (n=1002) Q.Have you driven at any time in the last 12 months on a long trip (more than 2 hours, outside of town) where you've felt quite tired? Q10a.Have you driven at any time in the last 12 months on a short trip (less than 2 hours, within your home city/town) where you've felt quite tired? (2006 & 2012)
Experiences of fatigue by time of day

Base: Survey respondents who experienced driver fatigue on: short trips (n=339), long trips (n=353) Q9c. Thinking about the last time you were driving but felt quite tired on a long trip, what time of day was it? Q10c. Thinking about the last time you were driving but felt quite tired on a short trip, what time of day was it?
Experiences of Fatigue

• 40% males 17-29 years reported 20% of their driving occurs between 10pm & 6am
• Drivers aware of fatigue risk at night, but not during day - daytime fatigue often dismissed
• Drivers aware of early warning signs – but unable to judge when to stop driving
• 12% drivers experienced a microsleep in the previous 12 months
Experiences of Fatigue

• Drivers want to push on

Reasons for stopping when close to destination

- Microsleep / falling asleep at the wheel: 79%
- Almost crashed: 71%
- Need toilet / bathroom break: 61%
- Poor concentration: 48%
- Pressure from passengers: 47%
- Sore or tired eyes: 27%
- Hungry / thirsty: 26%
- None of these, would continue driving: 2%

Base: All survey respondents (n=1002) Q17b. What would make you stop if you were feeling tired on a long trip even if you were X hours and X Minutes [insert from 17a] from your destination? (Prompted)

Q17a If you recognised that you were tired while driving on a long trip, how close would you have to be to your destination to ‘push on’ rather than take a break? (Prompted)
## Attitudes and Barriers to Stopping when Fatigued

### Perceived danger of behaviours

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Very dangerous</th>
<th>Dangerous</th>
<th>Not very dangerous</th>
<th>Not at all dangerous</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting the trip with sleep debt (a lack of sleep built up over a number of days)</td>
<td>63</td>
<td>28</td>
<td>41</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Not taking a break from driving if feeling tired</td>
<td>54</td>
<td>37</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driving for six hours non-stop</td>
<td>60</td>
<td>28</td>
<td>8</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Not having regular breaks</td>
<td>36</td>
<td>47</td>
<td>13</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Driving at a time when you would normally be sleeping</td>
<td>42</td>
<td>38</td>
<td>16</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Beginning the trip after working all day</td>
<td>35</td>
<td>41</td>
<td>19</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Driving during the daytime when likely to be sleepy (e.g. after lunch, at dawn)</td>
<td>12</td>
<td>42</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Beginning the trip very early in the morning</td>
<td>8</td>
<td>49</td>
<td>21</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

* Asterisk marks behaviours that are considered very dangerous.

**Base:** All survey respondents (n=1002) Q20. If you had to take a long trip (more than 2 hours, outside of your home city/town), how dangerous do you think each of the following situations would be?
Attitudes and Barriers to Stopping when Fatigued

Reasons drivers drive when tired

- They do not plan breaks in their trip
- Prior activities and sleep are not always considered
- They want to ‘push on’ – particularly when close to destination
- They think there is nowhere to stop
Attitudes and Barriers to Stopping when Fatigued

Reasons drivers drive when tired (continued)

- They cannot accurately assess their tiredness
- They dismiss fatigue in the afternoon
- Young drivers feel invincible
- Males are too proud to pull over
Legislation for Driver Fatigue

• 52% supported making it illegal to drive while fatigued

• Similar support for:
  – ‘Driving after being awake for 17 hours’
  – ‘Driving having not slept in the last 24 hours’

• Of those who did not support, the main reason was feeling it would be too hard to police, judge or define
Conclusions

• Fatigue is increasingly being perceived as serious, but still not as serious as other road safety issues
• Legislation for fatigue has some support but measurement remains a difficulty
• Fatigue occurs on short trips as well as long – but is not considered as an issue on short trips
• Limited pre-planning of breaks, male pride and a desire to push on means younger male drivers take few breaks
Conclusions (continued)

• Drivers are unsure how tired is too tired, and their judgement of fatigue declines with fatigue
• Little awareness of fatigue as an issue during the daytime – but older drivers in particular experience it at this time
• Work, social activities & sleep/rest, and their impact on fatigue are not always being considered before driving

Currently developing a new public education campaign to address these issues
Thank You
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