



**Australian Government**  
**Australian Institute of Criminology**

# Motor vehicle pursuit fatalities in Australia: 2000 - 2011

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## This presentation will:

- Describe the key preliminary national findings from a recent collaborative study with police services around fatal motor vehicle pursuits across Australia since 2000;
- Touch on areas in need of further research.



## **This presentation will not:**

- Argue for or against motor vehicle pursuits; or
- Discuss individual cases.



## What does the NDICP do?

The AIC coordinates the National Deaths in Custody Program (NDICP)

- Collects information about deaths in custody (prison, juvenile detention and police cells); and
- Deaths in police custody-related operations (e.g. escorting, sieges, raids, shootings, and motor vehicle pursuits).



## What does the NDICP do?

- Information about the circumstances and nature of deaths in custody are supplied by the relevant custodial authority, supplemented with coronial records
- Works with custodial authorities to identify emerging trends and issues
- Provides evidence base for reform and development of strategies to reduce deaths in custody

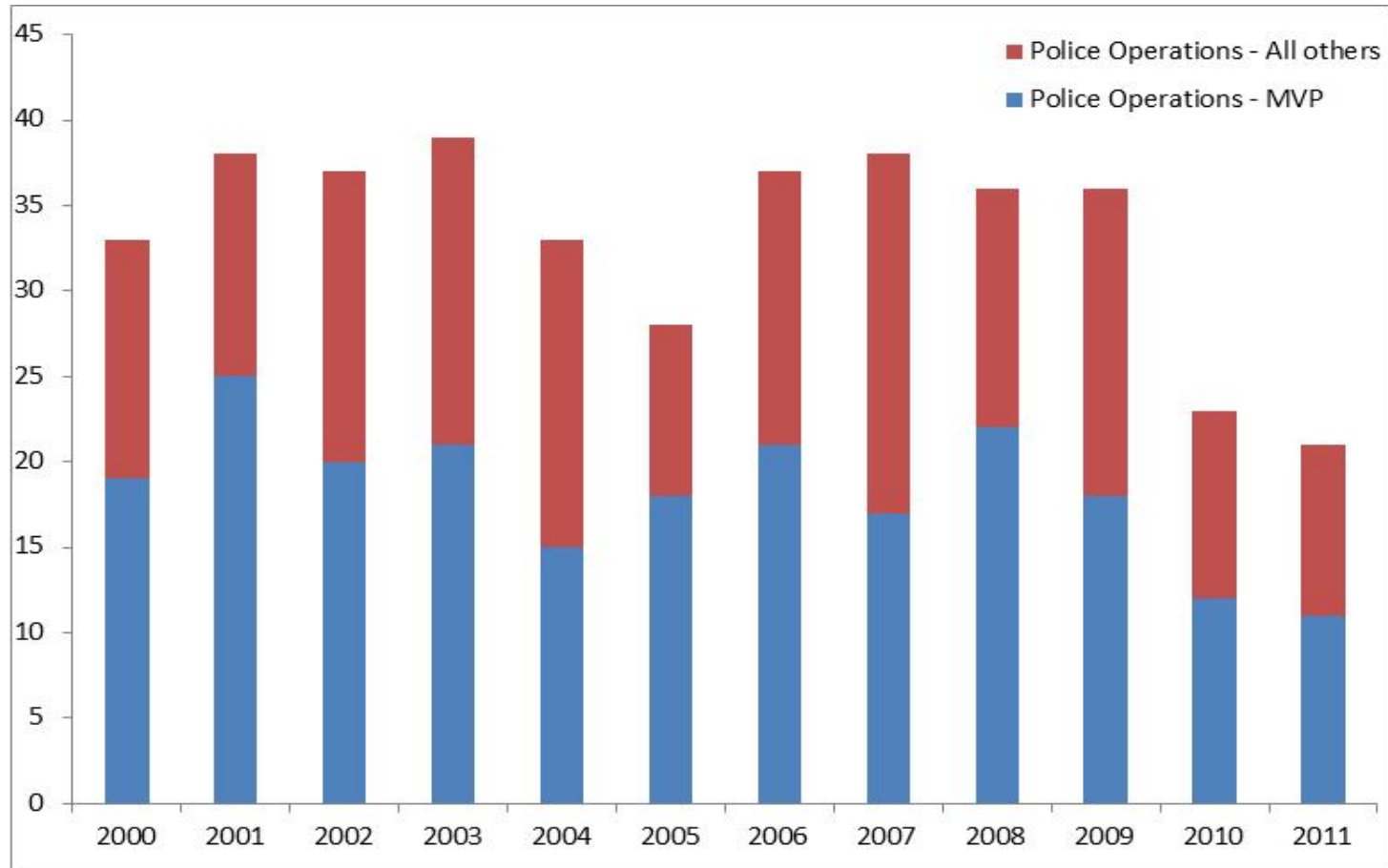


## Why focus on motor vehicle pursuits?

- Since 2000, deaths in motor vehicle pursuits represent between 45% and 66% of all deaths in police operations each year; and
- Because they frequently occur on public roads, motor vehicle pursuits are more likely to affect members of the community than any other type of operational policing activity.



# Motor vehicle pursuit deaths vs all others





## Research methodology:

- NDICP database held information about deaths of alleged offenders in pursuits.
- NCIS database held information about deaths of innocent people in pursuits.
- Police agencies provided additional information and data.





## How many pursuit-related deaths have occurred in Australia: 2000-2011?

- 186 pursuit-related crashes resulting in 219 deaths.
- 138 alleged offenders died (63%).
- 81 innocent people died (37%).
- Annual average of 17 crashes and 20 deaths. <sup>x</sup>



## Demographic characteristics

- Persons less than 25 years represent 53% of all deaths in pursuits (n=116).
- Persons less than 25 years represent 51% of the deaths of those driving the vehicle being pursued (n=58).
- Males over-represented in both groups – 84% of all deaths, 78% of those driving the vehicle.



## Precipitating offences

- The offence is known in 162 of the 186 pursuit-related fatal crashes (87%).
- Most prevalent offence category was 'traffic-related offences' such as speeding or dangerous driving (38%, n=61); followed by
- Motor vehicle theft (32%, n=51) then exceed PCA (19%, n=31).



## Role of drugs and/or alcohol

- Abundance of literature that shows the harmful effects of drugs and/or alcohol on driving ability and increasing risk-taking behaviour.
- Post-mortem toxicology results were available for 150 of the 219 deaths (68%).
- Not possible to determine level of intoxication, but useful to indicate consumption prior to the incident.



## Role of drugs and/or alcohol cont.

- For those driving the vehicle being pursued, where toxicology results were available (n=89, 79%) -
  - 33% (n=28) had consumed alcohol;
  - 30% (n=27) had consumed drugs; and
  - 26% (n=23) had consumed both.
- Overall, 88% had consumed alcohol, drugs or both prior to the fatal motor vehicle pursuit.



## What role did speed play and how long did these fatal pursuits go for?

- Not possible to determine whether these fatal pursuits are measurably different from all pursuits however, these data are useful to build a profile of such incidents.
- Average speed was 129km/h and average length was 4 mins 53 seconds
- Speeds ranged from 50km/h to 210km/h
- Length ranged from 5 seconds to 81 mins

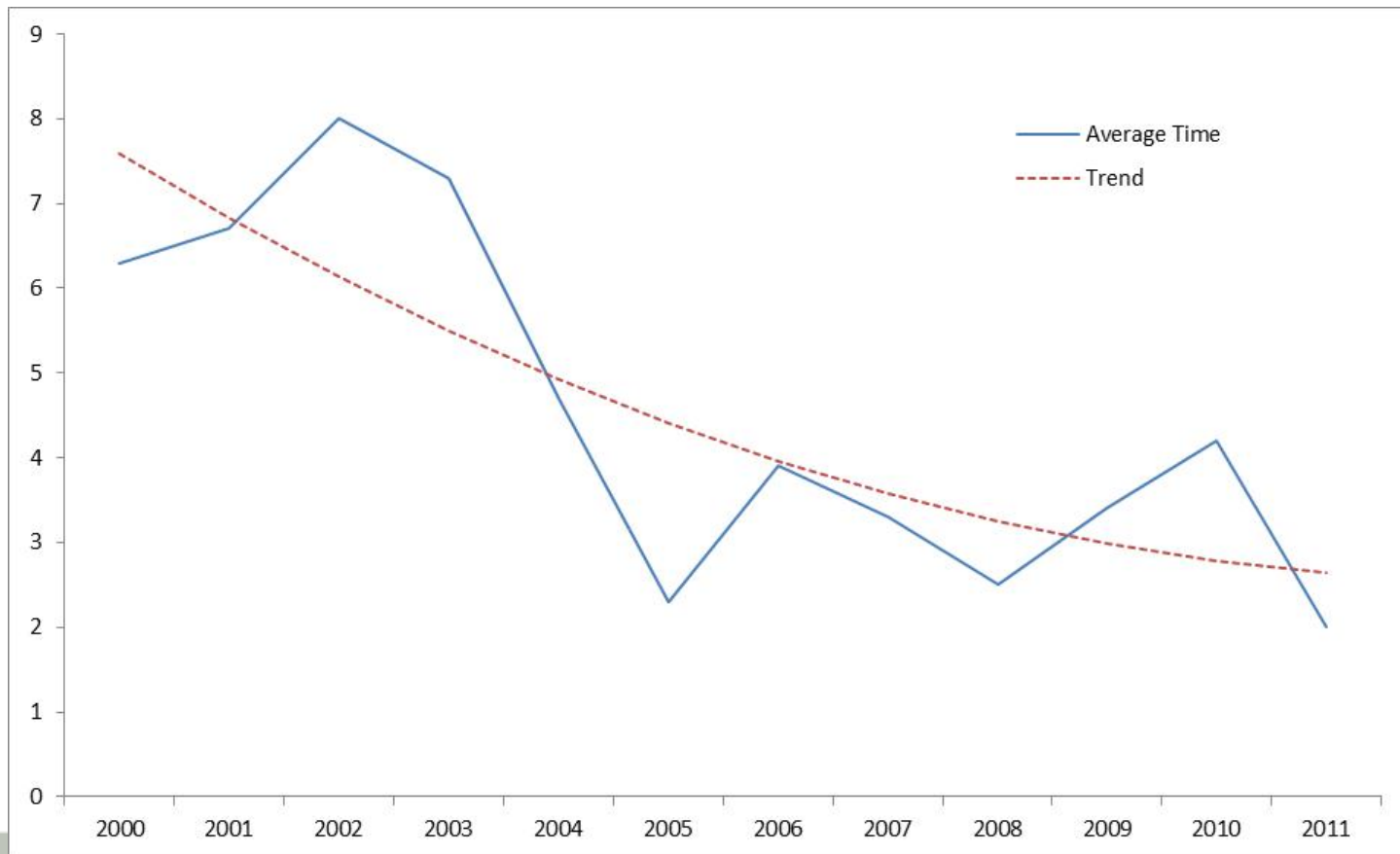


# Average speeds reached in fatal pursuits, by year, 2000-2011 (km/h)





# Average duration of fatal pursuits, by year, 2000-2011 (mins)





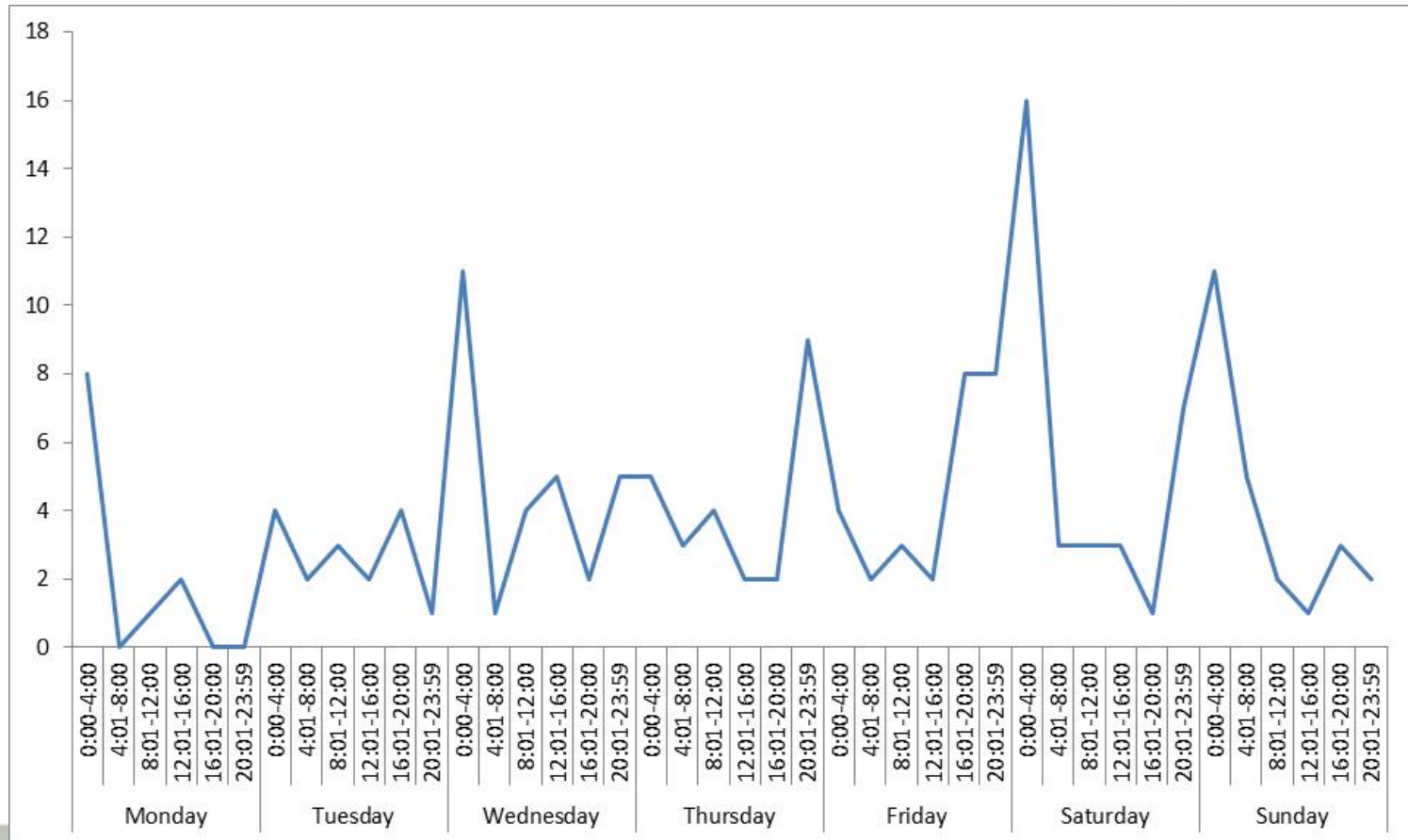


## Was location and time of day a factor?

- 69% (n=129) of the fatal pursuit-related crashes occurred in rural/remote areas; and
- 31% (n=57) occurred in capital cities.
- There were considerable spikes in the number of pursuit crashes during the early hours on Wednesday's, Friday's, Saturday's and Sunday's.



# Distribution of pursuit-related fatal crashes across the week, by time of day (n)





## How many pursuits are there each year?

- Important to place the number of fatalities in the context of the number of pursuits each year
- Police agencies provided data on the number of pursuits each year since 2004
- Approximately 4,000 pursuits each year
- Since 2009, pursuit numbers have increased (up 10%), but fatalities have dropped (down 50%)



## What is the rate of fatal pursuits?

- Rates calculated by dividing number of fatal crashes by number of pursuits each year x 1,000
- Nationally, rate of fatal pursuits ranged between 2.3 per 1,000 in 2004 to a high of 4.6 per 1,000 in 2010
- Over the last seven years (2004 to 2011) between 1 in 217 and 1 in 435 pursuits ended in fatality



## Summary of key findings

- Young people under 25, particularly young men, are over-represented in pursuit-related fatalities;
- 88% of the drivers who were being pursued had consumed an intoxicant prior to the incident;
- Pursuit speeds have remained stable, but length of time has dropped considerably; and
- Rate of death in pursuits fluctuated, but fairly stable



## What other research is needed?

- Little is known about non-fatal and ‘successful pursuits’, those that end in the arrest of the alleged offender
- What is the financial cost of pursuits?
- Philosophical debate – striking a balance between community expectations of the police to uphold the law, with risks to community safety of pursuing alleged offenders at high speed



# What is your view?

## Questions?