



Crashes of older Australian riders

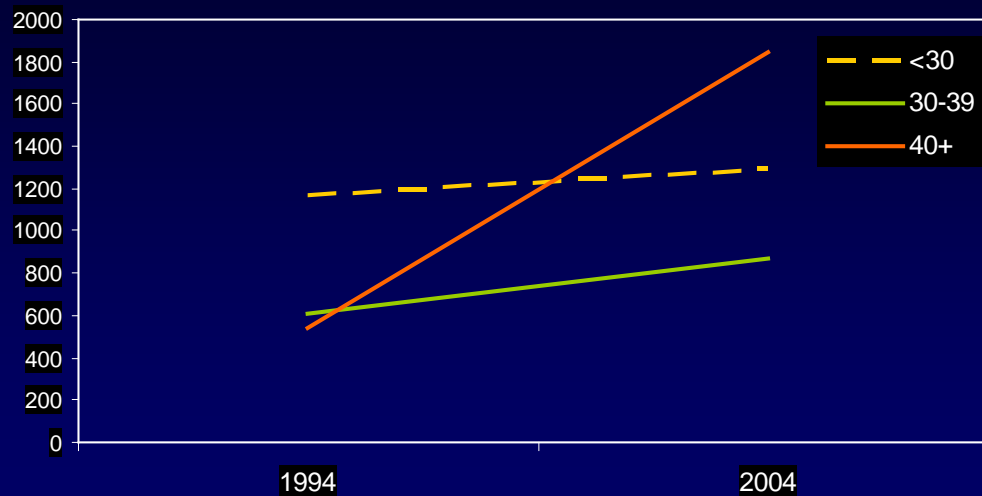
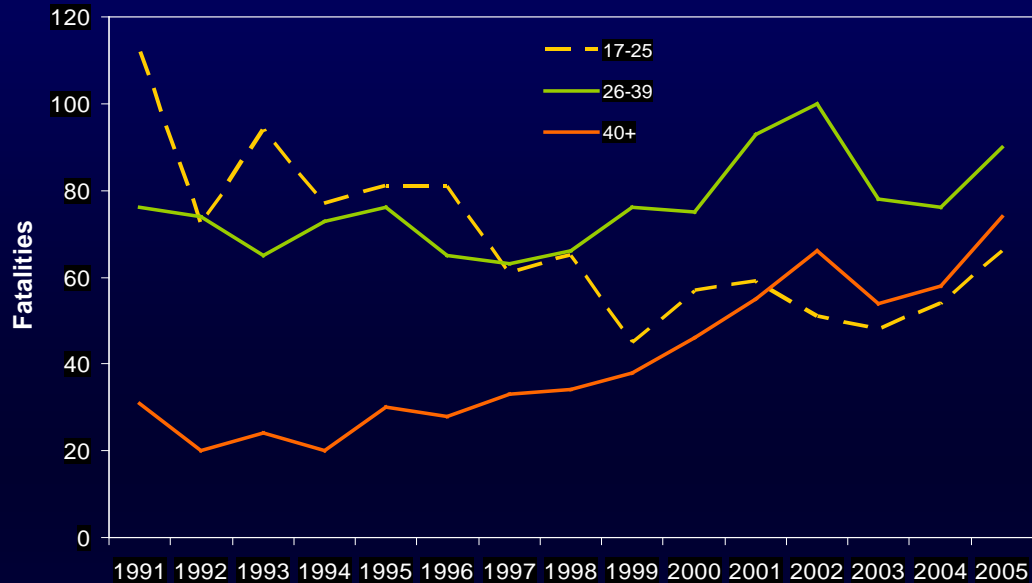
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Outline

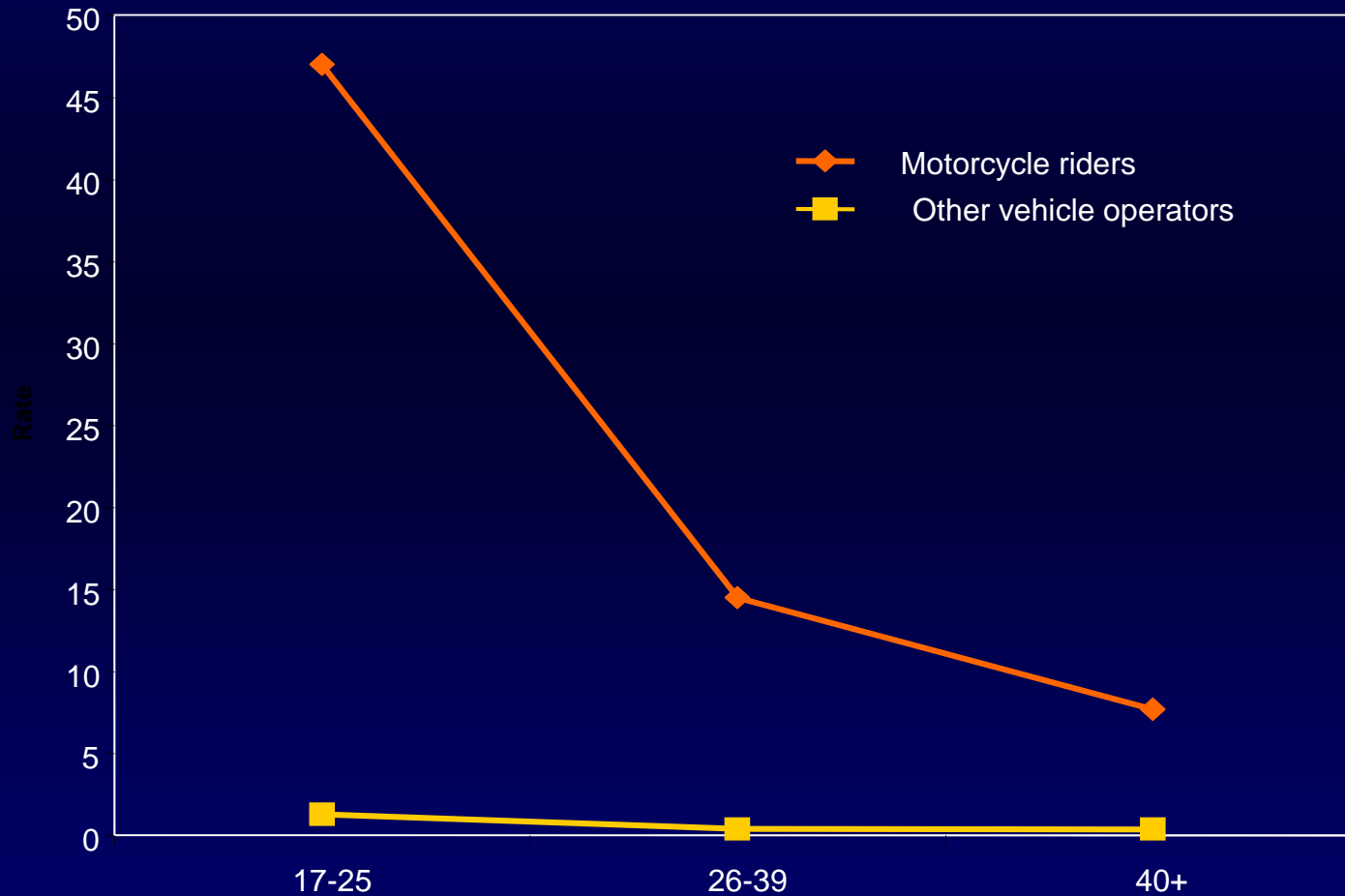
- **Motorcycle crash trends and rates**
- **Types of older riders**
- **Survey method**
- **Survey results**
- **Conclusions**

Motorcyclist fatalities in Australia and US



Australian fatality rates per million VKT 1998-2000

(from ATSB, 2002)



Crashes of new, continuing and returned older riders

- Newly licensed older riders have more crashes per year than other older riders
- Do the groups differ in terms of...
 - crashes per distance travelled?
 - crash severity?
 - types of crashes?
 - contributing factors to crashes?
- Are returned riders who have completed refresher courses safer?

RIDER SAFETY SURVEY

Are you aged 25 or over?

Have you ridden in Australia in the last 5 years?

If YES, we would like to find out more about your riding patterns and experiences and accidents.

Please visit our website
and fill in the questionnaire at

www.monash.edu.au/muarc/riders

or ring Christine on

03 9905 4367

if you would like us to
send you a paper copy
of the questionnaire.



THIS RESEARCH IS FUNDED BY THE NSW MOTOR ACCIDENTS AUTHORITY RESEARCH GRANTS SCHEME

Responses

- 2,343 site visitors after pilot phase
- 1,500 valid questionnaires including 74 paper
- 19% new riders, 62% continuing, 17% returned

Rider characteristics

- New riders younger than continuing and returned (means 39, 46, and 49 years)
- New riders more likely to be female (29% versus 8%)
- In an average week...
 - Quarter of riders rode 50 kms or less
 - Another quarter rode 51-100 kms
 - Continuing riders rode further
 - Younger riders rode further

Crash involvement

- Crashes defined as
 - On road within Australia
 - In last 5 years
 - Someone was hurt, Police were called, or vehicle had to be taken away
- About 30% in at least one crash in the last 5 years
- 35% continuing riders, 30% new riders, 24% returned riders (but new riders may not have ridden for whole 5 years)
- Cuts and bruises in 46% of crashes
- Injuries less severe for new riders
- Crashed riders aged 55 – 64 more likely to be admitted to hospital

Crash risk

- **Multivariate logistic regression showed that risk of being involved in at least one crash in last 5 years**
 - **Decreased with age**
 - **Was higher for males and riders who had completed a training course**
 - **Was higher for riders who rode more than 201 km/week than those who rode less than 50 km/week**
 - **Was lower for returned riders than continuing riders**

Crash characteristics

- **53% single vehicle (61% of new rider crashes)**
- **28% at intersections**
- **speed zones**
 - **53% 60 km/h or less**
 - **23% 70-90 km/h**
 - **24% 100-110 km/h**
 - **more single vehicle at higher speed zones**

Contributing factors to crashes

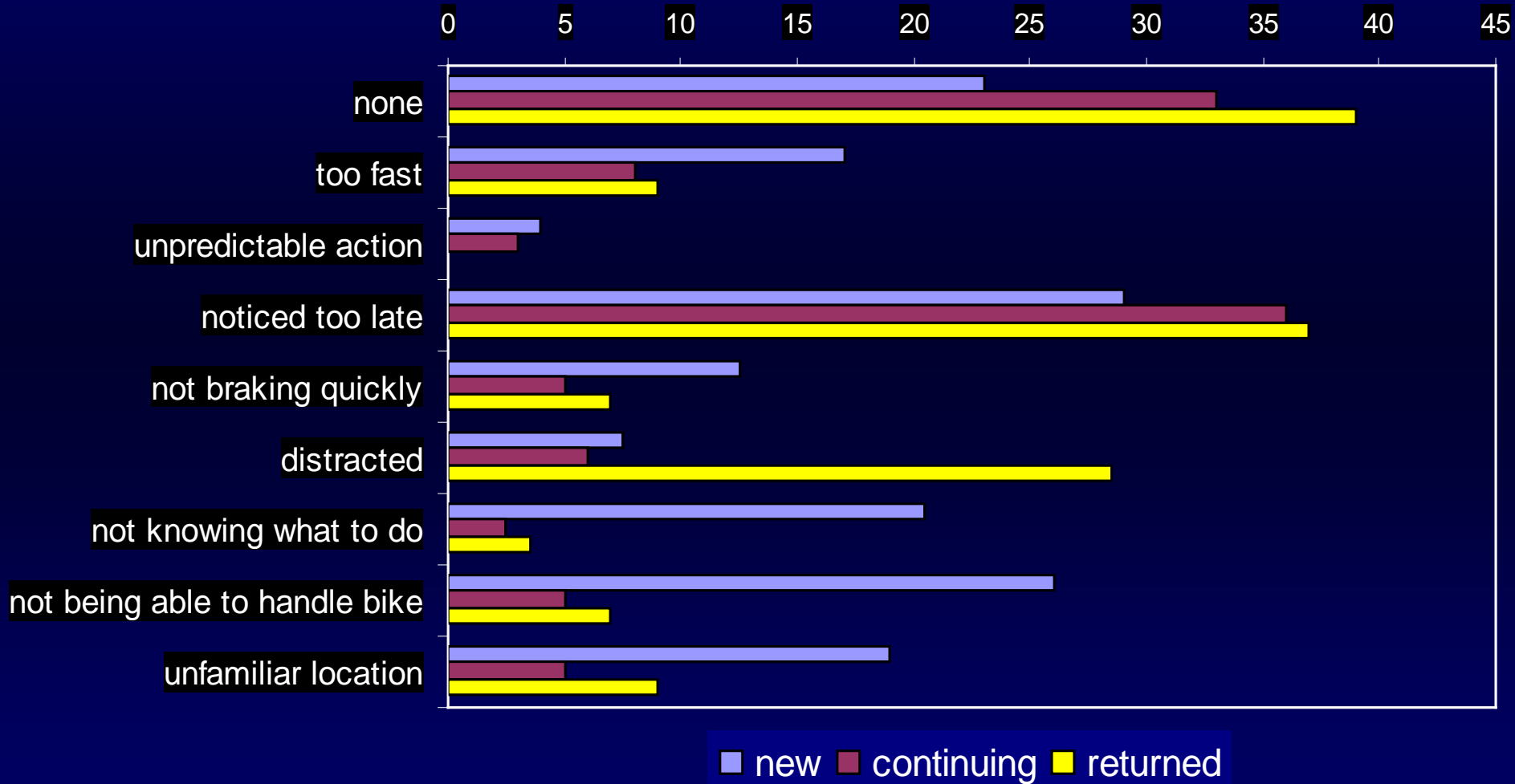
➤ Unfamiliarity

- 14% of new riders had ridden the bike less than 1,000 kms (9% returned, 4% continuing)
- 29% of new riders had not ridden in the crash location before (22% returned, 13% continuing)

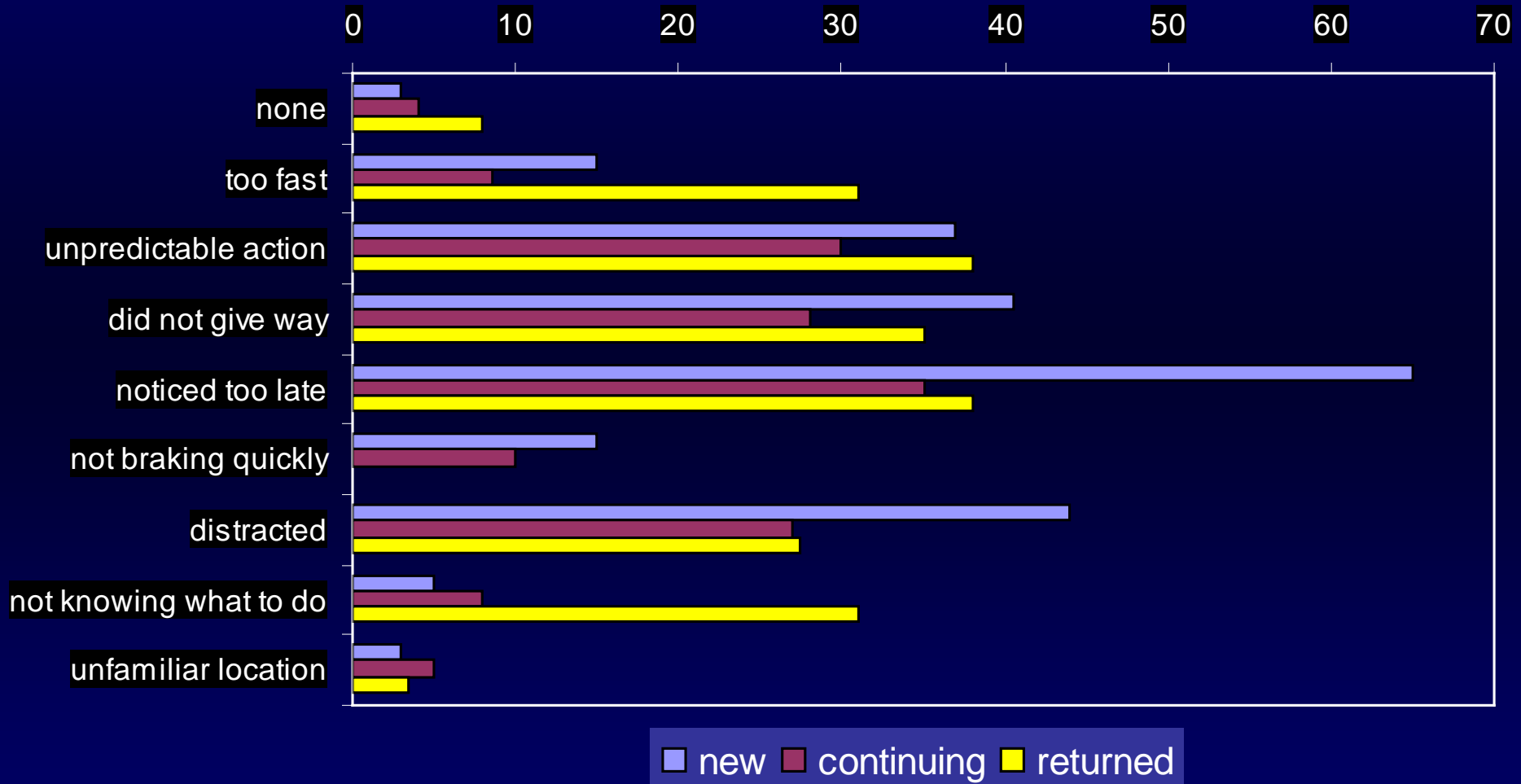
➤ Road surface factors

- slippery surfaces (18%)
- loose gravel (18% - more for new riders)

Main contribution from rider



Main contribution from other driver to multi-vehicle crashes



Rider training and crash involvement

- Training compulsory some States and not others
- 93% new riders, 67% continuing riders, 57% returned riders
- Advanced course was most recent for about half of trained continuing and returned riders
- Licence course was most recent for about half of trained new riders
- Trained riders were more likely to have been involved in a crash

Refresher courses for returned riders

- Less than 10% of returned riders had completed a refresher course, but 30% had completed an advanced course
- More continuing than returned riders had completed a refresher course

1. Do the groups differ in terms of crashes per distance travelled?

Yes, crash risk was significantly lower for returned riders than continuing riders after adjusting for distance travelled.

Hard to answer for new riders because many had ridden for less than 5 years.

2. Do the groups differ in terms of crash severity?

Yes, injuries less severe for new riders.

Crashed riders aged 55-64 more likely to be admitted to hospital.

3. Do the groups differ in terms of type of crash?

Yes, new riders have more single vehicle crashes.

4. Do the groups differ in terms of contributing factors to crashes?

Yes, new riders reported more difficulties with loose gravel, not knowing how to respond, more often unfamiliar with motorcycle and/or location.

In multi-vehicle crashes, new riders thought the other driver noticed them too late or was distracted. Returned riders thought the other driver was driving too fast or did not know what to do.

5. Are returned riders who have completed refresher courses safer?

Relatively few returned riders had completed refresher courses. Some indication of lower crash involvement but more analysis required.

Don't know if refresher courses improved their safety or whether safer riders took these courses.

Acknowledgements

This research was funded by a grant from the Motor Accidents Authority of New South Wales.

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