

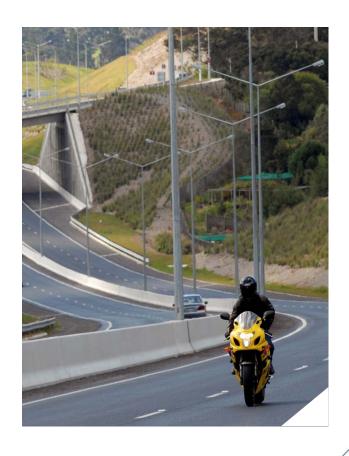
# **Today's presentation**

- 1. Why motorcycle crashes
- 2. What we did
- 3. What we found
- 4. What we're doing now
- 5. What this means for improving the evidence base
- 6. Questions



# Why we did this research

Road traffic crashes, especially those involving motorcycles, are a significant cause of injury



### What we did

- 1. Linked Police reports and hospital trauma data
- 2. Identified hospitalised riders not recorded by Police
- 3. Compared crash location and hospital care location
- 4. Identified the cost of acute care
- 5. Established crash distance from home
- 6. Explored riders stories about their experiences (by survey)



## **Linking Police and trauma data**

- 56% of motorcycle trauma patient records could be linked to Police records
- Important factors affecting linkage rates included:
  - Injury severity
  - Age
  - Ethnicity
  - Rurality of crash
  - Self-presenting behaviour
- Police reports possibly underestimated motorcycle casualties across the region by ~18%



# Riders in hospital but not recorded by Police

- 'Missing' riders more likely to be male, <40 years, crashed in urban locations with non-major injuries
- While the demography of missing riders differed from those in CAS, when they crashed did not, with both groups more likely to crash on weekends
- Average length of hospital stay 4.7 days (range 1-39)



#### **Crash distance from home**

- Characteristics of urban (speed limit ≤ 70km/h) and rural (≥80km/h) crashes at different distances from home
  - Urban crashes at intersections, straight road, multiple vehicles
  - Alcohol and/or speed crashes close to home (under 1.5km)
  - Rural crashes single vehicle, curved road, furthest distance from home
  - Excessive speed crashes furthest from home
  - Motorcyclists not at greater risk of crashing close to home once exposure taken into account





### Riders like to tell their story

- Good and bad experiences to understand risk-taking and attitudes to riding
- Themes:
  - Respect for riders with experience
  - Riding provides thrill of danger with potential for some excitement
  - Crashes are "when not if" with constant controlling for risk
  - Pride and status in skill and great value seen in training
  - The right gear is important



### What we're doing now

- We're using the research findings to help design more targeted safety campaigns
- Looking at specifics raised by riders eg training and riding experience
- We're considering our next research steps and whether we have policy questions where further collaboration could be useful for our evidence base



## What does this mean for improving our evidence base?

- Linkage rates and potential under-reporting are of interest from a policy perspective
  - We established under-reporting
  - We counted the un-counted or 'missing' injured riders
- Data linkage provides a wider picture of motorcycle trauma via complementary data
- Crash information and riders stories used to fine tune safety messages
- The cost of acute care for road trauma could be better quantified in our region





