

Prevalence of driver-related risk factors for crashing in mildly injured drivers

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Background

- Most road safety research focuses on serious injury or fatality crashes
- Most crashes – even those that result in an ED visit – cause minor injuries
- Minor injury crashes can cause disability such as whiplash, concussion, and chronic pain
- Driver factors contribute to most crashes* and many of these factors are poorly understood

Objectives

- i) Estimate the prevalence of driver-related risk factors (distraction, substance use, aggressive driving, depression) in drivers treated in hospital for minor injury crashes,
- ii) Determine the six month health outcome of drivers after minor crashes.

Methods

- Convenience sample of injured drivers being treated in the ED when an RA was present
- Exclusions:
 - Non-residents of BC
 - Unable to communicate in English
 - Amnestic for the event
 - Unable to complete interview because of pain or injuries

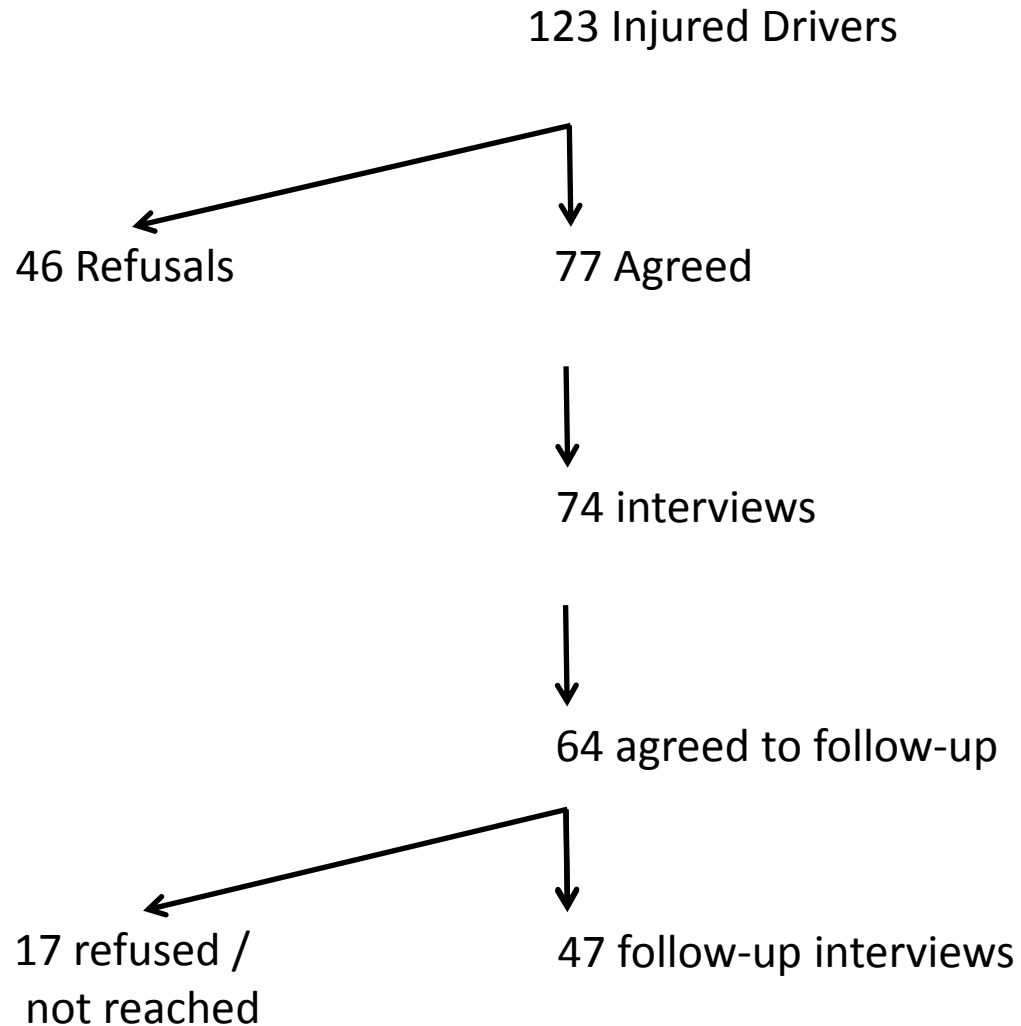
Baseline Interviews

- i) Description of the crash including driver activities at time of crash,
- ii) Drug or alcohol use in the preceding 6 hours,
- iii) Questions re addictions,
- iv) Dangerous driving behaviour (Dula),
- v) General driving history

Follow-up interviews (6 months)

- i) The personal health sequelae resulting from the index crash
- ii) Their subsequent driving record
 - other collisions
 - risky driving behaviour (impaired, speeding, distracted driving)
- iii) Alcohol, medication, and illicit drug use

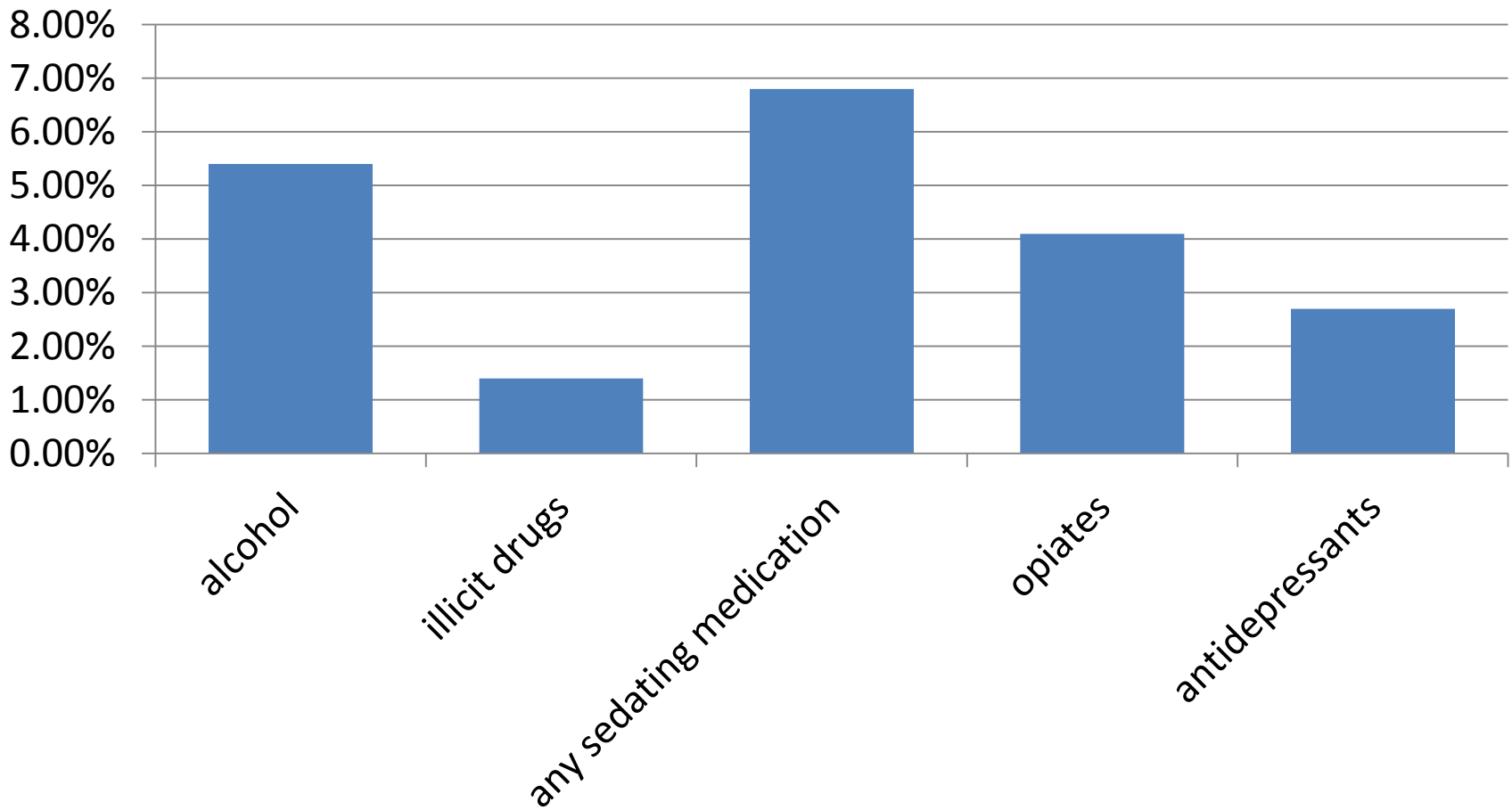
Results



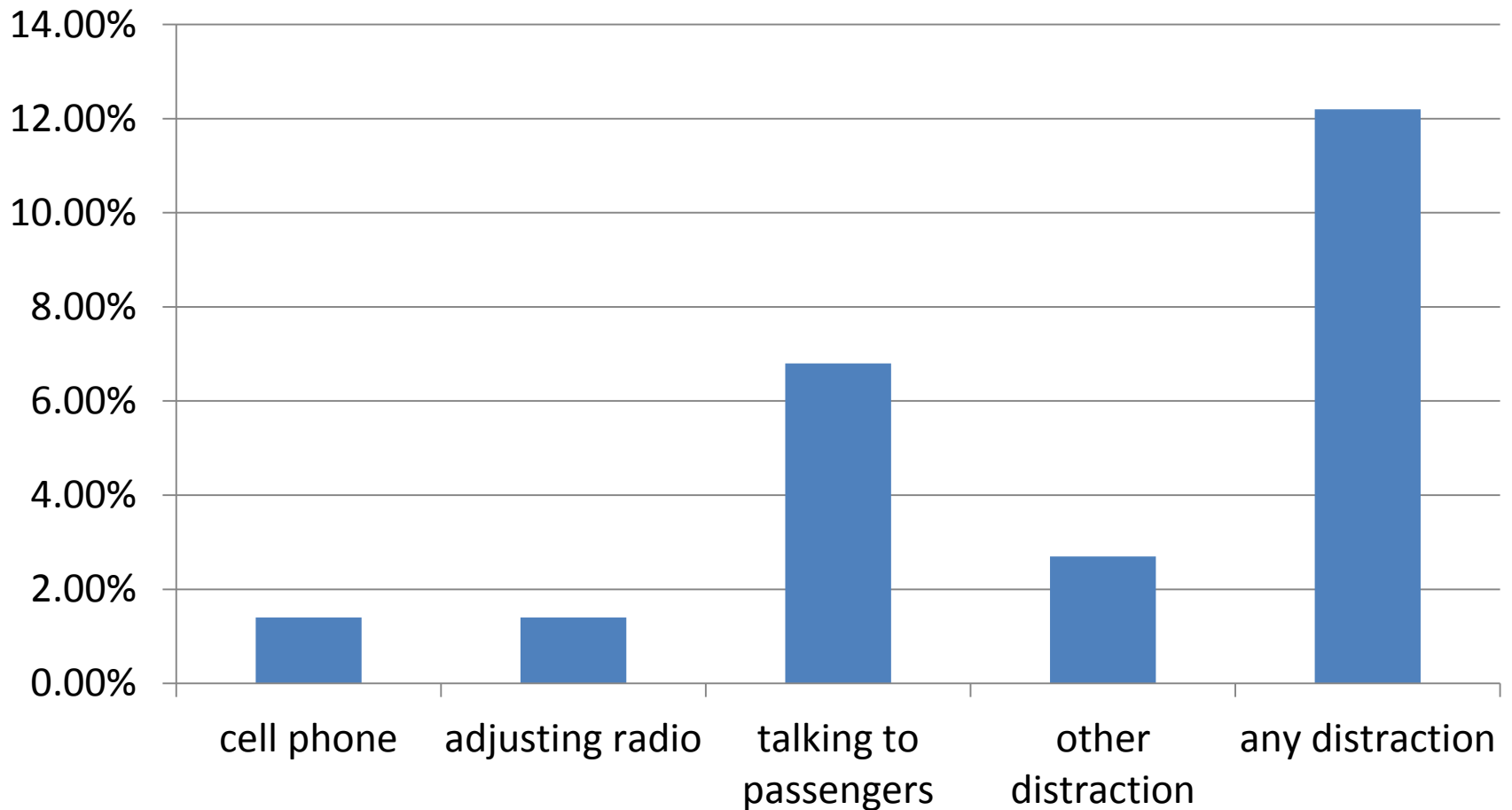
Results

- 37 (50.0%) of the drivers were male.
- Median age = 39 years (IQR = 29 – 51 years).
- Most drivers (69/74 = 93.3%) were treated and released from the ED.
- The majority of index crashes (65/74 = 87.8%) occurred during daytime hours
- Most (68/74 = 91.9%) were multi-vehicle crashes.

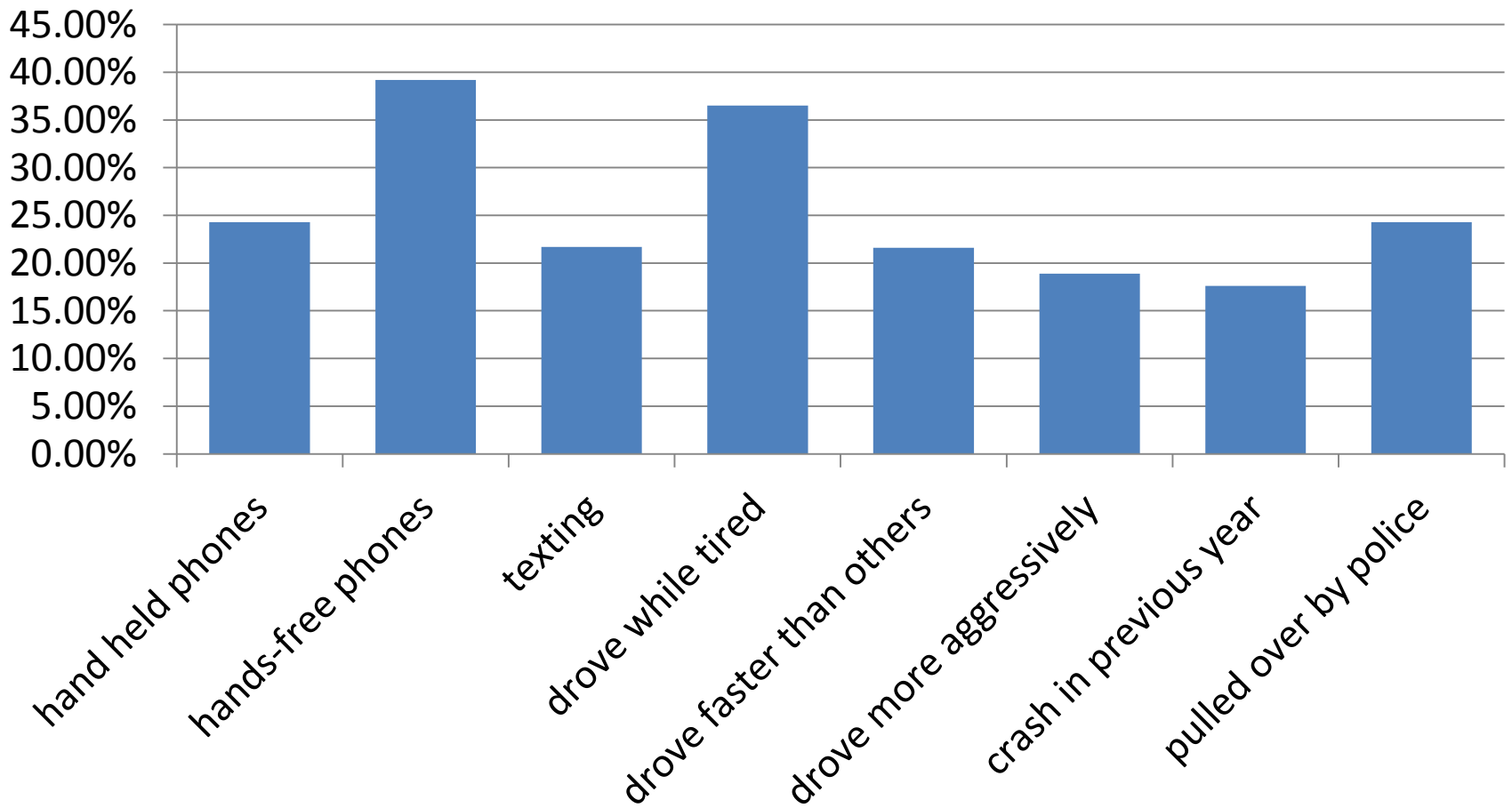
Substance use prior to index crash



Distraction at time of crash



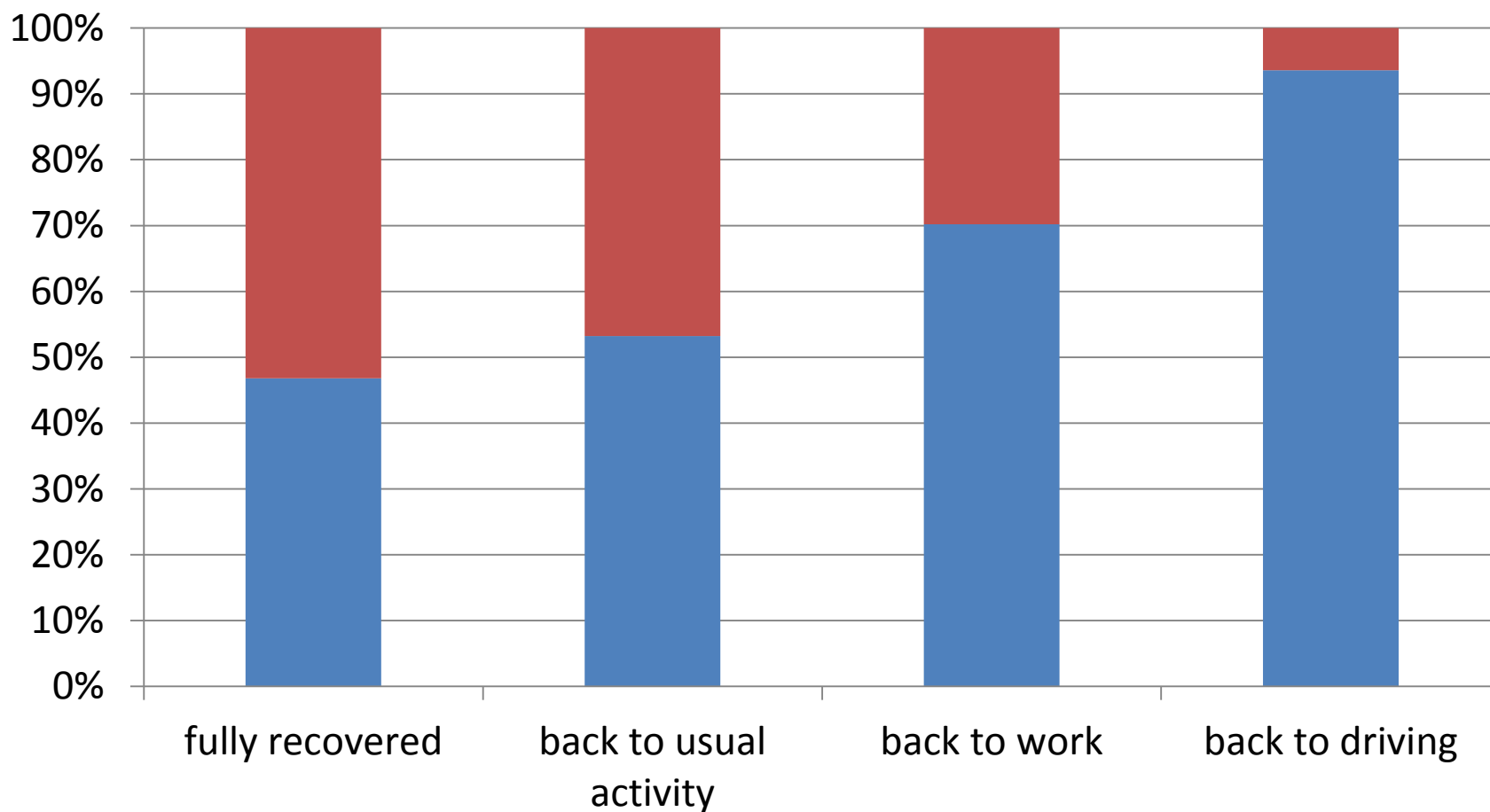
Driving habits



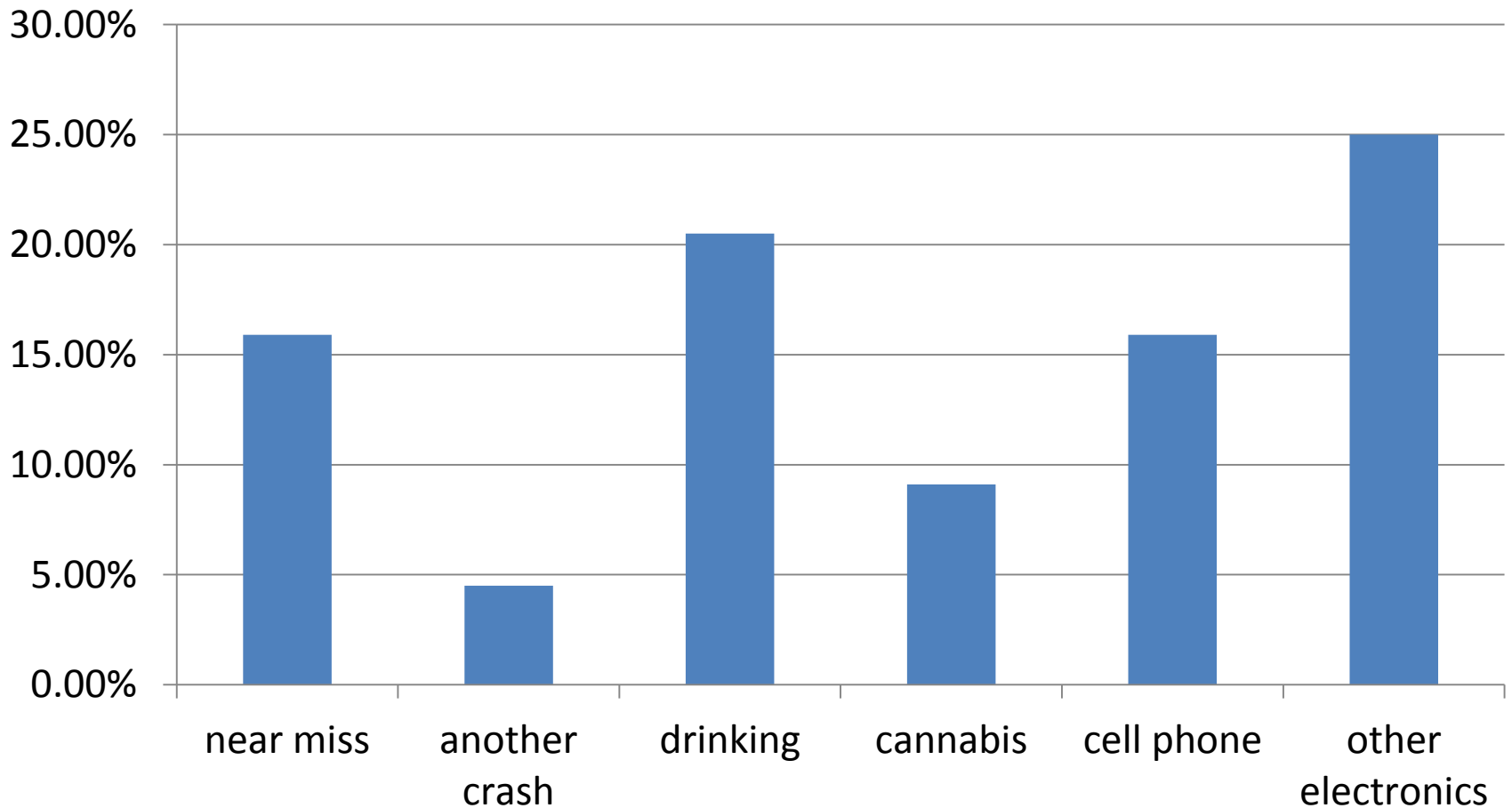
Aggressive Driving (Dula)

- 4/74 (5.4%) were aggressive drivers
- 6 (8.1%) were risky drivers
- 8 (10.8%) drove while experiencing anger or other negative emotions

Six month follow-up (n = 47)



Subsequent driving habits (n = 44)



Conclusions

- Driver-related risk factors are common in drivers involved in minor injury crashes
- Drivers persist in taking risks after being involved in a crash
 - This suggests an opportunity for intervention
- Even minor injury crashes are associated with slow recovery
 - They may benefit from more intensive medical management