Overview of Public Health-Related Research at CARRS-Q

Dr Mark King

SYSU-QUT Research Collaboration Meeting, Sun Yat-Sen University, Giangzhou, 11th May 2015
Background to CARRS-Q

- Established in 1996 as joint initiative of:
  - Queensland University of Technology
  - Queensland Motor Accident Insurance Commission

- Based in the School of Psychology & Counselling, Faculty of Health

- Our Vision is for:

  *A safer world in which injury-related harm is uncommon and unacceptable*
CARRS-Q’s activities

- **Research program**
  - Road safety and other transport safety
  - Community safety
  - Occupational safety

- **Professional education & support program**
  - Training of researchers through PhD and Masters courses
  - Industry-oriented short courses

- **Community engagement & advocacy program**
  - Advice to government and industry
  - Community education including media work
CARRS-Q’s Research Focus

**TRANSPORT SAFETY**
- Road safety
- Rail safety

**OCCUPATIONAL SAFETY**
- Fleet safety
- Construction safety
- Other high-risk workers

**COMMUNITY SAFETY**
- School & community injury prevention
- Product safety

Eco driving
Active transport
Structural framework for integrated assessment of health effects of transport approaches (Source: Götschi & Kahlmeier, 2011, Figure 1, p. 8)
CARRS-Q’s Research Themes

- Occupational Safety
- School and Community Injury Prevention
- Vulnerable Road Users
- Regulation and Enforcement
- Intelligent Transport Systems
- Road Safety Infrastructure
CARRS-Q’s Research Themes

- Occupational Safety
  - Safety management systems – buses in Indonesia, company government fleets
  - Alcohol/drug use/problems: train drivers and police
  - Construction safety
  - Roadworker safety: including *research on clothing standards for night time visibility*
  - *Exposure of tollbooth workers to pollution - China*
CARRS-Q’s Research Themes

- School and Community Injury Prevention
  - Peer intervention program to prevent risky behaviours in secondary school students
  - Product safety especially for children
  - Safe school zones
  - Youth road safety education integrated with Active School Travel
  - Journey access tool to support safety and mobility of people with disabilities
CARRS-Q’s Research Themes

- Vulnerable Road Users
  - Motorcyclist training programs and best practice
  - Cyclist and driver interactions
  - Walking while intoxicated or distracted
  - Helmet wearing among cyclists and pedestrians
  - Mobility, safety and wellbeing among older people
  - Pedestrian crossing risk
CARRS-Q’s Research Themes

- Regulation and Enforcement
  - Evaluation of speed cameras/speed enforcement
  - Unlicensed driving
  - Aggressive driving
  - Drink driving legislation and enforcement including study in China
  - Compliance with the law – pragmatic driving and policing
CARRS-Q’s Research Themes

- Intelligent Transport Systems
  - Predicting vigilance impairment in drivers and operators functioning under monotonous conditions
  - Naturalistic driving studies with instrumented vehicles
  - Driver assistance systems for older drivers
  - Managing safety and driving workload under distraction from mobile phones
Advanced Driving Simulator
CARRS-Q’s Research Themes

- Road Safety Infrastructure
  - Data collection procedures and data linking
  - Complexity of road signs
  - Railway crossing safety
  - Road widening and noise pollution
  - Vehicle dynamics, road damage and safety
CARRS-Q’s Research Themes

- Occupational Safety
- School and Community Injury Prevention
- Vulnerable Road Users
- Regulation and Enforcement
- Intelligent Transport Systems
- Road Safety Infrastructure

PUBLIC HEALTH
Suggested Areas for Collaboration

• Injury risk and driver behaviour: compliance, pragmatic driving, aggressive driving, speeding, drink driving

• Transport and child health: active travel, exposure to road crashes and pollution, safety around schools, education

• Managing work safety to reduce injury: construction, government/company fleets, roadworkers

• Improving collection and use of injury data: work-related/product-related/traffic injury data, link to other databases

• Medical conditions and driving: drink drivers with alcohol/drug dependency, assessing fitness to drive
Questions?
mark.king@qut.edu.au