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The use of protective clothing by motorcyclists in Victoria: Evaluation of the Community Policing and Education Project

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Introduction - Community Policing and Education Project

- Education + enforcement
- 2009-10
- Speeding, crossing double lines, failure to give way, changing lanes when unsafe, driver distraction, impaired driving/riding, use of protective and conspicuous clothing
- Motorcycle Safety Levy
- Statewide and regional operations





CASR evaluation

- Process evaluation
- Crash and offence data analysis
- Regional speed surveys
- Roadside observations
- Online survey of Victorian motorcyclists





Value of protective clothing

- Gear study (de Rome and colleagues, 2011)
 - 212 crash-involved motorcyclists
 - hospital admission less likely for riders wearing protective clothing
 - lower injury risk for those wearing body armour
 - follow up of 146 riders protective clothing associated with longer term benefits
- TAC study (McIntyre et al, 2011)
 - interviews with 500 crash-involved motorcyclists
 - protective clothing associated with fewer open wound injuries
 - reduced nerve injuries associated with protective pants and boots



Roadside observations

- Metropolitan Melbourne during commuting times; regional Victoria during recreational periods on weekends
- 3 sets of Melbourne observations
 - two weeks before a Victoria Police operation
 - two days after the operation
 - three weeks after
 - Thursdays and Fridays 7-9am, 4:30-6:30pm
- Type of motorcycle
- Headlights on or off
- Helmet type
- Conspicuity
- Protective clothing
- Pillion passenger/helmet type





Results – motorcycle type

- Three sets of observations consistent with regard to m/c type
- 37% sports
- 26% scooters
- 25% standard/naked
- N = 209, 247 and 260





Results – headlights, helmets and conspicuity

- 1 in 40 motorcycles headlights not operating
- All riders wearing helmets
- Full-face versus open-face helmets no change across three sets of observations
- Statistically significant differences (p < .01) by motorcycle type more open-face helmets among riders of scooters (33%) and cruisers (44%)
- Low levels of clothing conspicuity, no change across the 3 sets of observations.
- Riders of cruisers significantly lower (p < .01) levels of conspicuity (6% highly conspicuous compared to ~20% for the rest)





Results – protective clothing

	Pre	One week post	One month post
% full protection (Melbourne)	17.2	23.9	38.1





Results – protective clothing cont.

- Improvement across sets of observations in protective clothing worn by riders of sports motorcycles and standard/naked motorcycles
- Improvement still needed for scooter and cruiser riders
- Overall:
 - 28% full body protection
 - 61% upper body protection only
 - 12% no protection







Discussion

- Positive finding increased body protection following Yellow Flag/Black Flag operation targeting commuters in Melbourne
- Credible information provided by police can contribute to the goal of increasing use of protective clothing by motorcyclists
- Still need improvements in protective clothing among riders of scooters and cruisers.
- Rider conspicuity could be improved
- Results similar to other studies of this sort in Australia (Wishart et al 2009, in Brisbane and Canberra; Baldock et al., 2011, in South Australia)
- Limitation of study observations made from side of the road



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