

A Model for Motorcycle Community Intersection Projects

Leonie McCormack¹ (Presenter)
¹Accident Compensation Corporation

Biography

Leonie McCormack is a Programme Manager for the Injury Prevention and Client Services Division of the Accident Compensation Corporation (ACC) in New Zealand. Leonie has a background in education and injury prevention. Her current injury prevention focus is predominantly in road safety, but also includes other areas such as snow sports. ACC invests significantly in road safety initiatives in partnership with similar activities of other government agencies to contribute to the overall injury prevention objectives being set as part of the New Zealand Governments Road Safety Strategy to 2010.

Abstract

ACC is the lead agency for motorcycle safety as part of New Zealand's 2010 Road Safety Strategy.

All motor vehicle injury related claim costs to ACC are continuing to increase dramatically. Motorcycle injury costs are not going up any more drastically than other motor vehicle injuries, nor are motorcycle claim costs any higher than motor vehicle claim costs in general. However motorcycle injuries (as measured by numbers of claims to ACC involving motorcycles) are extremely high in number considering the small size of the motorcycle fleet. The number of new claims per licenced motorcycle in 2001/2002 was 12.09 per 1000 compared to 1.07 per 1000 for all licenced vehicles excluding motorcycles.

In 2003 ACC piloted a motorcycle community based initiative aimed at increasing motorists' awareness of motorcyclists, particularly at intersections. The pilot formed part of ACC's wider Motorcycle Injury Prevention Programme aimed at reducing the number and severity of injuries sustained by motorcyclists in road crashes.

Eleven projects were piloted in ten regional centres between February and March 2003. Each pilot had a project co-ordinator, nine of which were volunteers from the Ulysses Club of New Zealand. An evaluation of the pilot has just been carried out to assess the effectiveness of the intervention as a community based project. The achievements of the pilot are notable. ACC successfully created a voluntary community based injury prevention resource. Perhaps even more notable is that the impact on the target group (motorists) in the test region was considerable i.e. one in three respondents recalled the promotions about being safe around motorcyclists at intersections, with a 75% recall of the key sponsor, and of these, 60% correctly identified the main message.

1. BODY TEXT

1.1 Risk Factors

Motorcycling is a high risk activity. ACC statistics show that motorcyclists face a far higher risk of involvement in an injury crash in comparison with drivers of cars and vans.

Risk factors for motorcycle traffic injuries may be categorised as relating to the physical environment, the motorcycle itself, the socio-cultural environment, or the rider. Prevention strategies may be similarly categorised.

Prevention efforts that focus on modification of the physical environment, such as the removal of hazardous roadside objects and improved traffic management at intersections, clearly have the potential to reduce the risk of injuries. Such modifications, however, have practical limits and there are economic barriers to making substantial changes.

Motorcycle design has incorporated a number of improvements aimed at increasing safety (for example, disc braking systems) and crashworthiness (for example recessed fuel tank filler caps). Nevertheless, the motorcycle remains an inherently unstable vehicle in which riders are particularly vulnerable to injury.

Given that the opportunities for modifying the physical environment and the motorcycle have limitations, and the over-representation of riders in crashes, it suggests that rider factors may be involved, and there is reason to turn to interventions strategies directed at riders and their social environment.

Preferences for strategies directed at modifying rider behaviour largely reflect whether it is assumed that its attitude, youthfulness or inexperience that are the primary factor in crashes. Those who emphasise the effects of age or immaturity tend to favour reducing exposure through restrictions on motorcycle use (for example through licencing rules). Whereas those who emphasise the role of inexperience tend to favour the improvement of knowledge, skills and protective attitudes and practices, particularly through formal training.

In line with this ACC with other partners is working on increasing the safety of motorcyclists on the road through focusing on licencing and training issues, options for increasing the wearing of protective gear, and increasing motorist awareness of motorcyclists at intersections

1.2 Prevalent Movement Codes for Motorcycle Crashes

Research suggests that the most prevalent movement codes for motorcycle crashes are intersection collisions, head on collisions and cornering crashes.

In New Zealand intersections crashes made up 30% of fatal motorcycle crashes between 1994 and 1999¹. Riders had nearly twice as many fatal crashes in urban areas. Intersection crashes were also more common for younger motorcyclists. A predominant feature of the intersection crashes was having a vehicle pull out in front of a motorcyclist. This suggests that motorcyclists are less visible, and not being treated with the same caution as other motorists. Motorcyclists were also less likely to be at fault in intersection crashes.

1.3 ACC's Motorcycle Safety Programme to date

As a result of increasing concern about the relative exposure of motorcyclists to injury and the proportion of costs motorcyclists consumed in the Corporation's motor vehicle account when compared with motorists, ACC began the development of a motorcycle injury prevention programme in 2001.

The programme focuses its activity as follows:

Strategy: The development of a Motorcycle Injury Prevention Strategy Group comprising of partnerships between ACC, LTSA, Police, motorcycle distributors, dealers, trainers, and clubs.

Licencing and training: There are significant challenges posed by the existing licencing system. An effective licencing/training system is important as it enables attitudes to be

¹ Bailey J and M. (2001). Analysis of Fatal Motorcycle Accidents Using the In-depth Fatal Accident Database – technical report prepared for the Accident Compensation Corporation

targeted early on before unsafe attitudes take hold. The strategy group is exploring different approaches to driver licensing.

Protective gear: The development of options for increasing the wearing of protective gear.

Community projects: The implementation of community projects to achieve an increase in the awareness by motorists of the common risk factors in intersection crashes leading to a corresponding increase in safe behaviour leading to further reduction in the number and severity of injury claims.

This paper focuses on the results of the pilot of the community projects. The aim of the projects were to pilot a community approach to achieving an increase in the awareness by motorists of the common risk factors leading to motorcycle injuries, with a corresponding increase in safe behaviour by motorists.

Eleven projects were piloted in ten regional centres between February and March 2003. A formal evaluation of the pilot was carried out to assess the effectiveness of the intervention as a community based project.

Overall the community projects have been a major success. Achievements include:

- Development of a successful working relationship between ACC and the Ulysses Club of New Zealand.
- Development of a voluntary and motivated community based resource.
- Development of positive relationships with a wide range of key stakeholders.
- Positive stakeholder perceptions and expectations.
- Positive programme impact on local communities, media and motorists.

The effort by the project co-ordinators and the Ulysses Club was a significant factor in the success of these projects.

Factors for consideration included:

- How to maximise the benefits of involving a key stakeholder in the programme i.e. Ulysses Club as representatives of the motorcycle community.
- Project establishment – ensuring preparation is optimised.
- How to sustain projects over a longer period of time.

There was sufficient evidence from the evaluation to conclude that the model on which the programme was based has the potential to be highly successful, and therefore supports continuing with a community based initiative.

Targeting of motorists and motorcyclists needs to be a sustained effort for attitudes and behaviour to change. The report recommended continuing to use volunteers in the context of a year long or more frequent initiatives. The use of volunteers from Ulysses was a major factor to the success of the pilot. For example it provided the opportunity for motorcyclists to articulate and reflect on their experience, to influence what happens with motorcycle safety, to develop new skills, to use their extensive networks, and to have control of their safety. However the demand on the volunteers in the pilot was high. Given what we can realistically expect from volunteers, ACC is considering how we can sustain community effort over a longer period of time.