COCHRANE CORNER

Road safety

The latest edition of the Cochrane Library (available at http://www.cochrane.org) contains a review which assesses speed enforcement detection devices for reducing road traffic injuries. Speed cameras have been a controversial topic in many high income countries where many people in the community feel that they are in place not for safety benefits but as a means of income generation for government. This review, from a group of reviewers at the University of Queensland, Australia, concluded that speed enforcement devices are a promising intervention likely to reduce the risk of motor vehicle crash and related injuries. However, the ability of the review team to make conclusions was limited somewhat by the quality of the studies.

Study design is an issue that seems to arise again and again in systematic reviews in road safety and several reviews have highlighted the relatively limited use of randomized controlled trial (RCT) designs. There are various reasons why there have been so few trials. Many research projects have been funded by government agencies keen for quick results, and as a result large complex studies that take years to complete are not funded. It is not always feasible to use an RCT design—for example, randomizing motorists to use of motorcycle helmets or not is not possible. However, RCTs do have clear benefits over other study designs in terms of validity and it is possible to incorporate such study designs into road safety evaluations.

As Wilson et al highlight in their review, RCTs can be used to evaluate the effectiveness of speed enforcement devices. Using a cluster trial design, it would be possible to randomly allocate areas of interest—intersections earmarked as traffic black spots for example—to either receiving a speed enforcement device or not. Data collection at all intersections before and after the introduction of the device would determine whether there had been reductions in average speeds, collisions, and injuries.

Researchers, policy makers, and funding agencies need to recognize that this may mean large, costly trials. However, when the widespread implementation of such controversial interventions as speed cameras is costly in itself, such trials should be considered. In fact, given the degree of debate in the community about the relative merits of speed enforcement devices, one would expect that results from a trial demonstrating reductions in serious crashes or injuries could only smooth the process.

On another note, new titles registered with the Cochrane Injuries Group include:

- Alcohol and drug screening of people whose work involves driving, for preventing injury
- Cycle paths and cycle lanes for the prevention of injuries in cyclists
- Interventions for preventing injuries in the agricultural industry
- Interventions for preventing injuries in the construction industry
- Motor vehicle road worthiness certification for preventing traffic crashes
- Parenting programmes for the prevention of unintentional injury in childhood
- School based primary prevention programmes for preventing violence
- Vision screening of older drivers for preventing road traffic injuries and fatalities.

We look forward to seeing the completed protocols and reviews. If you are interested in getting involved in the Injuries Group or if you have any ideas for new reviews, please contact us at cochrane_injuries@lshtm.ac.uk.

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Reference