TARANAKI HOME INJURY HAZARDS STUDY

According to ACC estimates, about one in three injuries occur at home. The Taranaki study found that, for an average of $500, homeowners could fix common hazards, making their homes safer.

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New Zealand has a disturbingly high-home injury rate. Nationally, approximately 36,000 people per year are hospitalised from injuries occurring at home. This number includes about 500 deaths, which is more than the road toll.

Motivated by these disturbing statistics, ACC funded a study of 1,000 homes in Taranaki to look at the issues (see *Build* 108 October/November 2008, pages 66–67). The study has been in progress over the last 18 months. Central to this research is the ability to identify and quantify injury hazards in houses using a new rating tool, the Healthy Housing Index, which has been developed from international systems to suit New Zealand housing.

Many homes have hazards

The study was commissioned to determine how injury hazards in the home could be reduced and to assess the cost-effectiveness of making homes safer. It also looked at the prevalence of home hazards, whether they were associated with increased risk of injury and whether the presence of slip/trip/fall hazards was associated with ACC injury claims for related injuries.

The researchers, from He Kainga Oranga/the Housing and Health Research Programme, BRANZ and NZIER, found that many homes are likely to have hazards that result in claims to ACC. These claims have a huge monetary cost – millions of dollars a year – as well as causing pain and suffering to individuals and their families.

Repairs not always seen as desirable

A builder visited a random sample of the homes and assessed the cost of repairing common injury hazards. These hazards had been found in the homes studied and were highlighted by publications such as the ACC's *Tips for designing a beautiful, safe home*.

Participants were asked whether the work being costed would be acceptable to them. This was important because people are not motivated to fix injury hazards if the resulting repair is seen as undesirable in some way, particularly if it is seen to interfere with the functionality or aesthetics of the home. For example, some participants who were not elderly or infirm preferred not to have grab rails fitted in their bathrooms.

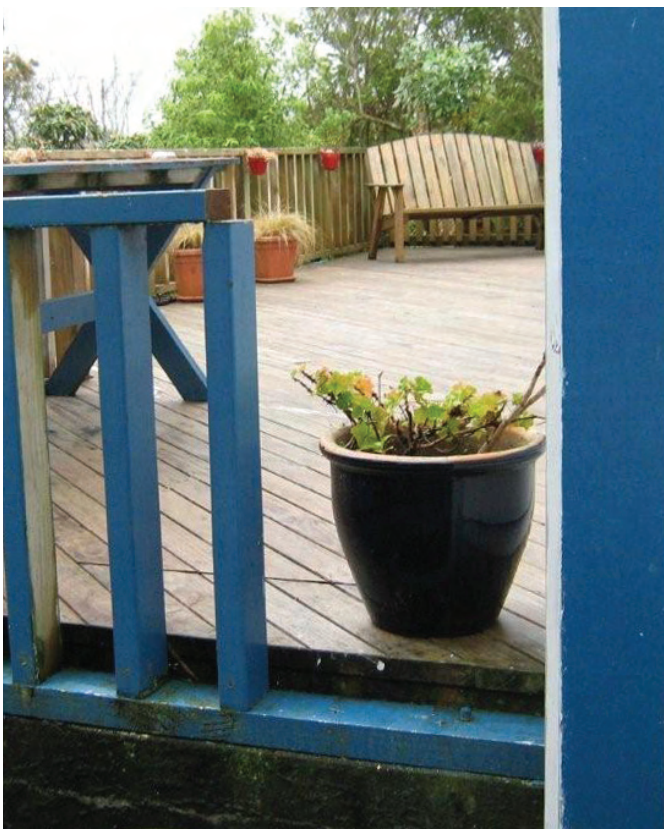
Common hazards easy and cheap to fix

The Taranaki home injury hazards study found three common home injury hazards that could be fixed at no or low cost to the householder. These were:

- most houses did not have working smoke alarms
- the hot water was turned up dangerously high in nearly 50% of homes
- 20% of homes had ranch sliders or low windows without safety visibility strips.

These three hazards, which could result in serious injury, are easily fixed. Turning down the thermostat on a hot water cylinder costs nothing, and installing smoke alarms and visibility strips only incur minor costs.

Many of the hazards assessed were specific to children, such as the lack of safe child-proof storage for cleaning products and medications, and inadequate fencing for areas where children play. For these hazards, which were not related to slips, trips and falls, the study found steeply increasing child injury risk with increasing numbers of home hazards. But there was no particular increase in injury rates for the population generally.



A missing balustrade (above) and an overgrown path (above right) – examples of common home injury hazards that many New Zealanders live with.

Behaviour changes with perceived risk

As a continuation of the study, the researchers hope to obtain funding from the Health Research Council to carry out a high-quality community trial to provide a strong scientific and economic basis for further investment in home safety.

Although it seems intuitive that fixing an injury hazard will reduce injury risk, researchers have repeatedly found that we tend to adapt our behaviour according to what we consider to be a risk. For example, most people will carefully negotiate an obviously uneven flight of steps. In contrast, people may descend a well-constructed set of steps more quickly. Consequently, it is important to study real-life results from a trial that involves fixing injury hazards.

$500 to fix common injury hazards

As has been found in many other countries, the study confirmed that home injury in New Zealand is both common and costly. An economic analysis of the social cost of home injuries was conducted as part of the study. The findings indicated that, for an average of $500, most householders could fix certain injury hazards in their homes and reduce their injury risk.

More information on the Healthy Housing Index can be found at www.wnmeds.ac.nz/academic/dph/research/housing/hhindex.html.