



Injury Prevention Models and Approaches

On average in New Zealand everyday

- 5 of our people will die from an injury
- 380 people will be hospitalised
- 4,000 will need medical treatment
- The Accident Compensation Corporation (ACC) will pay out \$5million



Data: National injury data is free on the web from NIQS (National Injury Query System) at www.otago.ac.nz/ipru/Stats
Refer also to SCFNZ factsheet 34.

Additionally, in New Zealand

- More than 1,600 New Zealanders die each year from injuries, our men are dying at twice the rate of women
- Injuries are the leading cause of death for ages 1 to 34 years, and the second leading cause of hospitalisation
- Injuries kill three school-age children a week in this country, that's 60% of all childhood deaths
- Injuries claim more potential years of our lives than cancer and heart disease combined
- Our rate of injury deaths is one of the worst in the OECD

Injuries are an epidemic

Injuries take lives, destroy families and ruin futures

Injuries can be traumatic, debilitating, expensive and heartbreaking

Injuries are far from inevitable – they are mainly predictable and preventable



Many people believe that injuries are chance events or freak “accidents” that cannot be prevented. But in fact research and experience has established that injury can be prevented (refer SCFNZ factsheet 27 www.safecommunities.org.nz)



Injuries can be either

- **Unintentional:** unplanned, e.g. falls, drowning, motor vehicle traffic crashes, burns **OR**
- **Intentional:** purposeful human actions, e.g., assault, suicide or deliberate self-harm, bullying



Models and Approaches

There are many different ways to prevent unintentional and intentional injury. Internationally recognised injury prevention models include: Intersectorial collaboration; Safety Promotion; Active and Passive Strategies; Spectrum of Prevention; The 5 Es; Haddon's Matrix; Safe Communities Model; and the New Zealand Injury Prevention Framework. Some of the models and approaches above have been adapted to reflect current thinking and New Zealand conditions.



Intersectorial Collaboration

At the heart of effective injury prevention is collaboration and coordinated effort (for networking opportunities contact Injury Prevention Network of Aotearoa New Zealand www.ipn.org.nz). Often this may involve local and/or national agencies (government and non-government) working in partnership with the community, to strengthen national and local injury prevention efforts. It is essential that many organisations and individuals are committed to working together to address injury.

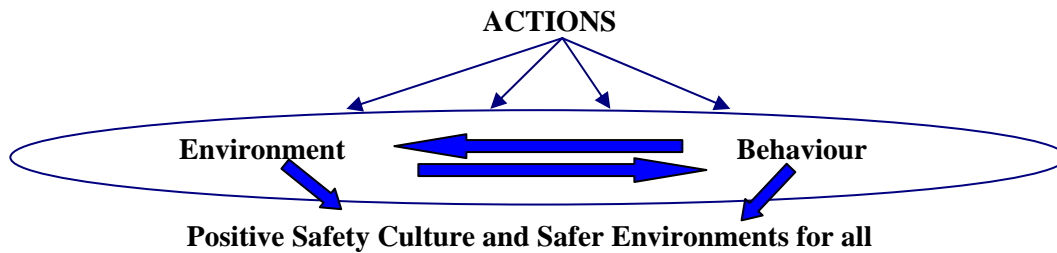
- **Example:** Suicide prevention collaborators could be community educators, clinicians, schools, community service providers, churches, mental health promotion providers, marae, relevant government agencies, youth groups, local authority, local businesses, community injury prevention coalitions, researchers, local newspaper.



Promotion of Safety

In Safety Promotion an environment and culture that is safe for everyone on all levels, physical, mental and social, is developed and sustained. The responsibility for creating safe environments and a positive safety culture is shared by government (both national and local), a wide range of organisations and the population. Populations become engaged in safety promotion through community development approaches. **Examples** include: Walking School Buses, Host Responsibility, Plunket Well-Child Project, City on its Feet (Tauranga) and Safe Schools (refer SCFNZ factsheet 8 www.safecommunities.org.nz).

Diagram of Safety Promotion Process



Active and Passive Strategies

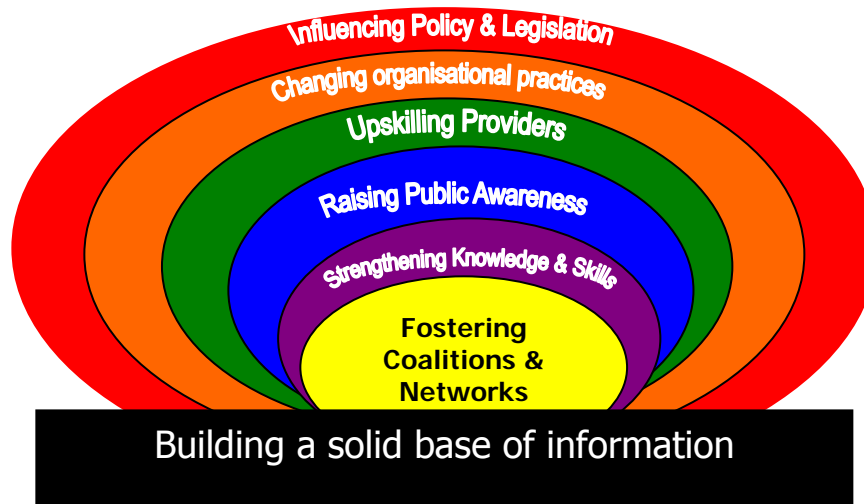
- Passive strategies are aimed at creating a safer environment so that people are safer without having to take any specific action. *Examples* include: air bags in cars, crash barriers on roads, and fences that separate children’s play areas from driveways.
- Active strategies also make people safer, but they require specific actions. *Examples* include: ensuring bicycle helmets are fitted and worn correctly and ensuring that seat restraints are used.



Spectrum of Prevention

Seven action strategies that reinforce and complement each other (for further information contact: Safekids www.safekids.org.nz):

- Building a solid base of information: data collected;
- Fostering coalitions and networks: working collaboratively, coordinating efforts;
- Strengthening knowledge and skills: one-to-one and in groups;
- Raising public awareness, changing attitudes: promotional campaign;
- Upskilling providers: targeted training of agencies/groups/community coalitions;
- Changing organisational practices: policies and practices; and
- Influencing policy and legislation: aimed at all political levels.



Seven action strategies		<i>Example: Preventing falls from babywalkers</i>
1) Building a solid base of information	✓	Data collected
2) Fostering coalitions and networks	✓	National and local child injury prevention coalitions
3) Strengthening knowledge and skills	✓	Parent/whanau groups
4) Raising public awareness	✓	Newspaper articles, TV and Radio interviews
5) Upskilling providers	✓	Community educators, childcare providers
6) Changing organisational practices	✓	Hospital policy – no babywalkers allowed
7) Policy and Legislation	✓	Call for total ban on babywalkers – submissions etc



The 5 “Es”

- **E**ducation: increases awareness and knowledge;
- **E**nforcement: of regulations and legislation – directs behaviour, provides consequences;
- **E**ngineering: alters the design of objects;
- **E**nvironment: alters the physical environment; and
- **E**valuation: assesses if what we do is working and informs the development of policy.



<i>Example</i>	Drowning Prevention
Education	Teaching children core swimming skills
Enforcement	Safety policies at aquatic centres
Engineering	Flotation devices
Environment	Appropriate fences around swimming pools
Evaluation	Of water safety programmes and interventions.

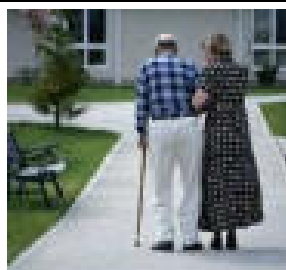


Haddon’s Matrix

A useful tool for identifying both the factors that can lead to injury and the opportunities to break the causal chain of events, based on an analysis of the hazards involved before during and after an event that causes injury.

Example: Road traffic crash

	Person	Event/situation	Wider environment
Pre-event	Alcohol/drugs	Condition of the vehicle	Road conditions/weather
Event	Unrestrained driver/passengers	Safety features in the vehicle	Roadside hazards
Post-event	Driver who didn’t stop	Design of fuel tanks	Access to first aid



Example: Falls in older people

	Person	Event/situation	Wider environment
Pre-event	Poor vision mobility	Condition of tread	Poor lighting Lack of money for repairs
Event	Brittle bones	Height of stairs	Surface beneath the fall
Post-event	General medical condition	The number of stairs	Access to services Family support

Safe Communities

The World Health Organisation (WHO) Safe Communities Designation Programme provides an approach to injury prevention and safety promotion, by creating an infrastructure in local communities for addressing injury prevention and safety promotion initiatives through the building of local partnerships (refer to SCFZN factsheet 2). As such it incorporates aspects of all the other models and approaches outlined in this factsheet. The WHO Safe Community model is internationally recognised as an effective, beneficial and long-term approach to the prevention of injuries (www.phs.ki.se/csp). The term Safe Community implies that the community aspires to safety in a structured approach, not that the community is already perfectly safe. Creative methods of environmental change and education, along with appropriate legislation and enforcement, are important for the safety of a community, as no single approach is sufficient for changing behaviour and environments. *Examples:* Waimakariri, New Plymouth, Whangarei, Wellington (refer to the SCFZN website www.safecommunities.org.nz for accessing information and downloading copies of applications).

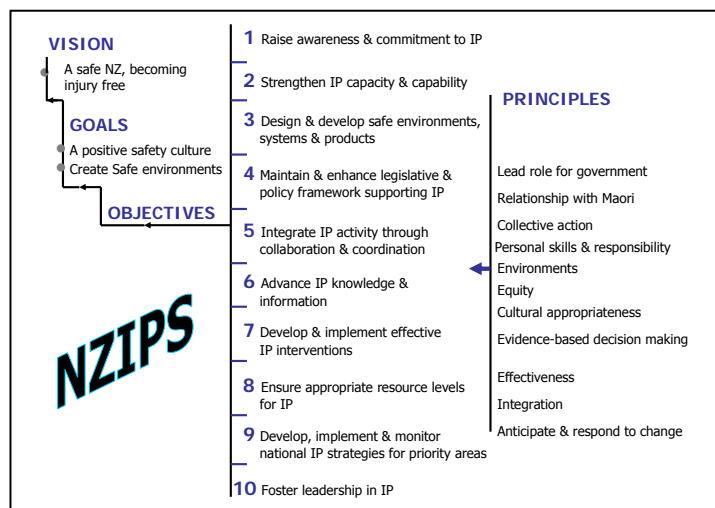




New Zealand Injury Prevention Strategy (NZIPS) Framework

NZIPS was released by the Minister for ACC in June, 2003. The Strategy establishes the Government’s strategic direction and framework to improve NZ’s injury prevention performance. It serves as a guide for the injury prevention activities of central and local government and non-government and community organisations, while uniting the injury prevention sector towards a common vision of: “A Safe New Zealand, becoming injury free”.

The Strategy has 10 objectives, each of which has a set of actions. These actions specifically target high-risk groups and communities. For further information on NZIPS contact: www.nzips.govt.nz or visit the ACC website www.acc.co.nz



Settings

Injury prevention action, using one or more models and approaches can be concentrated in a particular setting, organisation or community, as illustrated by these examples:



Workplaces: Use the 5 Es approach to reduce injuries and develop a strong safety culture in line with the Workplace Health & Safety Strategy for New Zealand to 2015.



Schools: Woodend School used an intersectoral community development approach incorporating both active and passive strategies to reduce injuries and promote safer environments and a positive safety culture at the school.



Marae: Ngati Porou used the Safe Communities Model and a community development approach for their Community Injury Prevention Project. One of the project initiatives was a marae-based driver licensing course.



Churches: Delivered through the New Lynn Tongan Methodist Church the inter-agency “Safe in our hands” programme promotes road safety awareness in the 400-member congregation and the wider community. Linked initiatives focus on child restraints, driver licensing, speed and alcohol. This model used a mix of several approaches.



Territorial Local Authorities: New Plymouth injury Safe (NPiS) used the Safe Communities model and the NZIPS framework to provide an approach to injury prevention and safety promotion that was consistent with their values of partnership and collaboration.



Literature: The information resource unit based at the Injury Prevention Research Centre has information on injury prevention for further information contact: www.health.auckland.ac.nz/ipc

Evaluation: Tracks how well an injury prevention programme is meeting its objectives & helps build the evidence base of what works. SCFNZ are in the process of developing an evaluation manual, for further information contact: www.safecommunities.org.nz

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Accrediting Centre for Safe School International Designation Programme.