# LONG TERM PLANNING FOR RECOVERY AFTER DISASTERS: ENSURING HEALTH IN ALL POLICIES (HiAP)

Susan Bidwell, Community and Public Health (CPH)

March 2011

# **INFORMATION SHEET 5 Housing issues**

## What is the aim of this series of documents?

This document aims to show what can be learnt from previous disasters about the impact of decisions and actions taken that have affected people's wellbeing during the recovery period.

The document is written from a public health perspective but draws from the **literature of many disciplines.** 

The key challenge and aim is to gain a place in the recovery planning effort and ensure that health and wellbeing is recognised as a key factor to be considered in all decisions and actions, rather taking a narrow view of "health" as being limited to health protection and disease control functions, vital though they are.

It aims to show that recovery takes place in several phases, from immediate response to long term rebuilding, with transitional phases in between. These phases overlap and the stages of recovery may be of longer or shorter duration for particular groups of people within the affected area.

It highlights that there is always tension between acting speedily and taking time to plan well. Pre-disaster planning is the best means of avoiding short term decisions that create or exacerbate long term problems.

### Why is the HIAP approach so relevant?

Health in All Policies (HiAP) is an approach which emphasises the fact that health and wellbeing are largely influenced by measures that are managed by government sectors other than health. HiAP seeks to highlight the connections and interactions between health and other sectors. The health sector's role is to support other sectors to achieve their goals in a way which also improves health and wellbeing.

#### What are the other wider factors?

Many of the wider factors that influence community health and wellbeing are reflected in the literature on to post-disaster recovery but appear to have been seldom recognised as such by city planners and construction engineers or even by those engaged in primary and secondary care.

The American Planning Association advice on planning for post disaster recovery, for example, incorporates relevant advice for creating a more sustainable society in commenting about the creative possibilities can be achieved for "...housing, transportation, environmental protection, parks and recreation, urban redevelopment and even health and sanitation" (p. 74).

# What are the issues relating to Housing?

A useful overview of housing issues for populations displaced by disasters is given by Levine et al (2007). Even though the article primarily refers to the aftermath of Hurricane Katrina in the United States, the findings appear to be relevant to Christchurch and are worth summarising in some detail.

- **Post disaster housing** encompasses four phases in succession emergency shelter, temporary shelter, temporary housing, and permanent housing.
- Providing housing for displaced populations raises a variety of downstream issues such as land use criteria, the provision of water, electricity and sewerage, availability of education and employment for children and adults, and access to transport, public services and food.
- There is a poorly defined transitional period between immediate response and full recovery. In this period there are

issues of displacement, temporary housing, social vulnerability, decisions to return or not to return by displaced residents to consider, as well as the need to avoid short-term thinking about land development, long term housing and resettlement. Delays in planning and rebuilding during the transitional period may cause temporary housing to become permanent even when it is not suitable for long term occupation, and they may predispose the population to future disasters.

- Temporary housing should be as geographically close as possible to the original location and displaced communities should be kept together so that their social and economic networks can be preserved and the stress of being displaced can be minimised. Uprooting low-income elderly people from their social networks and health care systems is known to be particularly damaging.
- Cultural and social factors play a key role in family decisions about whether or not to return. People with strong networks and historical ties to a place are less likely to relocate, whereas concern for the psychological health of children may encourage relocation to a safer area. Home and car ownership also influence decisions.
- **Population displacement** can have flow-on effects on communities far from the disaster zone caused by a flood of new residents arriving, housing shortages, and soaring prices, land use issues, and the need to extend existing infrastructure.
- Policy responses tend to be fragmented, highly politicised by the urgency of the moment, and are often "inadequate, dysfunctional, or tainted by hidden consequences..." (p. 10).

Poor planning and relocations - This article also highlights an example of poor planning that occurred when residents of New Orleans were relocated to a mobile-home park after Hurricane Katrina where there were no jobs, no transport available for residents to go to the nearest large town to look for work, nowhere to buy food within walking distance, and

children missed several months of school before the authorities managed to get a school bus service going.

Impediments to recovery - A study of impediments to recovery in the worst hit areas of New Orleans after Hurricane Katrina found that without access to income and capital, getting satisfactory permanent housing continued to be very slow. In some cases residents of New Orleans were provided with rental vouchers for obtaining housing, but rental housing was in very short supply and rents rose sharply.

People who had owned their own homes prior to a disaster and had them insured were more likely to have commenced rebuilding one year after the disaster. Those without these resources had little choice but to rely on government assistance and were likely to be living in unsatisfactory conditions even 14 months later (Green et al 2007).

Wholesale relocation of communities after disasters, however reasonable from a scientific and planning perspective, have proved to cause controversy and distress for the residents of the area which has been deemed unsuitable.

**Disaster prone areas** - Decisions about not rebuilding in the most disaster-prone areas after Hurricane Katrina were seen as an attempt to benefit wealthier white neighbourhoods by diverting scarce resources from flooded to unflooded areas, and to deny African Americans the right to return to their homes.

**Poor return planning** - No policies, other than general statements, were proposed to facilitate residents' return to other parts of the city and media reports which suggested that flooded areas were to be turned into green space, created a high level of resistance to the plans (Nelson et al 2007).

Best policy – minimum relocation - The Participatory Planning Guide for reconstruction after disaster (Environmental Planning Collective 2004) advises that minimum relocation is the best policy, stating that "past experiences world-wide have repeatedly shown that wholesale relocation very seldom works....

A more feasible alternative is selective relocation of parts of the community away from [the worst] sites but remaining within the same general area" (p. 6). The guide goes on to note that the affected community needs to be provided with technically and economically feasible resettlement options and transitional assistance including income support and employment.

Temp buildings on existing land (Katrina Cottages)- The literature on what works best for rehousing people after disasters is somewhat smaller than than on what not to do. An example from post-hurricane New Orleans cited by Levine et al (2007) is the Katrina Cottage. This is a small (380 square foot) home built to withstand gale force winds, and which can be placed on a damaged section while the owner rebuilds. It costs the same as a government provided mobile home, can remain on site afterwards and be used as a granny flat, spare room, or studio, or can subsequently be expanded into a larger home.

**Building codes** - The American Planning Association guide for post-disaster reconstruction (2005) issues of residential, commercial and public facility building, the importance of regulations and zoning, and decisions that need to be made about strengthening building codes.

It notes that there will be existing premises (both residential and commercial) that do not comply with strengthened codes and that it is "both practically and politically unlikely" (that a rigid stance should be applied in the circumstances immediately after a disaster (p. 53).

The approach recommended when there are hundreds, or even thousands, of "non conforming" buildings and intense pressure to re-establish on the same site, is to seek a compromise that strikes a balance between the benefits and risks.

They suggest "nonstructural measures directing land use away from hazardous areas or simply seeking to influence human behaviour" (p.57). Although not directly stated, this is likely to refer to the use of zoning regulations and/or the provision of incentives to make it more attractive to rebuild in safer areas.

There appears to be little about the impact on families with damaged housing in the aftermath of the Napier earthquake. Hollis (2007) comments only that that the mainly wooden houses were less affected than the business area, and owners carried out repairs when they were able, given that the country was in the depths of depression (p.108).

#### **Best practice lessons**

Nelson (2007) in the study of recovery planning in New Orleans concluded that:

- the process by which decisions are made should be transparent
- it should be participatory if possible but the engagement process should not get in the way of achieving important objectives
- outside experts are likely to be needed but they should be prepared to collaborate with local residents and professionals, and to adapt their expertise to the particular cultural and political context
- effective leadership means that decisions must be made even in the face of opposition and will sometimes be difficult and unpopular (p. 47).

The fact that temporary housing was set up and many women and children were evacuated, however, suggests that there was considerable displacement and the social history of the earthquake may be underinvestigated.

## HIAP messages:

- "Health begins where we live, learn, work, and play"
- Health starts "long before illness in our homes, schools and jobs"
- Health in All Policies (HiAP) is an approach that acknowledges the causes of health and wellbeing lie outside the health sector and are socially and economically formed.
- HiAP highlights the connections and interactions between health and other sectors and how they contribute to better health outcomes
- Health Impact Assessment (HIA) is a tool to meet HiAP goals.

#### Other Information Sheets in this series

**Information Sheet 1:** Background and key areas of health

**Information Sheet 2:** Introduction, Recovery phase and Lessons from Napier Earthquake of 1931

Information Sheet 3: Immediate response phase

Information Sheet 4: Equity issues

Information Sheet 5: Housing issues

Information Sheet 6: Mental Health issues

Information Sheet 7:Social Cohesion and resilience

Information Sheet 8: Community participation

issues

Information Sheet 9: Economic recovery

Information Sheet 10: Sustainability: mitigating

future disasters

Information Sheet 11: Heritage buildings

Information Sheet 12: Reflections on literature for

Christchurch recovery

Information Sheet 13: Limitations to consider

#### References

American Planning Association. (2005). Policies for guiding post-disaster recovery and reconstruction. Retrieved 27 March, 2001 from: <a href="http://www.fema.gov/pdf/rebuild/ltrc/fema.gov/pdf/rebuild

Green, R., Bates, L.K., Smyth, A. (2007). Impediments to recovery in New Orleans Upper and Lower Ninth Ward: one year after Hurricane Katrina. Disasters 31(4), 311-335.

Levine, J.N., Esnard, A-M., Sapat, A. (2007).

Population displacement and housing dilemmas due to catastrophic disasters. Journal of Planning Literature 22(1), 3-15.

Nelson, M., Ehrenfeucht, R., Laska, S. (2007).
Planning, plans, and people: professional expertise, local knowledge, and governmental action in post-hurricane Katrina New Orleans.
Cityscape: A Journal of Policy Development and Research 9(3), 23-52.

### Authorship and acknowledgements

This paper was researched and written by Susan Bidwell, Analyst, Community and Public Health. Thanks to **Dr Anna Stevenson** and **Alison Bourn** of Community and Public Health, Christchurch, New Zealand.

#### For more information visit

http://www.cph.co.nz/About-Us/Health-in-all-Policies/Default.asp