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 core public health functions following a disaster?

Following an earthquake a number of priorities for public health have been identified (Landesman 2006; UNDP undated; Noji 2005):

- Monitor environmental infrastructure including water, sanitation, food and vector control
- Assess the needs of special populations. It is recognised the vulnerability to disaster is related to socio-economic deprivation, ethnicity, urban density, older people, and recent migrants (Cutter 2008; Morrow 1999; Powell 2009). Morrow et al. (2009) emphasise the need to identify where such vulnerable groups are and actively involve them in recovery.
- Ensure the continuity of health care
- Initiate injury prevention and surveillance, including rates of injury, infectious disease, drinking water, sewage, solid waste collections
- Issue health advisories, these should be in appropriate languages and media. A recent Australian study found that broadcast media were a particularly important source of information during disaster (Cretikos et al. 2008)
- Determine needed immunisations and allocate appropriate resources.
- Involvement in planning for disaster preparedness and mitigation
**What was the surveillance and disaster epidemiology?**

Public health research can help inform disaster recovery. Van den Berg et al. (2008) and Landesman (2006) identify several priority areas for public health research:

- A rapid assessment of health needs
- Data collection and epidemiological studies using questionnaires including longitudinal studies
- Surveillance using existing systems (such as cancer registries and notifiable disease surveillance systems, interRAI)
- Monitoring the use and distribution of health services
- Research into the aetiology of the health effects of disasters
- Utilising the information from surveillance systems to establish strategies to control disease, monitoring the effectiveness of such strategies.

Several authors have identified the benefits of routine sources of data collection (syndromic surveillance) to identify change, for example in infectious disease incidence (SIDARTHa 2010; Landesman 2006). Such surveillance and information should inform the recovery decision making process (Malilay 2000; Noji 2005).

However, Foxman et al. (2006) emphasise the inherent difficulties in measuring the health effects of disasters, including calculating accurate denominators and comparators.

**Why is it so important to integrate short term response and long term planning?**

The diagram in Information Sheet 2 (Jacob et al 2008) shows clearly that the phases of recovery overlap one another significantly. Integrated planning for all phases is critically important and should also encompass planning for mitigation of future possible disasters.

Moreover, failure to foresee long term impacts of decisions made in the immediate and short term response phases is likely to have a negative impact on long term recovery outcomes. There is a tension between the need to act quickly to relieve distress of homeless residents and to replace infrastructure, and the deliberation and planning required to rebuild in a safe and equitable way, which will mitigate the impact of future disasters (Nelson 2007).

While there is a strong and necessary tendency to focus on the obvious and direct destruction and damage there are long term and wide-ranging indirect effects particularly in socioeconomic costs (Quarantelli 1999).

Some mistakes made in past disasters have included poor location of temporary housing and businesses which have become much more permanent than intended and worsened existing inequalities, the selection of unsuitable sites for dumping disaster debris, hasty decisions about the demolition of buildings, and the reoccupation of sites that are disaster prone and would have been better relocated (Nelson 2007; Graham 2006; Denhart 2009; American Planning Association 2005).

Pre-disaster planning is the recommended method of overcoming the conflict between the need to take action and the need for deliberation. A prior “plan to plan” (Nelson 2007), means that authorities recognise at the start of the response that systematic planning is critically important.

**What are some of the lessons learned?**

Lessons learned from disaster recovery efforts have also shown that ideally there should be a single designated authority to oversee the rebuilding of an area, and that it should be able to boost capacity in times of need, understand the importance of consultation and participation of representatives of all affected parties, and have mechanisms to do that (Nelson 2007; American Planning Association 2005; Ingram 2006).

Because so often those most affected by disasters are the worst off members of society, a key emphasis of long term recovery has been to build a better and more equitable replacement for what originally existed (Morrow 1999; Keim 2008).
Key messages

- **Important to integrate short term response and long term planning**
- **Important to foresee long term impacts of decisions**
- **Important to have a single designated authority to oversee the rebuilding of an area, with understanding of the importance of consultation and participation of representatives of all affected parties, and mechanisms to do that**
- **Key emphasis of long term recovery has been to build a better and more equitable replacement for what originally existed**

**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.

**Authorship and acknowledgements**

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