



NATIONAL RURAL  
HEALTH  
ALLIANCE INC.

# **Rural Communities and Disaster Recovery**

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*This Position Paper represents the agreed views of the National Rural Health Alliance, but not necessarily the full or particular views of all of its Member Bodies.*

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## Rural Communities and Disaster Recovery

### INTRODUCTION

This paper examines the issues involved with enabling people living in rural and remote Australia who are affected by disasters to recover and rebuild their lives and communities. Because the NRHA's objective is to improve the health of rural and remote Australians it concentrates on the health aspects of disaster recovery.

Communities and the people who live in them must routinely manage hazards<sup>1</sup> they face from time to time. But when hazards become disasters<sup>2</sup> communities need the help of others. It is national policy that communities should manage their own recovery from a disaster. Many other government social, economic and environmental programs in rural and remote Australia are also based on community self management and involvement. These programs are making significant demands on the limited numbers of people who live in rural and remote communities.

Natural disasters most frequently affecting Australia are floods, storms (including hailstorms), cyclones, tsunamis, storm surges, bushfires, earthquakes and landslides caused by one of these events. Under the Natural Disaster Relief Arrangements (NDRA) the Commonwealth and State Governments share the costs of disaster relief.

Governments define droughts and some other events which significantly reduce farmers' incomes as Exceptional Circumstances Events rather than Natural Disasters. Governments fund relief from exceptional circumstances separately from the NDRA. This distinction between natural disasters and exceptional circumstances events means they are considered separately in some parts of this paper.

Plant and animal disease outbreaks may have disastrous effects on rural communities and the people who live in them. There are four plans for managing outbreaks of diseases or pests<sup>3</sup>:

- AUSVETPLAN covers animal disease emergencies
- AQUAVETPLAN covers aquatic animal disease emergencies
- Australian Emergency Marine Pest Plan covers introduced marine pest emergencies
- PLANTPLAN covers plant pest emergencies

These four plans establish national, state and local arrangements for disease or pest eradication or control. The costs of eradication or control are to be shared between the Commonwealth and State Governments and the affected animal or plant industries according to an agreed balance between public and private benefits. Not all these cost sharing arrangements have been finalised.

The plans rely on liaison with existing emergency management and exceptional circumstances arrangements to provide for community recovery.

By definition the NDRA does not apply to a plant or animal disease emergency. Exceptional Circumstances funding arrangements envisage providing farm businesses with assistance with managing and recovering from the effects pests and diseases. Because of this specific linkage recovery from plant and animal disease emergencies will be considered as part of the discussion of exceptional circumstances arrangements.

## **THE NATURE OF AUSTRALIAN DISASTERS**

In the first instance the health system must deal with deaths and injuries directly caused by disasters. Between 1967 and 1999 bushfires, tropical cyclones, floods, severe storms, landslides and earthquakes killed 565 people and injured 7296. These deaths and injuries cost an estimated \$1.346 billion<sup>4</sup>. The most common, and the most costly, events are floods, severe storms and cyclones (80% of total costs and 89% of the total number of events between 1967 and 1999) but bushfires kill and injure the most people<sup>4</sup>.

Heatwaves, although not included in the NDRA, are estimated to have caused more deaths than any other type of disaster. The EMA estimated that heatwaves killed 4500 people between 1803 and 1999 compared with 2500 for floods and 2200 for tropical cyclones .

Unfortunately the most recent analysis of the economic costs of Australian natural disasters by the Bureau of Transport Economics<sup>4</sup> did not examine the distribution of disasters across metropolitan, rural and remote Australia. Since 1980 the number of disasters per year is increasing<sup>5</sup>.

Exceptional circumstances arrangements, first introduced in 1992<sup>6</sup>, have been used to help farmers manage the effects of rare and severe droughts, pests, diseases, frosts and waterlogging, with the 2002-03 drought being the most significant event.

There have been five major droughts in Australia since the 1960s<sup>7</sup>. During the 1980s and 1990s major droughts cost about \$12 billion<sup>8</sup>. The Australian Bureau of Agricultural and Resource Economics<sup>9</sup> estimated that the 2002-03 drought cost about \$7 billion in that year with significant effects flowing on into 2003-04.

Australia is relatively free of plant and animal diseases but pest or disease control costs can be significant at the local or regional level. For example the cost of eradicating Newcastle Disease from a Victorian poultry farm in 2002 was estimated at \$2.2 million. The national cost of a major disease outbreak would be significant. The detection of Foot and Mouth Disease in Australia would immediately stop rural exports worth \$10 billions<sup>10</sup>.

## **MANAGING DISASTERS IN AUSTRALIA**

In recent times Australian public policy has emphasised the need for individuals and communities to be able to effectively prepare for and manage the risks of both natural disasters<sup>11</sup> and exceptional circumstances events.

During their operational phases current plant and animal emergency management plans look to support the health and welfare needs of individuals and communities through liaison with the existing emergency management and welfare arrangements. Additionally, there is a specific linkage with exceptional circumstances arrangements. Existing publicly available documentation does not clearly spell out the relationships between the three types of plans.

## Managing Natural Disasters

The arrangements for managing natural and other types of disasters aim to actively involve the whole community in:

- preventing disasters occurring;
- adequately preparing for disasters;
- responding effectively to disasters; and
- recovering from disasters.

Recovery deals with the full range of social, physical, environmental and economic effects of disasters on both communities and the individuals who live in them<sup>12</sup>.

An individual's or community's first response to a disaster necessarily uses the resources already locally available. Subsequently local and state governments mobilise and manage the additional resources necessary to respond to the disaster according to established local, regional and state disaster management plans. State governments have statutory arrangements for identifying disasters. The Australian Government provides supplementary resources to ensure that local and state communities and organisations can manage the disaster effectively.

The Australian Government and State Governments share the costs of natural disaster relief and recovery through the NDRA which funds:

- grants to relieve personal hardship and distress;
- replacement of buildings and equipment by farmers, small businesses and voluntary non-profit organisations;
- replacement of essential public infrastructure; and
- financial and psychological counselling to disaster victims for six months following the disaster.

Individual states supplement this assistance.

The Council of Australian Governments (COAG) has reviewed Australia's arrangements for responding to and recovering from natural disasters. COAG has agreed that the Review's recommendations should be implemented.

Australia's responses to natural and other disasters rely heavily on volunteers. Volunteers play a particularly important role in meeting the need for community safety in rural and remote areas.

In recent years government support for volunteers in emergency management has been increased through improved training, the provision of higher standards of operational and personal protective equipment, and the enactment of legislation to provide liability protection. Emergency management volunteer organisations have also recently formed the Australian Emergency Management Volunteer Forum, to facilitate better communication between organisations and the sector, and to progress issues facing emergency management volunteers<sup>13</sup>.

## **Managing Exceptional Circumstances**

Exceptional circumstances (EC) events expose farm businesses and those dependent on them to greater levels of risk than those for which farmers would normally be expected to manage.

To obtain EC assistance the farmers of a region or an industry must formally demonstrate, and both the State and Australian governments must accept, that they are facing exceptional circumstances. EC support is usually provided as:

- concessional interest rate loans for up to 24 months to commercially viable farmers and small businesses; and
- the Exceptional Circumstances Relief Payment (ECRP) and a Health Care Card for farmers unable to meet their day-to-day living expenses. They may also receive Youth Allowance for dependent children.

These assistance measures contain a component intended to help producers and small businesses recover from the exceptional circumstances event<sup>14</sup>.

As part of its response to the 2003 drought the Commonwealth Government expanded its Exceptional Circumstances Assistance into a Drought Assistance Package which made available: opportunities to restructure the farm business; financial risk management tools; training and technical information; financial and personal counselling; and relaxation of tax obligations. Labour market and environmental programs were also modified to provide opportunities for work in areas affected by drought.

During exceptional circumstances State governments may also provide: transaction subsidies; counselling services; tax relief; and cash grants or loans for re-establishing farm businesses severely affected by drought<sup>15</sup>.

The Exceptional Circumstances Information Handbook says that: 'while there are potential links between disaster relief and EC policy, EC is not generally available as an immediate response to an emergency situation. Rather, EC is more likely to become a consideration some time after the "exceptional" event and indeed, under the EC guidelines, cannot be considered until a prolonged downturn in income becomes evident'. Making eligibility for assistance conditional in this manner seemed to contribute to significant mental and physical health problems among those who experienced the 2002-03 drought in western New South Wales<sup>16</sup>.

## **COMMUNITY CAPACITY TO RECOVER FROM DISASTERS**

### **Effects on communities and individuals**

Natural disasters may physically destroy or degrade essential services, housing and other community facilities and disrupt commercial activity. Exceptional circumstances events disrupt agricultural and other dependent commercial activity. Both natural disasters and exceptional circumstances events such as drought may have environmental effects. They both disrupt normal functioning of the communities experiencing them and the pre-existing social relationships of those caught up in them.

Community recovery from a disaster has been divided into four phases.

- The first 'heroic' phase during the event as people work to save life and property.
- During the 'honeymoon' phase survivors bond strongly because of their shared experiences and look forward to help promised from the wider community.
- 'Disillusionment' sets in as the euphoria of survival diminishes. The practical difficulties of recovery appear and give rise to feelings of anger, frustration and disappointment.
- During 'reconstruction' individuals realise they must achieve their own and their community's recovery. Community restoration, physical reconstruction and cooperative programs reaffirm people's belief in themselves and in their community.

Individuals go through a similar cycle as they respond to and recover from a disaster or similar traumatic incident.

While communities and the people who live in them normally re-establish themselves in one form or another after disasters, with the right sort of support and guidance during recovery they can become more resilient and sustainable.

People experiencing the prolonged drought of 2002-03 suffered depression, anger and disillusionment. That is, they had not yet entered a psychosocial recovery phase. Current exceptional circumstances arrangements are intended to facilitate recovery but do not obviously recognise the psychosocial processes necessary for effective individual and community recovery.

In 2002 the Productivity Commission reported that animal disease outbreaks and the subsequent control activities leads to significant social disruption among affected communities, families and individuals. This can lead to significant physical and mental health difficulties<sup>17</sup>.

### **The Conceptual Framework for Disaster Recovery**

Effective disaster recovery policies should enable affected communities to become more resilient.

The Australian approach to disaster recovery management is based on a philosophy of community empowerment and self-management. But more active involvement and cooperation between communities and disaster management agencies in risk assessment and community development would further improve disaster response and recovery capacities<sup>18</sup>.

Support from outside the community should maintain the identity, dignity and autonomy of affected people and enable the community to improve its infrastructure and functioning rather than just return it to the pre-disaster level<sup>12 19</sup>.

Resources and services for recovery should be readily available and appropriate, locally managed and provided through a network of existing service providers<sup>12</sup>.

The community must be involved with all aspects of a recovery process. Exceptional circumstances assistance is not as explicitly placed in a similar coordinated, community-based delivery framework.

There is a perception that current exceptional circumstances drought assistance is primarily provided to allow people merely to survive a drought<sup>16 20</sup> rather than enabling them to participate in a positive community development and recovery process.

While current Australian Government and State drought assistance programs recognise the importance of social interaction and support for individuals and their families to manage the drought, only Victoria has instituted a formally expressed community recovery strategy based on the disaster recovery model<sup>21</sup>.

The current plant and animal emergency response plans, of course, have as their prime objective the eradication or control of a disease or pest outbreak. As they are documented they pay little specific attention to the established principles of disaster recovery<sup>3 12</sup> discussed in this section. This is of particular concern because established disaster recovery principles emphasise that community recovery is a continuous process which needs to be managed from the beginning of a disaster and is likely to continue for some time after emergency operations finish. Successful community recovery requires very good liaison and cooperation between disease control, emergency management and exceptional circumstances activities.

## **THE HEALTH SYSTEM IN DISASTER RECOVERY**

### **Effects on the health of the population**

People affected by a disaster are most likely to make a good recovery if they have access to appropriate levels of support, including support from a high quality health system. Such support must give the health system the capacity to:

- treat minor and acute medical conditions caused by the disaster;
- treat pre-existing chronic medical conditions;
- continue to deliver adequate levels of primary health care;
- provide comprehensive pharmaceutical services; and
- treat psychological stress, particularly among those with high levels of stress.

Australia has a highly developed health system which plays an established role in Australian disaster management arrangements.

The treatment and care of casualties during the initial crisis phase of a disaster is a significant responsibility of the health system. It has undoubtedly contributed to the overall national success in reducing the death rate due to all natural hazards combined, which fell from 10 per 100,000 in 1875 to 1 per 100,000 in 1940.

Emotional effects tend to vary from disaster to disaster. Generally natural disasters result in large numbers of individuals suffering from minor emotional distress that tends to be self-limiting. Some portion of the population may suffer from more severe forms of distress, especially anxiety and depression, depending on their prior psychological state and the impact of the disaster on them and their families. Symptoms of post-traumatic stress disorder (PTSD) may be expressed by victims of natural disasters but community based studies do not show an increase in diagnosable PTSD<sup>22</sup>.

In addition to urgent health care needs generated by the disaster there are primary health care needs which, if not met, will adversely affect people. Immunisations, prenatal care, management of chronic hypertension, diabetes and cardiac disease, as well as other primary health care services need to be maintained and provided to those affected by the disaster.

While most victims of disasters eventually recover and return to their original living conditions, recovery may be neither rapid nor definite. While those who have excess resources may be able to invest them in recovery, those who depend on outside assistance may find that the recovery process is longer and more difficult. Members of society who are marginalised because of economic status, language barriers, age, infirmity or belong to a minority group, may find it more difficult to access the services needed to achieve recovery.

A strong public health system plays a large part in reducing morbidity and mortality resulting from disasters. A public health sector which conducts routine surveillance, has good immunisation coverage, maintains adequate environmental control etc will be better able to withstand the increase in need following a disaster.

While such a well-developed public health system is found in most parts of Australia, the poor public health systems in many remote communities would make disaster recovery more difficult.

The role of the health system during exceptional circumstances events is not as clearly specified or as comprehensively studied. The slow development and indefinite duration of a drought situation causes steadily increasing levels of uncertainty with consequent physical and mental health difficulties for individuals. Other actions individuals take to cope with drought, such as leaving a community to find work elsewhere may also affect the viability of smaller communities and their ability support health service infrastructure.

During the 2002-03 drought, at least in one State, there was difficulty delivering adequate health care to people affected by an exceptional circumstances event because of on-farm work pressures and the costs and time involved in obtaining health care. It seems reasonable that people experiencing and recovering from exceptional circumstances situations would require services from the health system similar to those required by those affected by disasters.

The health effects of a major plant and animal disease control operation are likely to be similar to those associated with drought. The fact that some significant animal diseases may also infect humans would be an additional complication.

## **Effects on health infrastructure**

During disasters hospitals, clinics, health care centres, their personnel and supporting infrastructure are subject to the same destructive forces as are other buildings and people. This damage occurs just as the need for emergency health care is greatest. Health care personnel can be injured, have significant emotional issues or need time off to put their homes in order.

While hospitals often maintain back-up systems in case of failure of normal community infrastructure these may not function as expected and are, by their nature, limited resources to be used for a short period of time. Clinics, pharmacies and doctors' offices rarely have such back up systems.

Therefore, the health system, including the medical care systems, must itself be prepared to resist disaster. Buildings and their contents must protect the health care professionals inside and they must be able to function in the aftermath of disaster.

Most exceptional circumstances events are inherently unlikely to affect health infrastructure. But some disease eradication operations could make significant demands on it.

## **Health System Roles**

### ***Public Health***

Before any disaster occurs the public health system plays an important role in reducing the community's vulnerability to disasters by preventing or mitigating the potential effects of hazards.

Following the crisis phase of disaster, public and environmental health services play an integral part in physical disaster recovery by ensuring that:

- the safety, quality and supply of water and food is maintained;
- adequate shelter is available;
- sanitation arrangements prevent the transmission of disease and enable the safe disposal of hazardous waste; and
- the possibility of epidemics of infectious diseases is prevented<sup>11 12</sup>.

The management of public and environmental health is usually the responsibility of environmental health officers employed by local government, supported and supplemented by the State Government public health system. Because experience in public health management is directly transferable to disaster situations public health officials can make a vital contribution to disaster management.

### ***Medical Services***

A disaster overwhelms locally available ambulance and other emergency paramedical, health and medical resources. An effective response to the disaster requires excellent planning and liaison between local health practitioners and emergency services, including ambulance and other paramedical services. In country areas rural general practitioners usually play a vital role in disaster responses.

In remote areas the resources of the Royal Flying Doctor Service (RFDS) or the Northern Territory Aerial Medical Service (NTAMS) can be used in disaster situations. Useful facilities include medical chests, visiting medical services, aerial evacuation and an HF Radio Network. Bush nursing posts and remote mining and industrial sites are also sources of medical help for disasters.

During exceptional circumstances events, such as drought, access to general practitioners plays a key role in enabling rural families and communities to have injuries effectively treated and to manage their physical and psychological<sup>16</sup> conditions. The costs and social constraints involved in consulting both GPs and specialists can prevent drought-affected families seeking or undertaking available treatment<sup>16</sup>.

### ***Mental Health***

The health system is a significant contributor of services to enable the community to recover from the psychological effects of a disaster. Initially crisis counselling enables people to understand and cope with the immediate psychological effects of the disaster. Suitably trained and supervised human services workers such as welfare and youth workers, nurses and social workers can provide crisis counselling. Clinical psychologists, psychiatrists, and appropriately trained social workers, psychiatric nurses and psychotherapists undertake longer-term counselling and clinical treatment.

Debriefing and worker support is needed to help disaster workers deal with their experiences. Community groups and people affected by the disaster may also benefit from debriefing. Emergency services organisations such as ambulance services often have specifically trained counsellors or support workers available to provide this debriefing.

While there is an established system for providing financial counselling during exceptional circumstances, social or psychological counselling is provided in an *ad hoc*, temporary, way. While an *ad hoc* response may deal with immediate problems, it cannot deal adequately with the underlying impact of drought on farm families<sup>23</sup>. More attention is needed to the provision of social support services and community capacity building to enable rural communities to manage the effects of future droughts and other exceptional circumstances more effectively<sup>16 23</sup>. Such an approach would be analogous to the existing disaster relief arrangements.

Experience with animal disease emergencies suggests that satisfactory recovery depends on the people involved having high levels of social and mental health support from the beginning of any emergency. It is important that arrangements for delivering this support effectively are developed and understood before disease emergencies occur.

### **Rural Health Resources and Disaster Recovery**

Disaster recovery activity should be based on co-ordinated use of the services normally provided by the government and non-government organisations which usually operate in the disaster area. But local health and medical services may have to be expanded to meet additional needs caused by the disaster. Additional numbers and types of staff provided should take account of the length of recovery processes and the need to avoid overloading staff by expecting them to perform both their disaster recovery duties and their normal duties simultaneously.

The health system is a significant employer of people able to participate in disaster recovery work as members of teams which assess recovery assistance needs as well as people who can provide personal support, community recovery and psychological support services. Psychological support services deliver crisis counselling, longer term counselling and debriefing and worker support.

The current distribution of health resources in Australia implies that there are fewer resources available locally for disaster recovery work in rural and remote Australia. This seems to be particularly so with those providing psychological services namely:

- nurses and social workers for crisis counselling; and
- clinical psychologists, psychiatrists, and appropriately trained social workers, psychiatric nurses and psychotherapists able to deliver longer term counselling and clinical treatment.

From their geographic distribution nurses seem to be the professionals most readily available for crisis counselling in rural and remote areas. Professions able to undertake longer term counselling and clinical treatment are concentrated in the major capitals and the most heavily populated regions.

The notable skewing of clinical psychiatrists and psychologists toward major capitals would seem to make it difficult to support other clinicians and to manage more complex cases arising from disasters. Such difficulties might be overcome by suitable travel to regional and remote areas and the use of modern communications technologies.

Individuals or families affected by exceptional circumstances events may be directed towards psychological help by their local general practitioner or a rural financial counsellor, with rural financial counsellors generally being the preferred first point of contact. There are 70 rural financial counsellors compared with about 4800 rural and remote primary care practitioners<sup>24</sup>. It would seem that rural general practitioners would be well placed to supplement the efforts of rural financial counsellors in dealing with the effects of psychological stress on farmers in financial difficulties.

Rural people value face-to-face contact very highly and may also have social attitudes which make it difficult for them to seek and engage with support services. It is therefore important to make contact through an outreach system which they can accept. In the case of drought, current outreach systems are based around financial and business management support and could well pay more attention to the health and social aspects of recovery.

Nurses play a particularly important role in delivering health care in rural remote areas. Along with ambulance officers they are a likely first point of contact for individuals affected by disasters and exceptional circumstances who require health or medical care.

During periods of low income rural people often delay or do not seek medical treatment either for pre-existing conditions or for conditions they develop as a result of disaster and disaster recovery. Lack of Medicare bulk billing can deter people from visiting their GP. This situation adds to the general difficulties that rural and remote Australians must overcome to access specialist medical care. The concentration of psychological and psychiatric workforce in metropolitan areas would add to the difficulty of providing rural and remote people with the full suite of treatments they might need to deal with the full range of health effects of natural disasters and exceptional circumstances events.

## **RECOMMENDATIONS**

To enable health system to contribute more effectively to the recovery of rural communities from disasters the National Rural Health Alliance urges all those concerned with improving the health of rural Australians to ensure:

### **Better information on the effects of disasters on rural and remote Australia**

1. An analysis of the distribution of various types of disasters across metropolitan, rural and remote Australia should be undertaken.

### **Stronger relationships and linkages between all disaster management and relief arrangements**

2. Current national plant and animal disease eradication and control, emergency services and exceptional circumstances arrangements should be tested to ensure that communities affected by plant and animal disease outbreaks will receive the types and levels of health services and support they need to recover rapidly and effectively.
3. The application of community recovery strategies, along the lines of Victoria's, to all types of exceptional circumstances events should be studied and evaluated by the Commonwealth and State Governments.

### **Health infrastructure which withstands disaster and has the resources to support recovery**

4. Building standards and codes should ensure that health system buildings and infrastructure are constructed to standards which make them able to withstand damage so health workers are protected and the health system can deliver emergency care during the disaster. Existing standards and codes should be modified and buildings and health systems should meet the new standards within a decade. After a disaster the health system in the affected area should receive additional resources so it can meet the needs of people affected by the disaster for ongoing care, including being able to service an increased demand for the care of chronic conditions and psychological stress as people recover from the disaster.
5. Communities with good public health systems are better able to withstand the health consequences of natural disasters. In many remote communities public health systems are weak and standards are low. So these communities can withstand the adverse health effects of natural hazards and disasters, their public health systems should be upgraded.

### **Better access to the health services necessary for disaster recovery**

6. Effective recovery from natural disasters and exceptional circumstances requires teams of support workers to seek out and contact affected individuals and families. Such outreach teams must include a health worker and subsequent support arrangements must deliver needed health and medical services.
7. Future arrangements for exceptional circumstances events should ensure that people affected by the event are funded so they can meet the costs of the health treatments they need. Such funding should also enable them to travel to obtain, or the providers to travel to provide, any needed treatment.

**Readily access to a workforce with the skills to promote recovery**

8. Adequate psychological support can play a positive role in enabling individuals and communities to recover from natural disasters and exceptional circumstances events. But workers in professions able to undertake longer-term support and counselling are concentrated on the major capitals and the most heavily populated regions. In the light of this, arrangements for providing psychological support in less densely populated and remote regions should be reviewed and evaluated. The improvements so identified should be rapidly introduced.
  
9. Because local health workers are those first called on to respond to a disaster, and are central to the delivery of health services for disaster recovery, the disaster recovery skills of the rural and remote health workforce must be developed and maintained. The most readily available health workers in rural and remote areas are paramedics such as ambulance officers and nurses who therefore have an important role in delivering health services for disaster recovery, especially in the absence of other health practitioners. The roles of the rural and remote health workforce with respect to disaster recovery should be reviewed to ensure they are able to deliver integrated, high quality services and support.

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A source of potential harm or a situation with a potential to cause loss; a potential or existing condition that may cause harm to people or damage to property or the environment; or an intrinsic capacity associated with an agent or process capable of causing harm. (Australian Emergency Management Glossary, 1998)

<sup>2</sup> A **disaster** is:

A serious disruption to community life which threatens or causes death or injury in that community and/or damage to property which is beyond the day-to-day capacity of the prescribed statutory authorities and which requires special mobilisation and organisation of resources other than those normally available to those authorities. (Australian Emergency Management Glossary, 1998)

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