

# **EVACUATION PLANNING**





# AUSTRALIAN EMERGENCY MANUAL SERIES

# **EVACUATION PLANNING**

**MANUAL NUMBER 11** 

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The first publication in the original AEM Series of mainly skills reference manuals was produced in 1989. In August 1996, on advice from the National Emergency Management Principles and Practice Advisory Group, EMA agreed to expand the AEM Series to include a more comprehensive range of emergency management principles and practice reference publications.

The Australian Emergency Series has been developed to assist in the management and delivery of support services in a disaster context. It comprises principles, strategies and actions, compiled by practitioners with management and service delivery experience in a range of disaster events.

The series has been developed by a national consultative committee representing a range of State and Territory agencies involved in the delivery of support services and sponsored by Emergency Management Australia (EMA).

The manuals are available in full text on the EMA website at http://www.ema.gov.au under Publications. Limited Print copies are distributed to state and territory emergency management organisations, community organisations and relevant government agencies. These manuals are also available free of charge on CD. Please send requests to ema@ema.gov.au.

The emergency services skills series (skills and training management topics) are issued as training guides to state agencies through each state and territory emergency service.

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Manual 8	Emergency Catering
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Manual 5	Emergency Risk Management – Applications Guide
Manual 43	Emergency Planning
Manual 11	Evacuation Planning
Manual 20	Flood Preparedness
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Manual 21	Flood Warning
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Manual 26	Guidelines for Psychological Services: Mental Health Practitioners Guide
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Manual 6	Implementing Emergency Risk Management – A facilitators guide to
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Manual 36	Map Reading and Navigation
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Manual 40	Vertical Rescue

# **FOREWORD**

As more and more people are becoming affected by the impact of emergencies and disasters across the globe, it is increasingly imperative that response and recovery agencies, organisations and individuals in the community focus on preparedness for a wide range of situations. Evacuation is a significant element of this focus.

Effective planning is integral to building the resilience of organisations and communities through their active involvement in the process. In the event of a hazard impact or threat, the evacuation process is vital to saving lives and preventing injury. As part of a risk management strategy, evacuation planning can be used to mitigate the effects of an emergency or disaster on communities.

The Australian Emergency Manual - Evacuation Planning, includes guidelines to assist in the formulation of evacuation plans at all levels. These guidelines are designed to assist not only the emergency services, but local government, State and Territory government agencies and Australian Government departments in developing and revising evacuation plans.

Evacuation is a complex process, so this manual provides detailed information on the five stages of evacuation, from the decision to evacuate, through the warning, the withdrawal, shelter and the return. Careful planning can minimise risks associated with the evacuation process, and it is essential to consider these factors in order to establish an effective evacuation plan.

This manual has been compiled from information provided by emergency and welfare organisations and EMA and adapted to reflect a national approach. It is designed to be read in conjunction with other manuals in the series as well as applicable State/Territory legislation and emergency management plans.

This manual is also available on the EMA website (http://www.ema.gov.au).

David Templeman

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Director General

**Emergency Management Australia** 

December 2005

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# 1. INTRODUCTION

#### What is evacuation?

Evacuation is a risk management strategy which may be used as a means of mitigating the effects of an emergency or disaster on a community. It involves the movement of people to a safer location. However, to be effective it must be correctly planned and executed. The process of evacuation is usually considered to include the return of the affected community.

#### Aim of the manual

The aim of this manual is to provide guidelines to assist planning committees to develop evacuation plans in accordance with accepted emergency management principles and applicable legislative requirements.

# Scope of the manual

The manual incorporates guidelines and considerations for the formulation of evacuation plans at community level. These guidelines and considerations relate to both peacetime and hostility related emergencies (civil defence). They are presented within the main sections of the manual covering:

- introduction;
- evacuation planning;
- evacuation planning considerations; and
- the five stages of evacuation: decision to evacuate, warning, withdrawal, shelter and return.

The manual is not intended for use in planning of site-specific evacuations, for example, high-rise buildings. This level of evacuation planning is provided for in Australian Standard (AS3745-2002), relevant legislation and other specific publications which are available from State and Territory emergency agencies.

#### **Related documents**

The manual should be read in conjunction with applicable State/Territory legislation and emergency management plans and with the Australian Emergency Manuals (AEMs) 'Emergency Planning' and 'Recovery' which are available through Emergency Management Australia.

# **Legal protection**

Effective emergency management planning may help protect organisations from litigation arising out of the 'duty of care' provisions in common law. The requirement for responsible organisations to develop, test and review emergency plans accords with their general obligation of fulfilling duty of care, and the specific requirements under most State/Territory legislation. This includes evacuation planning.

# **State/Territory arrangements**

It is recognised that there are variations in legislative powers and/or arrangements nationally. Where appropriate, States and Territories should adapt planning considerations to comply with arrangements, regulations and legislation relating to evacuation, which are unique to that State or Territory.

States and Territories may wish to include information detailing their individual arrangements in their copies of this AEM.

# 2. EVACUATION PLANNING—AN OVERVIEW

#### Introduction

A community risk assessment examining the source of risks, implications of their impact and possible mitigation action is the basis for formulation of the main emergency management plan. The start point for consideration of an evacuation plan is where the risk assessment has identified evacuation as a potentially appropriate risk management strategy.

# **Evacuation planning principles**

The following principles should be observed in evacuation planning:

- determination of legal or other authority to evacuate;
- establishment of a management structure;
- clear definition of roles and responsibilities;
- development of appropriate and flexible plans;
- effective warning and information system;
- assurance of movement capability;
- establishment and maintenance of confidence and cooperation of the affected community;
- appropriate welfare provision throughout all stages; and
- exercise of developed plans.

# **Types of evacuation**

For the purpose of planning, all evacuations may be considered to be one of two generic types:

**Immediate Evacuation**—An evacuation resulting from a hazard impact, that forces immediate action, thereby allowing little or no warning and limited preparation time. Hazardous materials accidents/incidents, air crash, wildfire or earthquake are examples of events that may require immediate action.

**Pre-warned Evacuation**—An evacuation resulting from an event that provides adequate warning and does not unduly limit preparation time. Examples of this type of event may include flood, cyclone and storm surge.

In both cases planning using the principles above is essential.

#### **Alternative to evacuation**

Although evacuation is considered an important element of emergency response which may be effective in many situations, there will be occasions when it may be assessed that people would be safer to stay and shelter in place. Depending on the nature of the hazard, measures such as closing windows, isolation of air conditioning systems and listening to the radio and/or TV to receive information can be taken to reduce vulnerability.

# Stages of the evacuation process

The evacuation process comprises the five stages of:

- decision to evacuate;
- warning;
- withdrawal;
- · shelter; and
- return.

# **Planning considerations**

Detailed planning considerations for each of these five stages are shown in Chapters 4 to 8 inclusive.

The evacuation process is shown diagrammatically at Figure 2:1.

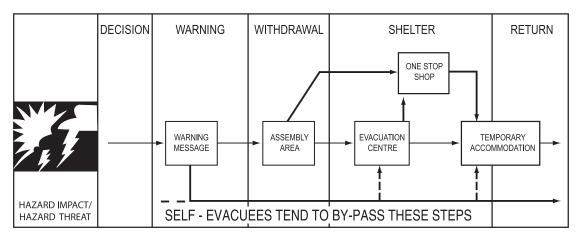


Figure 2:1—The Evacuation Process

# **Planning model**

An outline evacuation planning model is shown at Annex A to Chapter 2.

#### **ANNEX A TO CHAPTER 2**

# **Outline evacuation planning model**

There are many models available to assist in the development of a community evacuation plan. The following is one such generic model. It should be noted that an evacuation plan does not take the place of a main emergency management plan in which details of the community risk assessment will be contained. The evacuation plan should supplement the main plan and provide details of one of the possible risk reduction strategies to treat an identified risk.

#### Authority to plan

The authority to plan will normally be extracted from the main plan or from State or Territory emergency management legislation. The evacuation plan should cite this authority.

#### Risk assessment

A community risk-assessment is the start point for planning a risk management strategy such as evacuation. A risk assessment, examining the source of risks, their impact and possible mitigation action will have been completed as a basis for the formulation of the main plan. The start point for consideration of an evacuation plan is those areas in which the risk assessment has identified evacuation as an appropriate risk management strategy.

#### Convene an evacuation planning committee

A planning committee including representatives from all agencies with a role in the evacuation should be convened. It would normally be based on the existing emergency planning committee, augmented as necessary to meet those requirements that are unique to evacuation.

#### Determine what needs to be done

**Planning objectives.** This process will involve examining the component parts of the evacuation process, (Decision to evacuate, Warning, Withdrawal, Shelter and Return), for each specific hazard and determining exactly what tasks need to be carried out once the decision to evacuate has been made. Consideration will need to be based on an assessment of the nature and extent of the hazard, the anticipated speed of onset, the number and category of people to be evacuated, evacuation priorities and the availability of resources. These considerations should focus on providing, as far as possible, all the needs of those being evacuated to ensure their safety and on-going welfare.

There may need to be more than one location identified to which people can be evacuated—due to the numbers involved or the type of hazard. For example if the hazard is a toxic airborne chemical, separate locations, depending on wind directions, will be necessary.

**Decide who is going to do it. Roles and responsibilities** of the control and support agencies need to be determined and importantly, agreed upon, if they are not already specified in either legislation or by any other government direction. Roles and responsibilities must be clearly shown in the plan.

**Resource issues.** Agencies involved should analyse their resource requirements and availability and address any identified shortfalls. The plan needs to identify all resource requirements and detail how they are to be obtained for the purpose of an evacuation.

**Determine how the evacuation is to be managed.** Management of the evacuation will involve the planning committee examining the existing emergency management structure and arrangements to ensure that adequate control and coordination can be exercised over the total evacuation operation. The management structure must be agreed and documented in the plan.

#### **Document the Agreed Arrangements**

The agreed plan should be documented, printed and distributed to all those organisations with a potential role in the operation.

#### Test the Plan

Once documented, the plan should be regularly exercised. A 'full scale' exercise may not always be practicable due to the cost, inconvenience or risk to the community. However, those involved can certainly test their ability to respond in an appropriate manner and to anticipate the problems which may be encountered.

#### Review the Plan

The plan must be regularly reviewed and updated, taking into account any changes in risk assessment.

Planning is a continuous process.

# 3. EVACUATION PLANNING CONSIDERATIONS

#### Introduction

As a result of a hazard impact or threat, evacuation of affected people may need to be considered. This may involve a complex operation that has the potential to place evacuees at some risk during its execution. Careful planning can minimise the risks associated with the process of evacuation and planning committees must take account of the following:

#### The decision to evacuate

Making the decision as to whether to evacuate or not will be assisted by the availability of timely and relevant information. If the decision is made too early and the hazard recedes, the evacuated community may have been exposed to unnecessary risk, inconvenience and cost. If the decision is made too late, the affected community may be forced to either evacuate under high-risk conditions or to shelter in place and accept the effects of the hazard impact.

While the nature of the hazard impact will be a primary consideration, an effective evacuation plan supported by a current public education program will facilitate decision making. Due to the complex nature of an evacuation operation it must not be regarded as a secondary reaction to other risk management strategies. The evacuation should be treated as a discrete response operation. Chapter 4 provides detailed considerations in relation to the decision to evacuate.

# The authority to evacuate

Evacuation planning must establish the legal basis for evacuation and any conditions which apply. For example, in some States and Territories there is no authority to force evacuation of people from properties in which they have a pecuniary interest. Factors such as this must be taken into account during the planning process as they may have a significant effect on how an evacuation is implemented.

# The importance of community awareness and education

Community awareness and education are critical to the successful implementation of an evacuation plan. A program should be instituted which covers hazard information, the need to evacuate under certain prescribed circumstances and specific action to be taken. The evacuation plan should allocate responsibility for community awareness and education programs. Raising awareness and educating the community should be done well before hazard impact. For example, before the start of the hazard season in the case of flood, cyclone, wildfire etc.

#### An effective community education program should be designed to establish:

- community awareness of the hazards which may lead to a requirement to evacuate;
- individual awareness of conditions, both pre-existing and hazard-related, which would support a decision to either evacuate or shelter in place; and
- community awareness of the need to heed warning and public information messages.

#### **Effective public information should:**

- be complemented by the community education program;
- employ a variety of media (print, electronic, community announcement, word-of-mouth, etc) to disseminate information;
- carry authoritative, credible, simple, direct and unambiguous information, instructions and directions; and
- provide timely and constant reinforcement.

Community awareness and education aspects are applicable to all stages and should be continually reviewed to ensure appropriateness and effectiveness.

#### **Self-evacuation**

Experience has shown that in the face of impending hazard impact or after actual impact, many people will self-evacuate. That is to say they will make their own decision to evacuate using their own means of transport. This inevitable situation needs to be recognised in the planning process. Self-evacuation has the potential to be beneficial in some circumstances as it permits emergency services to focus on those most in need of assistance. There may be a good case for actively encouraging self-evacuation in some instances. If self-evacuation is considered in the planning process it may be possible to provide some level of coordination. For example, evacuation routes for self-evacuees could be designated. It is counter-productive to try to over-regulate this process. Self-evacuees must be encouraged, through public education programs, to register at either assembly areas or evacuation centres and to leave some indication at the evacuated premises that they have, in fact, evacuated and where they are going. Most States and Territories encourage people to leave early if they intend to evacuate at all.

# **Risk to emergency workers**

During evacuations the risk to emergency workers can be high, especially in situations where door-to-door warnings are being given. Emergency workers becoming casualties may jeopardise the effectiveness of the evacuation operation. The plan must consider all options available to minimise the risks to emergency workers.

# **Need for security of evacuated premises**

Perception of security of vacated property may have considerable influence on the decision by individuals to evacuate or not. Hence, adequate security arrangements need to be made for property being vacated and possessions left behind. This will involve evacuees securing premises as well as an active program of security checking.

# Potential risks in moving people in hazardous situations

Dislocation and the potential hazard-related dangers people may be facing are likely to place them under considerable stress. Under these circumstances people may not act as rationally as might normally be anticipated and they will need to be treated with a greater deal of compassion and understanding. The implications of this will need to be considered in the planning of all stages of evacuation but particularly in the withdrawal.

#### **Need for control/coordination**

Each stage of an evacuation may be the responsibility of a different agency. The activities of each involved agency must be coordinated to ensure that the overall process works efficiently. In some cases control/coordination of evacuation responsibilities is specified in State/Territory relevant legislation and arrangements. It is therefore important for the evacuation plan to clearly reflect roles and responsibilities of all agencies involved. Control/ Coordination cannot be effectively achieved without good communication between agencies.

#### Media

Communication with media will require skilled liaison and a system for the authorised release of current information. Planning should include identification of any agency media responsibilities in accordance with State/Territory arrangements. A media strategy should be developed and be in place prior to activation of evacuation plans.

# Special-needs groups in the community

The plan must take the social implications of special-needs groups into account. For example, people with disabilities, people from non English-speaking background, children and elderly people may react differently during an evacuation. They may also have a range of differing needs. Critical aspects include problems of communication, mobility and culture. Welfare of pets and other animals should also be considered in the planning process.

# Time management in large scale evacuation

Where large population (possibly including whole towns and suburbs of cities) need to be evacuated, it will be desirable to have calculated the time taken for certain functions to be performed. These timings (detailed below) can be incorporated into the plan:

#### Door-knocking resources

The time needed, after the decision to evacuate has been made, to assemble and brief door-knockers, to get them into the field, to carry out the task and change shifts, can all be fairly accurately estimated and used in planning.

# **Transport resources**

Community analysis should define the level of transport resources required in different areas. Planning should be based on information such as the number of households without access to motor vehicles and the number of buses and/or train carriages required for the evacuation. The time required to marshal these resources will be an important planning factor. Australian Bureau of Statistics will be a useful source of information on vehicle ownership and other relevant aspects of demography.

# Time required to clear the evacuation area

After evacuees have been advised of the need to leave, there will be a finite time before movement actually occurs. In addition, there will be time taken to move from origin (home) to a point of safety, for example, an assembly area. Calculation of these times is important and may require traffic engineering inputs to identify locations of possible bottle-necks and assess potential vehicle flow-rates along required routes.

# 4. DECISION TO EVACUATE

#### Introduction

The decision to evacuate is the first of the five identified stages of the evacuation process. There are often many complex issues to be taken into account in making this decision and it may need to be made in the absence of the totality of the desired information.

# **Roles and responsibilities**

As the implications of this decision, in terms of saving lives and preventing injury are of such importance, it is imperative that roles and responsibilities be clearly identified in evacuation plans.

#### **Considerations**

The following planning considerations relate to making the decision to evacuate:

- Vulnerability analysis may indicate that, for certain hazards and under certain conditions, sheltering in place could well be the best protective strategy. Typically, this could be the case for some toxic chemical release incidents or in a wildfire situation. The success of this strategy will depend, to a large extent, on the degree to which premises have been prepared to withstand the impact and also the level of community awareness about the nature of the hazard and appropriate protective actions to be taken to reduce vulnerability. Factors to be considered in the case of wildfire are addressed in the Australasian Fire Authorities Council (AFAC) 'Position Paper on Community Safety and Evacuation during bushfires'.
- Because of the potential for risk to evacuees during movement, special attention should be paid to planning of this aspect. All appropriate risk control measures should be considered.
- Available lead time may influence the decision to evacuate. If there is sufficient time
  to warn and evacuate the public before the impact of the emergency (eg floods, wildfire)
  the risk during the movement may be greatly reduced. If time is not available or the
  hazard has already impacted it may be a case of rescuing those affected rather than
  evacuation.
- Evacuation can be a time-consuming and resource-intensive process. As the
  number to be evacuated rises, so does the time and resources it will take to carry out
  the evacuation. Movement of evacuees may cause congestion on road networks in
  large-scale evacuations and unless the movement of people is properly planned and
  managed, congested conditions could defeat the purpose of the evacuation.
- Egress routes must be capable of handling the requirements of the evacuation. Roads usually available or safe may not be available during evacuation. Access routes will also be required by responding emergency vehicles. For instance, consider the potential for problems caused by flooding, driving rains and debris; or fire, smoke and fallen trees.

- Safety of emergency workers is paramount! Consideration must be given to the
  safety and welfare of the emergency workers who are required to enter the affected
  area—both in controlling the emergency and warning those at risk. If the area is too
  dangerous for emergency workers, other means of alerting the public will be required.
- Identification of available resources (including transport and personnel) to move the
  evacuees will influence the decision to evacuate.
- Depending on the type of hazard impact experienced, the requirement to provide temporary accommodation will need to be assessed. This will become an issue in some situations when there may be a choice between either evacuating an area or advising people to shelter in place (for example, during wildfire).
- There is a significant difference between evacuating a residential area and a non-residential area. In a non-residential area it may be possible to evacuate the area at risk without the need to provide temporary accommodation—people can return to their homes (providing they are outside the impact area). In a residential area evacuation, temporary accommodation will more likely be required and will depend on such factors as:
  - ready availability of suitable accommodation;
  - · climatic conditions at the time;
  - expected duration of the emergency;
  - type of emergency and severity of hazard impact; and
  - time of day.
- The identification of **assembly areas** in the planning process will assist in the decision-making process. Alternatives should also be selected.
- The best decision will be made after **assessment of all the available information**. The luxury of assessing all possible considerations may not always be available.
- The decision to evacuate must have regard to the specific State/Territory legislation or arrangements.
- A current and practised evacuation plan will give the decision-maker greater confidence.
- Good decisions are made using **accurate and timely information**. The decision-makers should not hesitate to seek and evaluate expert advice.
- The identification of special-needs buildings or people may influence the decision to evacuate.
- The ability to effectively warn affected people will influence the decision to evacuate.
   Considerations would include the ability of those at risk to understand and react appropriately to the warning.
- The effectiveness of public awareness and education programs will influence a community's ability to adequately cope with an intended evacuation or shelter-in-place operation. A decision-maker who believes that a community has properly prepared, will take that into account when arriving at a decision.

# 5. WARNING

#### Introduction

Warning is the second of five stages of the evacuation process and comprises dissemination of public information in the form of advice or direction.

An evacuation warning must be structured to provide timely and effective information. The effectiveness of the evaluation will largely depend on the quality of the warning process.

Factors which may influence the effectiveness of the warning include time, distance, visual evidence, threat characteristics and sense of urgency demonstrated by the emergency services. For example, the more immediate the threat, the greater the readiness of people to accept and appropriately react to the warning.

# **Roles and responsibilities**

It is essential that all agencies involved in the warning stage have a clear understanding of their roles and responsibilities. In some States and Territories these are incorporated in legislation. Formulation of warnings should involve the participation of some or all of:

- the community (including special-needs groups);
- the media;
- the emergency services;
- the government agencies (all levels);
- private industry; and
- the non-government organisations.

# **Planning responsibilities**

Some of the key responsibilities that need to be clearly identified in the warning stage of the evacuation planning process are:

- who is responsible for issuing the warnings;
- who authorises the content;
- who provides the alerting/dissemination facilities; and
- who is responsible for the requirements of special-needs groups.

# **Warning process**

Warnings should be clear, unambiguous, be issued by a known and credible authority, contain a contact point for confirmation, and include a feedback mechanism.

#### To be effective, warnings should have the following characteristics:

- Authority—Warnings are more credible and more likely to stimulate appropriate public
  actions if they are issued by a recognised authority.
- **Consistency**—To avoid confusion and uncertainty, it is important that consistency be maintained when multiple warnings are issued to the public.
- Accuracy—Accuracy and currency of information contained in the warning also affect understanding and belief. Errors can cause people to doubt subsequent warnings.
- **Clarity**—An unclear warning can cause people to misunderstand or ignore it. Warnings should be in simple language, without the use of jargon.
- Level of Certainty—Certainty determines the level of belief in a warning and affects decision making by those to whom the warning is given.
- **Level of Detail**—Insufficient information creates confusion, uncertainty and anxiety, and public imagination will tend to fill the information void. This can promote rumours, uninformed misconceptions or fears.
- Clear Guidance— Messages containing clear guidance about protective actions people should take and the time available for doing so are more effective than those which provide no specific instructions.
- Repetition of Warnings—Where time permits, warnings should be repeated preferably
  using more than one delivery method. This provides confirmation of the warning
  message, helps increase persuasiveness and overcomes the problem of people not
  responding after hearing a warning only once.
- **Impact Areas**—Warning information that clearly states the areas actually or likely to be affected by the event is most effective.
- Methods of Information Dissemination—Warnings are more effective if a range of methods is used rather than a single method, thereby reaching as many people as possible in the shortest time. Methods need to be chosen to fit the time-frame available and should recognise that some modes are appropriate in reaching many people but with only relatively simple or generalised information (eg radio, television) whereas others can provide more specific information to targeted individuals (eg telephone, facsimile machine, computer, two-way radio, door-knocking or use of community leaders or wardens). Use of the Standard Emergency Warning Signal (SEWS) will enhance the effectiveness of electronic media warnings by alerting listeners for an urgent safety message to follow.
- Information Dissemination for Special Needs Groups—Consideration must be given
  to the specific problems of special needs groups. Dissemination to, and receipt of
  information by, many of these groups will pose different challenges, for example,
  language. Neighbours can also help by checking on special-needs people in close
  proximity.

# Warning message essential content

The warning message should be prepared by the agency responsible for controlling the hazard in conjunction with the police and available specialist advice. Information should include:

- the issuing authority;
- the date and time of issue;
- an accurate description of the hazard (what has happened or is likely to happen);
- the area that is likely to be affected immediately by the hazard and any areas that may be affected in the longer term, for example, in the case of flood, areas that will be inundated once levee banks have been over-topped;
- advice to those receiving the warning including:
  - evacuating (including anticipated duration of absence, if known) or staying indoors:
  - risk minimisation measures (if staying);
  - what to bring, for example, medication, or what not to bring, for example, pets, unless advised otherwise:
  - listening to a nominated radio station or watching a nominated TV channel for further advice;
  - securing of premises and personal effects;
  - · evacuation routes;
  - assembly areas;
  - assistance available (transport, medical, relief centres, counselling);
  - referring to 'what to do in a emergency' guide;
  - not using telephone unless absolutely necessary;
  - safeguarding domestic pets and other animals; and
  - translation services available:
- what is being done to control the hazard; and
- the time the next warning will be issued, or advise that no further warning will be issued.

# **Clarity and simplicity**

The warning message must be in clear and simple language. This includes the need to avoid ambiguity, jargon and abbreviations.

# **Special-needs groups**

These include those people whose needs may not be met by general evacuation planning.

# **Planning problems**

Evacuation planning-related problems vary from group to group. For example, some may need more warning time, some will take longer to mobilise, some may not be able to hear the warning, some may lack transportation, some may need assistance to relocate and others may require special medical attention during and after the evacuation.

#### Advance warning

Planning must take into account that some special-needs groups may have to be alerted prior to the execution of actual warning, if time permits, in order to facilitate:

- security of facilities to be evacuated;
- preparation of members of specific groups;
- coordination of support resources;
- special arrangements requested by those in the special-needs groups, for example:
  - notification of relatives/friends;
  - · arrangements for pet care; and
  - · security of personal effects;
- the provision of interpreters;
- any activities peculiar to special-needs groups;
- · information on assembly areas and evacuation centres; and
- any other aspects identified during the consultation process or subsequently.

Special-needs groups may include the following:

#### Health-Related

Hospitals

Nursing homes

Halfway house (drug, alcohol,

mental health)

Mental health institutions

Retirement communities

People with intellectual disabilities

Mobility-impaired Hearing-impaired Visually-impaired

Elderly

# Educational

Day care centres

Pre-schools

Schools

Special schools

Tertiary institutions

#### Other

Nursing-mothers

# Non-English Speaking

Persons

**Tourists** 

Ethnic groups

#### **Animals**

#### **Utilities**

Electricity Gas

Water

# Other Facilities

**Prisons** 

Commercial and industrial Recreation and sporting

Churches Transport

Multi-occupancy

# **Potential methods for disseminating warnings**

#### **GENERAL**

# More quickly disseminated

Radio message: break-ins with community announcement or interviews

Television: crawlers (messages drawn across the screen) or

announcements during news or program breaks.

Scheduled news bulletins: may take longer to go to air.

Notice boards: community or tourist information boards in town centres.

Newspapers: local or regional.

Slower dissemination

# SPECIFIC (ALL POTENTIALLY RAPID)

#### More quickly disseminated

Telephone (and telephone trees or cascades where each person contacted then calls others)

Fax and telex: especially for businesses and institutions.

Computer linkages: as with fax.

Two-way radio: CB (Citizens' Band) radio, or 'packet' radio.

Loud hailers, public address systems or sirens: mobile as with police or fire vehicles, or fixed in one place.

Door-knocking.

Community or ethnic leaders: use of key individuals to access their network

Warden systems: as with community leaders.

Slower dissemination

# 6. WITHDRAWAL

#### Introduction

 Withdrawal is the third stage of the evacuation process and involves the removal of people from a dangerous or potentially dangerous area to a safer area.

# **Roles and responsibilities**

• It is essential that all agencies involved in the 'withdrawal' stage have a clear understanding of their roles and responsibilities. In some States and Territories these are incorporated in legislation or emergency management arrangements.

#### **Considerations**

Some of the key considerations during the planning for withdrawal are:

**Control/Coordination**—the agency that has the authority to order an evacuation may not necessarily carry out the physical evacuation.

**Evacuation priorities**—Lead time will affect the prioritising and allocation of resources. The degree of urgency and/or time constraints within which the evacuation must be completed must be considered in the plan.

**Resources**—(eg transport, personnel and communications)—Limited resources may necessitate greater reliance upon self-evacuation and use of personal transport. However this may cause greater congestion on egress routes. Those least able to look after themselves may have special resources requirements.

**Access/egress routes**—These need to be identified, clearly marked and controlled to facilitate an orderly evacuation and to provide access for incoming personnel and resources.

**Phasing**—Some evacuations will need to be disciplined by phasing to avoid congestion or to ensure that special-needs groups can be evacuated in time. Phasing may be by area, where the plan specifies the sequence in which sub-areas should be evacuated, or by group where the plan specifies the sequence of evacuation of specific elements of the population.

Assembly areas—Although assembly areas will usually only be a temporary stopping point prior to moving evacuees to evacuation centres or alternative accommodation, it will be necessary to provide basic welfare facilities while evacuees are processed (for example, registration and allocation to temporary or nominated accommodation). Assembly areas should be as close to the boundary of the evacuation area as safely possible. Alternatives will also need to be identified.

**Special-needs groups**—These may include aged, infirm, hospital patients, nursing home patients, schools, ethnic groups, and pets (see Chapter 5). Categories will vary depending upon the area to be evacuated and may necessitate special arrangements. The facilities responsible for such special groups, for example, hospitals, should have their own site-specific evacuation plans in place.

**Registration**—This function is an essential requirement for any evacuation and as far as possible should include self-evacuees. Registration assists in provision of welfare services to evacuees and also provides the basis of the inquiry system which may include the National Registration and Inquiry System (NRIS). It can be effected during withdrawal at an assembly area or at an evacuation centre.

**Security of the evacuated area**—This is essential to maintain the confidence of the evacuees and to prevent looting. It is an owner's responsibility in the first instance, and awareness and education programs should highlight this fact

**Withdrawal control point**—The plan should address the need to establish a withdrawal control point in a safe area. Considerations to be addressed when selecting a control point include:

- nature of the hazard;
- distance;
- accessibility;
- weather;
- demography;
- · communications; and
- · services.

**Briefing to commanders of involved organisations**—the evacuation plan must provide arrangements for the person responsible for the evacuation to brief the commanders of all organisations involved in the withdrawal.

#### The briefing should include the following:

- Details of the decision and reasons for the evacuation, including:
  - the hazard, impact and effects;
  - areas to be evacuated:
  - current conditions; and
  - predicted conditions.
  - allocation of tasks and priorities.
- Arrangements for special groups to be evacuated (for example, segregation of incompatible religious groups).
- Access/egress routes—route markings, include radio frequencies/stations to listen to, traffic control and vehicle recovery.
- Location of assembly areas.

- Authority to evacuate and any limitations (for example, claims of pecuniary interest), including ability/desirability of forcible removal.
- Special instructions to evacuees relating to:
  - reason for evacuation;
  - anticipated duration;
  - method of evacuation (own transport, bus, on foot, etc);
  - where to go to and how to get there (assembly areas and evacuation routes);
  - requirement to report to designated assembly areas;
  - personal effects to be or not to be taken, (for example, clothing, medications);
  - securing of premises (may include instructions to switch off power, water and extinguish naked flames);
  - enquiring regarding occupation of neighbouring premises;
  - what arrangements apply to domestic animals (pets) and livestock. A record
    of animals left behind is required to allow for arrangements to be made for
    their care or later removal; and
  - what to do if residents choose not to evacuate, including closing up the premises and remaining indoors, not using telephone, and listening to TV/ radio for further instructions or advise.

**NOTE:** The EMA brochure, 'Emergency! Don't be scared, Be Prepared' which is a guide to household and workplace planning for, and survival during major emergencies, includes guidance on preparedness for evacuees. It is available free, through all State and Territory Emergency Services.

- Records that are to be made of persons evacuated, remaining and their pets.
- Reporting of the completion of evacuation (streets, blocks, and entire evacuation area), thus allowing for the redeployment of resources.
- How the area is to be secured following evacuation, including road closures, and security patrols.

# 7. SHELTER

#### Introduction

Shelter is the fourth stage of the evacuation process and involves provision of the basic needs for affected people away from the immediate or potential effects of the hazard.

Shelter provides for the temporary respite of evacuees. It may be limited in facilities, but must provide protection from the elements as well as accommodate the basic personal needs which arise at an individual level in an emergency.

Shelter, in the context of evacuation, may include:

- assembly areas which cater for people's basic needs;
- evacuation centres;
- one-stop shops; and
- · temporary accommodation.

Areas and centres should be planned to be established at well known, accessible, easily recognisable sites within the community.

# **Roles and responsibilities**

The plan must allocate responsibility for management of each of the elements of shelter. Considering the wide range of services, agencies and issues to be managed, it becomes essential for 'shelter' to be managed within a structure which facilitates the coordination of agencies and services and support of emergency workers.

There is a need for agreed management and service delivery arrangements for all welfare agencies and services. Each provider must accept and implement the delegated tasks to avoid over/under or inappropriate servicing.

Coordination of the separate task areas is usually directed by State and Territory community service agencies.

#### **Considerations**

Important planning considerations to be addressed during this stage include the following:

• **Identification of appropriate shelter areas**—this should be based on safety, availability of facilities, capacity and numbers.

- Acquisition agreements—These should be sought for the use and acquisition of schools, community or sporting complexes and private buildings for shelter.
- Shelter location—This will be dependent on the type and severity of the hazard impact.
  Possible sites should be identified in the planning stages with the details of contact
  personnel who are to be accessible 24 hours a day. This must be done in consultations
  with the emergency service organisations.
- Legal aspects/insurance of buildings and users—Council or government buildings
  are usually covered by public liability insurance when used for evacuation purposes.
  When other than government buildings are planned for use, a check should be made
  with the owner or agent. If insurance coverage does not exist, appropriate cover must
  be arranged prior to use of the facility.
- Access/egress—Vehicular access and egress must be planned to accommodate contingencies arising from the incident and convergence of private, service and public vehicles.
- **Transport services**—Additional transport facilities for displaced persons may be required to re-unite them with family and friends.
- Vehicle assembly areas—These should be identified in accordance with needs.
   Consideration should be given to changed conditions due to the hazard itself, the volume of traffic and weather.
- Existing facilities and utilities—These must provide for:
  - sanitation;
  - water:
  - electricity;
  - communications (for example telephone, computers, faxes); and
  - storage.
- Catering services—These should be mobile and multi-functional, able to provide various forms of refreshment and/or meals to all affected people, including emergency service personnel.
- **Medical support**—This should include first aid, medical advice and emergency evacuation (medivac).
- Security—Store and equipment (include telephones, computers, fax machines, photocopiers and office material and equipment) will require secure accommodation. Evacuees and workers will require isolation from spectators, media and unsolicited helpers.
- Convergence management—This should address the possibility of convergence of media, victims, workers, politicians, goods, cash donations, and the influx of authorised and other vehicles over an extended period of time.

- Registration—This must include self-evacuees as far as possible. It can be conducted
  in a number of locations including assembly areas and evacuation centres. Where
  registration occurs in more than one area there will be a need for coordination. The
  evacuation plan must allocate responsibility for this function. Activation of the National
  Registration and Inquiry System (NRIS) may be appropriate depending on the scale of
  the evacuation.
- Briefing and debriefing—Those attending to the evacuees' needs will require
  operational briefing, debriefing and/or counselling. Depending on the conditions, each
  agency may also require personal debriefing staff.
- **Rostering**—The rostering of personnel should receive special attention to ensure adequate rest, meal breaks and rotation of tasks.

# **Assembly areas**

These are usually a temporary stopping point prior to moving evacuees to evacuation centres or alternative accommodation. They may provide minimal service (registration, light refreshment, personal support and destination check), but the facilities available would depend upon the nature of the hazard.

#### **Evacuation centres**

As well as providing basic human needs including accommodation, food and water, these facilities should also provide a greater range of welfare and support services. This will help facilitate the recovery process.

Services provided may include:

- registration;
- financial and immediate assistance;
- counselling;
- temporary accommodation;
- first aid;
- food:
- clothing, blankets, linen and bedding;
- · information and referral services;
- assistance in completing applications for:
  - Commonwealth pensions and benefits;
  - disaster relief; and
  - other related schemes;
- point of application for insurance and advice;
- employment advice and referral interpreter service;
- housekeeper services, referral staff/volunteer help, including child-minding service;

- physical assistance, such as cleaning and debris removal;
- transport;
- arrangements for pets;
- arranging for rubbish removal from the shelter; and
- · legal services.

These additional services may be provided at the evacuation centre, or alternatively at a suitable venue nearby, easily accessible to both people staying at the evacuation centre and others affected by the hazard.

# 'One-stop shops'

Evacuation centres provide a solution to short-term accommodation problems while longer-term alternatives are determined. However, following the closure of evacuation centres there will still be a need for the continuation of many of the support service provided. Consequently, consideration should be given to converting suitable facilities into relief services centres, commonly referred to as 'one-stop shops'. These are established to provide a range of short and intermediate-term service.

When establishing these facilities the preferred option is to collocate services within the one location. If this is not possible a single centre should provide a referral point for all services thus enabling people to access a multiplicity of services with a minimum of inconvenience.

Responsibility for the establishment and management of one-stop shops varies in each State or Territory but should rest with the lead recovery agency. The establishment of a one-stop shop should be undertaken in consultation with the agency responsible for the establishment and management of evacuation centres. This will ensure that the most appropriate site, venue and facilities are utilised.

When selecting a site for a one-stop shop, considerations should include:

- capacity;
- · power, sewerage and water;
- communication;
- long-term availability;
- catering;
- access/egress;
- proximity to transport; and
- car parking.

A one-stop shop performs a comprehensive range of recovery services. Such a centre is usually, but not necessarily, set up in cooperation with local government. By providing services in this manner it is possible to minimise travel and inconvenience to people affected by the hazard impact and maximise coordination and liaison between relief and recovery services. It is essential that they be easily accessible, well advertised and properly staffed. In establishing a one-stop shop, early identification and liaison with other participating agencies is essential.

Adequate communication, catering, toilet and other services and facilities are essential. This will minimise confusion, congestion and practices which promote an atmosphere of 'people proceeding.'

Evacuation centres may evolve into one-stop shops.

# **Temporary accommodation**

When the evacuation of an area is to be for a protected period there will be a need to provide temporary accommodation of a more substantial nature. This may involve the following:

- Liaison and negotiation with a wide range of government and non-government agencies for the provision of accommodation such as:
  - hotel or motel accommodation;
  - caravans, mobile homes;
  - hostels; and
  - specially constructed temporary accommodation.
- Provision of financial assistance measures.
- Establishment of an information service.
- Making personalised accommodation arrangements, where appropriate, taking into account considerations such as:
  - many displaced persons prefer to remain as close to their vacated home site as possible;
  - disruption to individuals and families work, school, social and domestic arrangements should be minimised;
  - temporary accommodation arrangements should be of a suitable standard to cope with conditions anticipated to apply before re-establishment (for example some types of temporary accommodation may not be suitable for occupancy during winter);
  - the length of time people may be required to live in temporary accommodation;
  - temporary accommodation arrangements should allow for a smooth transition to permanent accommodation at the earliest possible time; and
  - local business should be used whenever possible to provide temporary accommodation and associated services as this will assist in the overall recovery of the community.

#### Other factors

In provision of shelter special consideration should be given to the following:

- Family groups should be kept together, as this provides them with the security of mutual support and removes the anxiety experience when family groups are split. This approach should be observed as far as possible in all stages of evacuation and needs to be considered should one member of the group require special treatment which would normally require separation.
- Assistance for groups with identified special needs and those of different cultural, ethnic or religious identities.
- Isolated individuals who may be reluctant or unable to cooperate in an evacuation.
- Pets, which may be of such importance that the evacuee will deny rescue, and which may have to be evacuated with the owner.

# 8. RETURN

#### Introduction

Return is the fifth and final stage of the evacuation process. It will be necessary to assess the disaster area to determine if return is possible and identify any special conditions which may need to be imposed.

# **Roles and responsibilities**

As the return process is complex and may be protracted, it is imperative that the plan clearly identifies roles and responsibilities of the many agencies involved.

#### **Considerations**

Once the hazard which necessitated the evacuation no longer exits, return to the evacuated area can be considered. There are a number of considerations which need to be taken into account in planning this stage.

#### **Affected area assessment**

A detailed assessment of the affected area must be completed before a decision is made to return evacuees. The assessment should include consideration of:

- the presence of the hazardous condition;
- the possibility of the hazard impact recurring;
- the safety of the structures including:
  - accommodation;
  - · utilities; and
  - transport facilities;
  - · security;
- availability of suitable facilities including:
  - accommodation—permanent or temporary;
  - utilities—permanent or temporary; and
  - hygiene facilities—permanent or temporary.

#### Evacuees return criteria

Assessment of evacuees' mental state and physical health should be undertaken prior to their return. The time that evacuees have been away from the area and their new circumstances may make some evacuees decide not to return to the area. It is also likely that some will also have re-settled in new permanent accommodation far from the evacuated site.

The distance from the temporary shelter to the affected area is also a consideration in deciding whether the evacuees are returned direct or in stages.

#### **Economic factors**

An assessment will be required of the economic factors involved in the return of evacuees. The factors to be considered include:

- viability of pre-existing industrial organisations in the affected areas;
- condition and viability of commercial, financial, legal and insurance assistance and rebuilding; and
- after-care.

Before evacuees can be returned, a number of support service will need to be provided. These should be arranged locally and include:

- management and security of unsafe structures;
- provision of temporary utilities and/or replacement of permanent facilities;
- resumption of normal services (power, water, sewerage, communication);
- provision of welfare services including counselling and health services;
- financial services including insurance, banking and government services;
- a formal communication mechanism to inform relocated evacuees of aspects of resettlement; and
- continuing counselling.

The social and spiritual needs of the returned evacuees will also need to be considered and measures instituted to ensure the structure and viability of the society is restored.

# **Recovery manual**

The Australian Emergency Manual Number 10, Recovery, should be used as a reference for the ongoing recovery of any affected community.