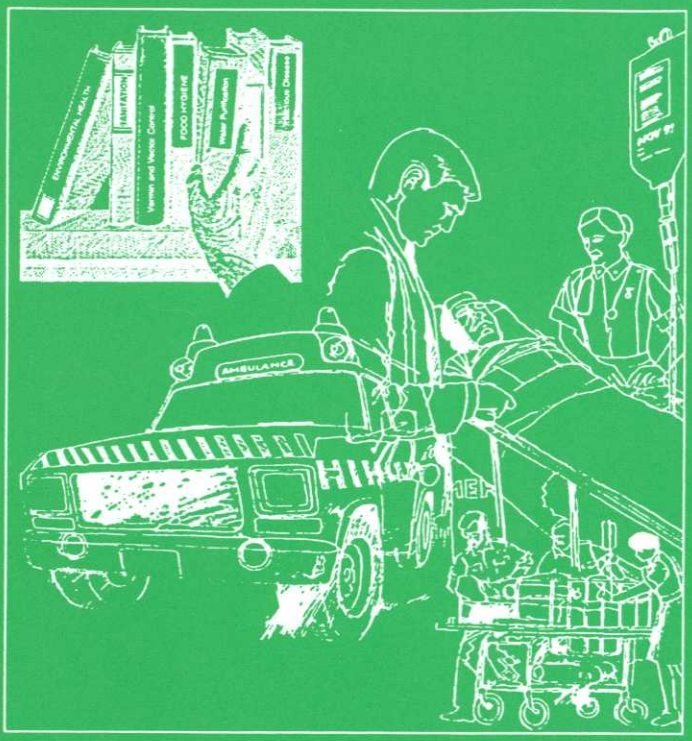
AUSTRALIAN EMERGENCY MANUAL

DISASTER MEDICINE



EMERGENCY MANAGEMENT AUSTRALIA

AMENDMENT LIST

Amendment		Effected	
No	Date	Signature	Date

FOREWORD

THE PURPOSE OF THIS MANUAL IS TO PROVIDE A BASIC REFERENCE FOR MEDICAL AND HEALTH PROFESSIONALS IN DISASTER MEDICINE. IT IS INTENDED FOR USE IN PLANNING, TRAINING AND OPERATIONS BY ALL HEALTH PERSONNEL

THIS MANUAL HAS BEEN DEVELOPED BY A NATIONAL CONSULTATIVE COMMITTEE (NCC), REPRESENTATIVE OF HEALTH PROFESSIONALS LEARNED BODIES, STATES AND TERRITORIES, AND SELECTED COMMONWEALTH ORGANISATIONS

THE NCC WAS INITIATED BY THE NATIONAL DISASTER RELIEF (HEALTH) COMMITTEE OF THE DEPARTMENT OF HUMAN SERVICES AND HEALTH, AND IS SPONSORED BY EMERGENCY MANAGEMENT AUSTRALIA, DEPARTMENT OF DEFENCE

AS SITUATIONS CHANGE AND NEW POLICY PROCEDURE IS DEVELOPED, THE MANUAL WILL BE AMENDED AND UPDATED BY THE NCC

PROPOSED CHANGES SHOULD BE FORWARDED TO THE DIRECTOR GENERAL, EMERGENCY MANAGEMENT AUSTRALIA AT THE ADDRESS SHOWN BELOW

THE MANUAL IS ISSUED IN LOOSE-LEAF FORM TO FACILITATE AMENDMENT AND INSERTION OF INDIVIDUAL ORGANISATIONAL SUPPLEMENTS.

DUPLICATION DOES OCCUR IN SOME AREAS, WITH THE AIM OF PERMITTING THE USER TO GAIN THE DESIRED INFORMATION FROM INDIVIDUAL OR MULTIPLE CHAPTER REFERENCES WITHOUT HAVING TO SCAN THE ENTIRE MANUAL.

THE USE OF TRADE NAMES IN THIS MANUAL IS NOT INTENDED TO BE RESTRICTIVE, PREFERENTIAL OR PROMOTIONAL. RATHER, TRADE NAMES ARE USED WHERE DESCRIPTIVE CLARITY IS REQUIRED

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PREFACE

In recent times much attention has been focused on generic emergency management. This document concentrates on the important aspects of the preservation of life, the effective management of the injured, and the restoration of the general health and well-being of the affected community

Some years ago sections of the medical profession approached the Federal Government for assistance with the training of medical practitioners, particularly in rural and remote areas, to handle mass casualty situations, where resources are often overwhelmed

Following discussion between Emergency Management Australia and the Commonwealth Department of Human Services and Health, a special working party was set up under the auspices of the National Disaster Relief (Health) Committee. The body, known as the Training of Health Professionals in Disaster Medicine Working Party, comprises selected experts from the States and Territories, and the Commonwealth, in a wide range of relevant professions

The Working Party decided to develop a series of training aids, to be known as the Australian Disaster Medicine Training Package, which is to be widely disseminated free of charge, to approriate organisations throughout the nation, to facilitate education and training in disaster medicine.

Already two video tapes have been made - 'You Can Make a Difference', which is directed specifically at the medical profession, and 'Disasters are Different', especially produced about Australian disasters and major incidents.

The key development within the Package is the **Australian Emergency Manual - Disaster Medicine**. The next step will be the production of a video tape on 'Mass Casualty Management', based directly on the doctrine espoused in the Manual. The final action will cover the very important public health aspects of disasters.

All components are of a stand alone capability, and already the video tapes have been widely disseminated, both within Australia and internationally Similar action will take place with the Manual.

Many contributors right across the country should be thanked for their time and input with the development of this Manual. The third Draft was circulated to over 150 organisations and selected individuals, with a four month comment period.

It is pleasing to record that the Commonwealth Department of Human Services and Health has covered the actual printing cost of the Manual, although the most significant portion of the project funding has been borne by Emergency Management Australia.

Finally, any enquiries concerning the Package should be directed to The Secretary, National Disaster Relief (Health) Committee, c/- Commonwealth Department of Human Services and Health, GPO Box 9848, CANBERRA ACT 2601.

DON. J WITHERS
SECRETARY
NATIONAL DISASTER RELIEF (HEALTH) COMMITTEE
JANUARY 1995

COMMONWEALTH
DEPARTMENT OF
HUMAN SERVICES
AND HEALTH

INTRODUCTION

AIM

THE AIM OF THIS PUBLICATION IS TO PROVIDE A BASIC REFERENCE FOR MEDICAL AND HEALTH PROFESSIONALS IN DISASTER MEDICINE.

DEFINITION

IN PRACTICAL TERMS, DISASTER MEDICINE INVOLVES THE MODIFICATION AND EXPANSION OF HEALTH AND MEDICAL CAPABILITIES TO COUNTER A SITUATION WHICH HAS THE POTENTIAL TO OVERWHELM THE SERVICES IN-SITU

IN DEFINITIVE TERMS THIS MAY BE EXPRESSED AS.

> 'THE STUDY AND COLLABORATIVE APPLICATION OF VARIOUS HEALTH DISCIPLINES TO THE PREVENTION, PREPAREDNESS, RESPONSE AND RECOVERY FROM THE HEALTH PROBLEMS ARISING FROM DISASTER. THIS MUST BE ACHIEVED IN CO-OPERATION WITH AGENCIES AND DISCIPLINES INVOLVED IN COMPREHENSIVE DISASTER MANAGEMENT.' (ADAPTED FROM GUNN, S.W.A.: **MULTILINGUAL DICTIONARY OF DISASTER MEDICINE AND INTERNATIONAL RELIEF.** THE NETHERLANDS KLUWER ACADEMIC PUBLISHERS, 1990, ISBN 0 89838 409 5)

FORMAT AND PHILOSOPHY

THE MANUAL HAS BEEN STRUCTURED IN STAND-ALONE SECTIONS SPECIFIC TO PREVENTION, PREPAREDNESS, RESPONSE AND RECOVERY. ACCORDINGLY, DUPLICATION DOES OCCUR IN SOME AREAS, PERMITTING THE USER TO GAIN INFORMATION FROM INDIVIDUAL OR MULTIPLE CHAPTER REFERENCES WITHOUT HAVING TO SCAN THE ENTIRE CONTENT.

AUSTRALIAN EMERGENCY MANUAL
DISASTER MEDICINE

SECTION ONE

DISASTER MANAGEMENT

CHAPTER ONE

DISASTER CONCEPTS AND EFFECTS

INTRODUCTION

1.01 DEFINITIONS

The Concise Oxford Dictionary defines disaster as a 'sudden or great misfortune, calamity (or) complete failure'. For example, the unexpected loss of family members in an accident would be regarded by that family as a disaster. However, professionals involved in disaster management would probably describe the event as an accident or an incident For our purposes, **disasters can be said to have occurred when normal community and organisational arrangements are overwhelmed by an event and extraordinary responses need to be instituted.**

1.02 HAZARDS

Australian communities live with a variety of hazards, natural and technological. Natural hazards include all those of climatic, geophysical or biological origin, while technological hazards include those arising from nuclear/biological/chemical technology, human fault and hostile action.

1.03 The presence of some major natural hazards, such as cyclones and bushfires depends on the season and geographic region, but other types of hazards, particularly those made by humans, are less predictable, and could impact almost anywhere.

1.04 DISASTER COSTS

While Australia cannot be regarded as disaster-prone in world terms, the cost of disasters which have affected this country in loss of life, injury, and particularly property destruction and social and economic loss, has been significant. The cost can be expected to increase unless effective measures are taken to prepare for disasters

PRINCIPLE

Interest in disaster preparedness is proportional to the magnitude and date of the last disaster.

1.05 DISASTER MANAGEMENT

Disaster Management embraces **prevention, preparedness, response** and **recovery** and advocates the development of counter-disaster programs to cater for all of them.

a. **Prevention/Mitigation** - The first element is designed to prevent or to reduce (mitigate) the severity of impact.

b **Preparedness** - The second element is designed to ensure the preparedness of the community.

c **Response** - The third element is designed to provide an effective response should impact occur

d **Recovery** - The fourth element is designed to provide for the recovery of the affected community

MEDICAL ASPECTS

1.06 IMMEDIATE RESPONSE

Up to 80% of persons injured in most disasters usually require only routine treatment for superficial injuries such as bruising and abrasions Up to 20% are likely to suffer from a single major injury such as a fracture. Frequently, less than 10% are severely injured. Most of the serious injuries occur as an immediate outcome of the impact of the disaster and demand immediate attention

1.07 The medical disaster response will be directed not only by the type and intensity of the disaster, the population density and the preparedness of the local community but also by the geographical spread of the disaster impact and the extent of any warning.

1.08 MONITORING

In every disaster, the resulting psychological effect upon both victims and rescuers must be monitored.

RANGE OF DISASTERS

1.09 The following summary notes refer to disasters which may occur in the Australian region. This area is likely to experience natural disasters resulting from tropical cyclones, fires and floods during the relevant regional season. Earthquakes, as impact-type disasters, may occur at any time and with little or no warning. In addition, technological disasters are also likely to occur in the form of chemical, biological and nuclear incidents, fires and transport incidents. Terrorist-instigated incidents, while difficult to quantify in terms of probability, have the potential to develop into disasters which may stretch or overcome available medical and health response capabilities. Finally, well-meaning but misguided efforts by relief workers in and from other regions may exacerbate incidents into full-blown disasters Notes relating to these hazards are arranged in alphabetical order of hazard identification rather than by one of the conventional taxonomies. The issue of terrorist-initiated is deliberately left to last, due to the difficulty in assessing the probability of occurrence.

SPECIFIC TYPES OF DISASTERS

1.10 NATURAL DISASTERS

a. **Cyclone**

(1) LOCATION - Generalised, mainly in Torrid Zone coastal areas.

(2) WARNING - Some, can be identified by satellite and tracked by radar

(3) MECHANISM OF ACTION - A cyclone can be described as a wind system rotating around an atmospheric low pressure system over tropical waters. Cyclones produce winds of very considerable velocity together with torrential rain Rescue during the cyclone is almost impossible. A storm surge may also be generated with the potential to cause massive damage. The Great Barrier Reef protects the east coast of Australia from tsunamis (seismic sea waves) but not from storm surges

(4) EFFECT ON ENVIRONMENT

(a) Community infrastructure and public utilities damaged

(b) Habitation damage.

(c) Crop damage.

(d) Flash flooding.

(5) EFFECT ON PEOPLE

(a) Severe winds cause few deaths regardless of where they occur, though flying debris frequently causes traumatic injuries

(b) Storm surges may cause drowning or injury

(c) Risk of water or vector-borne diseases may be aggravated or reduced.

(d) Many may be made homeless.

(e) Public health problems associated with water supply, hygiene and sanitation

b. **Earthquake**

(1) LOCATION - Generalised.

(2) WARNING - None.

(3) MECHANISM OF ACTION

(a) *Intraplate Earthquakes* - All earthquakes in Australia are intraplate earthquakes, which means that they are infrequent but can cause damage when they do occur.

(b) *Plate Margin Earthquakes* - Occur in the Philippines, Indonesia and New Zealand These may be more frequent and generally have more aftershocks. Tsunamis (seismic sea waves - often incorrectly called tidal waves) may occur.

(4) EFFECT ON ENVIRONMENT

(a) Buildings may collapse. Unreinforced masonry fails first. In Australia there is a gradient of damage over cavity brick, brick veneer and timber structures, with cavity brick sustaining most damage and timber the least In developing countries, adobe structures fare the worst.

(b) Heavy dust occurs around collapsed buildings.

(c) Underground lines (power, water, gas, sewerage) may break.

(d) Fires frequently occur

(e) Chemical spills may occur

(5) EFFECT ON PEOPLE

(a) The collapse of buildings results in traumatic injuries

(b) Heavy dust can be life-threatening especially for trapped casualties and, to a lesser extent, rescue personnel.

(c) High risk people are the very young, the elderly, the chronically ill and the disabled.

(d) Trapped people rarely survive beyond 24 hours and seriously ill beyond 6 hours

(e) Increase in prevailing disease rates unlikely

(f) Many may be made homeless.

(g) Public health problems associated with water supply, hygiene and sanitation

c. **Fire**

(1) LOCATION

(a) Generalised; such as bushfires

(b) Localised; such as structure fires.

(2) WARNING - May be some.

(3) MECHANISM OF ACTION - Can occur by spontaneous combustion, naturally or be human-made but can be part of another incident such as chemical disaster or earthquake

(4) EFFECT ON ENVIRONMENT - Devastation of crops, pastures and buildings.

(5) EFFECT ON PEOPLE

(a) Burn injuries may result.

(b) Smoke inhalation often results in many deaths, since casualties are often asphyxiated before heat or flames affect them directly.

(c) Poisoning may occur from toxic gases such as carbon monoxide, cyanide, chlorine and ammonia.

(d) Many may be made homeless

(e) Public health problems associated with water supply, hygiene and sanitation.

d. **Flood**

(1) LOCATION

(a) Generalised.

(b) Localised in some cases

(2) WARNING - A few days warning is usually available with generalised flooding. There be little warning in flash floods, which tend to be localised.

(3) MECHANISM OF ACTION - Floods can be coastal floods (including tsunamis), river floods or flash floods, which occur within a few hours of heavy rain, or a dam burst

(4) EFFECT ON ENVIRONMENT

(a) Fast flowing water accompanied by debris.

(b) Cars washed away.

(c) Some buildings collapse and are washed away

(d) May cause operative disruption to water-purification and sewerage treatment systems.

(5) EFFECT ON PEOPLE

(a) Fast-flowing water and debris can result in traumatic injuries and drowning

(b) Cars washed away may result in drowning situations

(c) High risk people are those trying to escape in cars and the elderly, who are less likely to evacuate, even if adequate warning is received.

(d) Outbreak of infectious disease is uncommon, but can occur.

(e) Loss of access to fresh food supplies

(f) Many may be made homeless.

(g) Public health problems associated with water supply, hygiene and sanitation

1.11 TECHNOLOGICAL DISASTERS

a Chemical Incident

(1) LOCATION

(a) Generalised if chemical is waterborne or airborne.

(b) Localised if spillage only occurs.

(2) WARNING - None.

(3) MECHANISM OF ACTION - The mechanism depends on the chemical. It can be a direct spill, can leach into the water supply or can be airborne

(4) EFFECT ON ENVIRONMENT

(a) Fire may occur.

(b) Explosion may occur.

(c) Air may be polluted.

(d) Water may be polluted

(e) Local contamination occurs

(5) EFFECT ON PEOPLE

(a) Effect depends on:

(i) toxicity of chemical;

(ii) route of exposure, i.e. the chemical may be inhaled,ingested or absorbed through skin; or

(iii) dose of exposure.

(b) Exposure may be:
  (i) direct, affecting workers at the site, rescuers and adjacent community; or
  (ii) indirect, affecting distant communities.

(c) Evacuation of people near the site may be required.

(d) Most toxicological incidents will result in a large number of casualties with the same clinical syndrome produced by a single chemical. The casualties will vary in the extent of their exposure.

b. **Nuclear Incident**

(1) LOCATION - Localised.

(2) WARNING - None.

(3) MECHANISM OF ACTION - Release of radioactive substances into the environment occur if safety systems fail, or if human error is present. Such release can also occur as a result of the impact of a natural disaster such as an earthquake.

(4) EFFECT ON ENVIRONMENT

(a) The plume of airborne particles may result in radioactive contamination.

(b) Water supply may be contaminated.

(c) Food chain may be contaminated.

(5) EFFECT ON PEOPLE

(a) Effect depends on:
  (i) type of radiation;
  (ii) route of exposure - the radioactive particles may be inhaled, ingested or absorbed through the skin; and
  (iii) dose of exposure.

(b) Exposure may be:
  (i) direct, affecting workers at the site, rescuers and adjacent community; or
  (ii) indirect, affecting distant communities.

(c) Evacuation of people near the site frequently required.

(d) Long term effects include carcinogenicity and teratogenicity.

c. **Terrorist-Instigated Events**

(1) LOCATION

(a) Localised

(b) Diverse

(2) WARNING - Probably little or no advance warning; there may also be a reluctance by authorities to publicise terrorist threats until such time as there is a very real possibility of a disaster.

(3) MECHANISM OF ACTION - This will usually be in the form of a threat or threats. The actual event can vary from simple bomb blasts, through pollution of the atmosphere (both general and in specific buildings), water and power supplies. There may also be variation in the size of geographical regions and concentrations of population affected.

(4) EFFECT ON ENVIRONMENT

(a) Devastation of the immediate environment.

(b) Flying debris.

(c) Buildings collapse.

(d) Mass evacuation, either voluntary or controlled, and with scope for associated panic.

(e) Introduction of nuclear, biological or chemical contamination and associated problems of identification, isolation/evacuation, treatment and decontamination. In most cases, the national medical capabilities in these areas are sparse to non-existent.

1.12 TRANSPORT DISASTERS

a. **Aircraft**

(1) LOCATION - Localised.

(2) WARNING - May be some.

(3) MECHANISM OF ACTION - Can be mechanical failure, human error or sabotage.

(4) EFFECT ON ENVIRONMENT

(a) Devastation of the immediate environment.

(b) Flying debris.

(c) Fire frequently occurs.

(5) EFFECT ON PEOPLE

(a) Mid-air explosion or collision normally leaves no survivors in aircraft, and causes traumatic injuries to those affected on the ground.

(b) Ground explosion or crash may leave injured survivors both in the impact area and in the aircraft or wreckage.

b. **Motor Vehicle**

(1) LOCATION - Localised.

(2) WARNING - None.

(3) MECHANISM OF ACTION - Usually depends on driver, road and vehicle (in decreasing order of importance). Speed and alcohol are prominent contributors to road deaths.

(4) EFFECT ON ENVIRONMENT

(a) Fire may occur.

(b) Chemical spill may occur.

(5) EFFECT ON PEOPLE - Vehicle crash results in traumatic injuries, especially head and thorax injuries.

c. **Shipping**

(1) LOCATION - Localised.

(2) WARNING - May be some.

(3) MECHANISM OF ACTION - Can be mechanical failure, human error or sabotage.

(4) EFFECT ON THE ENVIRONMENT

(a) Fire may occur.

(b) Chemical spill may occur.

(5) EFFECT ON PEOPLE - Shipwreck results in traumatic injury, hypothermia, drowning

d. **Rail**

(1) LOCATION - Localised.

(2) WARNING - May be some.

(3) MECHANISM OF ACTION - Can be mechanical failure, human error or sabotage.

(4) EFFECT ON ENVIRONMENT

(a) Fire may occur.

(b) Chemical spill may occur.

(5) EFFECT ON PEOPLE - Train crash results in traumatic injury.

INTERNATIONAL ASPECTS

1.13 INAPPROPRIATE RESPONSE

Specific problems may occur due to the nature of some international response mounted to provide assistance to a disaster-affected community. Such response could generate problems in the host community due to:

a. wasteful and inefficient international deployment of aid;

b. the necessity to identify, store and distribute large quantities of food, medical supplies and other goods at a time when some infrastructures may have broken down;

c. the receipt of useless supplies eg. time-expired pharmaceuticals;

d. the need to provide accommodation and sustenance and sometimes interpreters for relief workers; or

e. failure of international relief workers to take into account important local conditions and customs.

REFERENCE

Emergency Management Australia: **Australian Counter-Disaster Handbook - Volume 1: Commonwealth Counter-Disaster Concepts and Principles.** ISBN 0 642 19581 1

CHAPTER TWO

HIERARCHICAL OVERVIEW

NATIONAL/COMMONWEALTH POLICY-MAKING AUTHORITIES

2.01 EMERGENCY/DISASTER MANAGEMENT

The peak national policy body is the National Emergency Management Committee (NEMC). Chaired by the Director General, Emergency Management Australia (DGEMA), it comprises the Chairperson and Executive Officers of the State/Territory counter-disaster or emergency managment organisations.

2.02 HEALTH DISASTER POLICY AND PLANNING

In the national health disaster policy development area, input from the all State/Territory and Commonwealth Expert Working Group (Australian Medical Disaster Coordination Group (AMDCG) of the Australian Health Ministers' Advisory Council) strongly impacts on the development of national policy.

2.03 In the Commonwealth area, the administrative advisory and planning body is the National Disaster Relief (Health) Committee (NDR(H)C), chaired by the Secretary, Commonwealth Department of Human Services and Health. Membership includes involved Commonwealth Departments and Agencies and a Panel of Consultants from all State and Territory Health Authorities, Learned Medical and Health Colleges, and selected associated bodies and professions. DGEMA is a member of the NDR(H)C.

2.04 Most State and Territory health authorities have parallel policy-making bodies.

2.05 Policy is determined within the above organisations and disseminated downwards to regional and local levels.

NATIONAL/COMMONWEALTH OPERATIONAL AGENCIES

2.06 While there is nothing to prevent State and Territory health authorities from establishing direct operational liaison with equivalent Commonwealth facilities within their borders, or indeed for the NDR(H)C to deal directly with a State or Territory which has requested assistance, there is an established and recognised Commonwealth operational authority in the form of Emergency Management Australia (EMA). EMA, through its Director General, is responsible for the coordination of Commonwealth physical assistance to States and Territories in the wake of a disaster - in the event that State/Territory or commercial resources cannot meet the requirement.

2.07 COMMONWEALTH ASSISTANCE

Coordination of Commonwealth assistance is effected through the National Emergency Management Coordination Centre (NEMCC), the operational element of EMA. Through a network of Disaster Service Liaison Officers (DSLOs), the NEMCC has total call on all Commonwealth resources and, through the DSLOs, such commercial assistance as may be deemed necessary. All such responses are at no cost to the recipient State or Territory.

2.08 All States and Territories have a nominated officer or officers, authorised to request Commonwealth assistance. They are, in general the Police Commissioners, who may in turn delegate the responsibility downwards to the equivalent of the State Counter Disaster Council's Executive Officer. It is highly desirable, indeed mandatory, that **all** State and Territory requests for assistance be formally made via this established procedure. This does not, and should not, preclude direct liaison contact between operational health agencies but it is **essential** that the established State/Territory/Commonwealth operational agencies be kept fully informed.

PRINCIPLE

Under the Commonwealth of Australia Constitution Act the management of disasters or a major incident is a State/Territory responsibility.

STATE/TERRITORY OPERATIONAL AGENCIES

2.09 STATE EMERGENCY OPERATIONS CENTRES

The NEMCC is mirrored in each State and Territory by an equivalent operational authority responsible for oversight and implementation of the appropriate disaster plan, through the State Emergency Operations Centre or its equivalent. Nomenclature varies according to State and Territory legislation, and emergency/disaster planning policies, but the end product is the activation of an operations centre capable of command/control/coordination of all resources required to deal with the disaster.

2.10 The key officer at State/Territory level, for medical/health operations, is the Medical Controller. This officer is mirrored at regional level by a Regional Medical Controller and at the disaster site by a Field Medical Controller. In some instances, due to State or Territory procedures, the description may change but the role and responsibility remains the same. Refer to Glossary for State by State nomenclature.

REQUESTS FOR ASSISTANCE

2.11 PROCEDURE AND CONTENT

It is most important that all officers involved in the development of a request for medical/health assistance from the Commonwealth understand the procedure for making such a request. The following points **must** be noted:

a. The request must be couched in the form of the problem, ie do NOT specify the solution in other than very general terms. To ask for a specific and identified surgical team or resource for example, is inadvisable, since that team or facility may have already been deployed elsewhere.

b. Identify the weight and dimensions and any special storage/handling requirements (in the case of stores).

c. Nominate the personnel skills required, not the individuals.

d. Nominate the delivery point, a contact officer at both State and receiving area levels, plus telephone and facsimile numbers (where available).

e. Accord a priority on a scale of 1 to 10 (1 being the highest priority) and indicate the deadline time for delivery.

f. In the case of personnel and equipment, indicate the duration of the requirement.

REFERENCE

Emergency Management Australia: **Australian Counter-Disaster Handbook - Volume 1: Commonwealth Counter-Disaster Concepts and Principles**. ISBN 0 642 19581 1

CHAPTER THREE

LEGAL ASPECTS AND FINANCE ADMINISTRATION

PROFESSIONAL REGISTRATION

3.01 Professional registration is a State/Territory responsibility. Recent decisions with respect to Mutual Recognition will facilitate the registration process between States/Territories and has provided for a National Compendium of Registers but there will still be a need for registration on an individual State/Territory basis

3.02 To cover the activities for emergency, retrieval or organ acquisition purposes, Boards require some form of registration either by 'deeming' or actual registration.

INDEMNITY

3.03 NEGLIGENCE CLAIMS

The Commonwealth, States and Territories do not provide protection from claims of negligence against health care workers providing emergency care.

3.04 Employees may be covered by the vicarious liability of their employer where participation in activities of a counter disaster nature is included as part of their position description.

3.05 Some protection may be provided by relevant Emergency Management or Disaster Legislation when the powers under that legislation are invoked.

3.06 TEST CASES

Cases tested under common law make no distinction in an emergency situation as to the level of care to be exercised by a person rendering that care. Under Common Law, the test of reasonable care will be made within the circumstances prevailing at the time the care was provided. It is clearly a different environment in a field when compared to a well equipped resuscitation bay.

3.07 Some actions might lead to prosecution under criminal law if considered to be criminally negligent or assault.

3.08 MANDATORY COVER

Some State/Territory Registration Boards are moving towards mandatory indemnity cover for all registrants. It is, therefore, incumbent on individuals to ensure that they are indemnified and for employers to ensure they provide for employees who may be involved in counter disaster activities.

FINANCIAL ADMINISTRATION

3.09 Costs incurred by providers of emergency care will be met from within existing budgets unless some other provision is made. States/Territories provide in their Emergency or Disaster legislation, for additional expenditure incurred following the implementation of that legislation. However, it should be remembered that these powers require formal declarations as provided in the legislation before having any effect.

PRINCIPLE

The best time to submit disaster preparedness programs for funding is right after a disaster (even if it has occurred elsewhere).

COMMONWEALTH FINANCIAL RESPONSIBILITIES

3.10 DISASTER RELIEF

The Commonwealth/State Agreement for financial relief under the Natural Disaster Relief Arrangements (NDRA) provides for special assistance if State/Territory outlays on disaster relief exceed a figure which is negotiated annually. Full details of the scheme appear in the booklet 'A Guide to the Natural Disaster Relief Arrangements', available from the Natural Resources and Energy Section, Department of Finance, Treasury Building, Newlands Street, Parkes, ACT 2600. Information contained in the booklet includes details of the following:

a. Administration

b. Eligible measures

c. Guidelines

d. Funding

e. Expenditure

3.11 DISASTER RESPONSE

The management of disasters or major incidents is a State/Territory responsibility. The Commonwealth, apart from a watching brief, will become involved and provide resources only following a direct request from the State/Territory. This request is usually made between the State Co-ordinator and Emergency Management Australia which, following Federal Ministerial approval co-ordinates the provision of resources funded totally by the Commonwealth.

3.12 Where deemed necessary the full resources of the Commonwealth may be made available at no cost to the requesting State/Territory but only when the State/Territory resources are fully committed.

AUSTRALIAN EMERGENCY MANUAL
DISASTER MEDICINE

SECTION TWO

PREVENTION

CHAPTER FOUR

HAZARD/DISASTER MITIGATION AND PREVENTION

INTRODUCTION

4.01 EMERGENCY/DISASTER MANAGEMENT

An efficient emergency management system requires co-operation and support by all who have a role or responsibility to mitigate or prevent the effects of hazards and disasters upon a community. Good disaster management is not merely an extension of good everyday emergency procedures It is more than just the mobilisation of additional personnel, facilities and supplies. Disasters often pose unique problems rarely faced in daily emergencies

PRINCIPLE

To be effective, disaster management requires: organisation; command and control; co-ordination of support, information management; timely activation; and an effective disaster plan.

4 02 HAZARDS

The term 'hazard' means a potential or existing condition that may, through its impact, cause harm to people or damage to property or the environment These may result from extremes of natural processes or technology. Extremes in the natural environment include floods, earthquakes, bushfires, tornadoes, volcanic eruptions, landslides, tsunami, and drought. Technological extremes include chemical spills, and nuclear incidents and other events caused directly by human activity. The impact of these technological hazards may cause accumulated exposure to chemicals and/or radioactivity.

MITIGATION

4.03 The challenges of nature and technology, in increasing the vulnerability of people and property, pose a dilemma when seeking the fullest protection of people and their property New technologies make economic development possible but also create hazards that pose costly tradeoffs in terms of environmental quality and social and economic benefits and costs. There is little agreement about what risks are involved, their costs, and what to do about them Under normal circumstances little priority is given to any phase of emergency management However, there is a community expectation upon government to effectively manage disasters that occur, and to do this involves long-term planning, the purpose of which is to prevent or mitigate crises.

4.04 TECHNOLOGY AND PLANNING

Advancements in technology, coupled with the application of good disaster planning, can at least ease the impact of some natural disasters. However, because of society's increasing expectations of 'government', natural disasters inevitably pose the classical problem of independent (ie, individual) versus official action The reality today is that the old and proven principle of self-support and capability, in times of disaster, is being steadily eroded by the conviction on the part of the individual that 'government' solutions are his or her justifiable expectation and right.

4 05 TECHNOLOGICAL HAZARDS AND DISASTERS

Technology is creating additional, and potentially major, hazards. Emergencies, arising from the impact of these human-caused hazards, stimulate even greater public reliance on government for aid, largely because of our general unfamiliarity with the hazards involved Effective management can decrease risks from such threats as the transportation or storage of hazardous substances and explosives. The random nature of these threats, and the fact that incidents can occur quickly and without warning highlights the importance of planning The burgeoning chemical industry and other created hazard potentials are assumed to be amenable to solutions of various kinds, and there is an expectation that effects of such hazards can be substantially reduced. A wide variety of environmental laws, incorporating strong regulatory and non-regulatory programs, exists to help prevent technological disasters.

4.06 Mitigation of technological disasters can range from altering expectations and the choices of technology to preventing or lessening the consequences of a hazard. Mitigation of natural hazards can occur through a variety of structural measures, the protective engineering works such as dams. levees. sea walls. and nonstructural options including land use regulations, zoning laws, building codes, and economic programs (such as tax and insurance incentives) designed to keep vulnerable structures and activities out of the most hazard-prone areas to minimise the likelihood of structural damage. Post disaster actions such as rebuilding damaged structures in hazard-resistant ways or relocating structures and people are also mitigation strategies due to their concerns with the long term reduction of the effects of hazards.

4.07 MULTIPLE HAZARD MANAGEMENT

A recent trend in dealing with hazards is multiple hazard management, an integrated or coordinated approach addressing the full range of hazards to which communities are prone Multiple hazard mitigation is the component of multiple hazard management concerned with reducing the long term adverse impacts of the full range of hazards within a community, State, region, or the nation as a whole. Such an approach focuses attention on the full range of hazards, allows for consideration of the interaction among hazards, and offers increased opportunities for greater efficiency in the use of finances, personnel, and other resources.

PREVENTION

4.08 MASS CASUALTY

The prevention of mass casualty situations from impact type events may be beyond the influence of health professionals. However, scope exists for introducing mitigating actions that may lessen the effects of the impact and reduce the suffering and cost to the community at large

4 09 Appropriate response by health professionals will, in itself, mitigate the effects of an impact type event To ensure that the medical response is appropriate, a broad cross-section of health professionals need to be involved in the development of a flexible plan that can adapt to the particular occurrence.

4 10 TRAINING AND EXERCISES

Individuals who have a role to perform, need to be trained in their duties and regularly practised in exercises or drills that, as near as practicable, simulate a realistic and credible scenario.

4.11 MEDICAL AND HEALTH PREVENTION STRATEGIES

A range of medical, public health and other activities providing for prevention of illness and injury include.

a. immunisation and inoculation (human communicable diseases. zoonoses),

b. prophylactic therapy;

c. sanitation measures;

d personal hygiene,

e. refuse and hazardous waste disposal;

f vermin and vector control,

g. research and epidemiological studies.

h. immigration controls;

i. customs legislation;

j education programs,

k. media campaigns; and

l public warning notices.

4.12 DE-BRIEFINGS

The de-brief process is an integral part of prevention and mitigation. By critically examining medical responses to emergencies or disasters, the opportunity exists to determine the viability of the medical plan, the appropriateness of various procedures and the skills and knowledge of responders.

4.13 The aim of the de-brief is to examine the medical involvement to determine what may have gone wrong, why and how can procedures be improved. It is important that the debrief be controlled to ensure that it does not degenerate into a blame apportioning exercise.

4 14 The de-brief should be seen as part of the program of continuous quality improvement.

REFERENCES

Emergency Management Australia: **Australian Counter-Disaster Handbook - Volume 1: Commonwealth Counter-Disaster Concepts and Principles.** ISBN 0 642 19581 1

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