

**NATO/EAPC UNCLASSIFIED**



# **PSYCHOSOCIAL CARE FOR PEOPLE AFFECTED BY DISASTERS AND MAJOR INCIDENTS**

**A Model for Designing, Delivering and Managing  
Psychosocial Services for People Involved in  
Major Incidents, Conflict, Disasters and Terrorism**

**Non-binding Guidance  
NATO Joint Medical Committee**

**September 2008**

**NATO**



Non-binding Guidance



**A MODEL FOR DESIGNING, DELIVERING AND  
MANAGING PSYCHOSOCIAL SERVICES FOR PEOPLE  
INVOLVED IN MAJOR INCIDENTS, CONFLICT,  
DISASTERS AND TERRORISM**



**PSYCHOSOCIAL CARE FOR PEOPLE AFFECTED BY  
DISASTERS AND MAJOR INCIDENTS**

**CONTENTS**

| <b>Chapters</b>   | <b>Page</b>  |
|---|--------------|
| <b>Preface</b>  | <b>1-5</b>   |
| <b>Foreword</b>   | <b>1-6</b>   |
| <b>Introduction and Recommendations</b>   | <b>1-7</b>   |
| <b>The Nature of Disasters, Major Incidents and Psychosocial Trauma</b>             | <b>1-16</b>  |
| <b>Psychosocial Responses to Disasters, Major Incidents and Sustained Adversity</b> | <b>1-32</b>  |
| <b>Good Practice in Designing, Commissioning and Delivering Services</b>            | <b>1-65</b>  |
| <b>Aims and Goals of Care</b>   | <b>1-72</b>  |
| <b>A Strategic Stepped Model of Care</b>  | <b>1-76</b>  |
| <b>Programmes of Care</b>   | <b>1-84</b>  |
| <b>Quality, Corporate Governance and Clinical Governance</b>                        | <b>1-100</b> |
| <b>Workforce and Organisational Development</b>                                     | <b>1-106</b> |

|   |              |
|---|--------------|
| <b>Annexes</b>  | <b>1-116</b> |
| <b>A: The Madrid Framework</b>  | <b>1-116</b> |
| <b>B: Typical Myths and Misconceptions about Disasters</b>  | <b>1-117</b> |
| <b>C: Core Concepts and Definitions</b>   | <b>1-118</b> |
| <b>D: Maslow’s Hierarchy of Needs</b>   | <b>1-132</b> |
| <b>E: National Screening Committee’s Criteria for Appraising the Viability, Effectiveness, and Appropriateness of a Screening Programme</b> | <b>1-133</b> |
| <b>F: The Values and Principles Governing the Psychosocial Response and the Use of Information</b>  | <b>1-134</b> |
| <b>G: The Expert Advisory Groups</b>  | <b>1-136</b> |
| <b>H: The Research Assessment Team Commissioned from The Aberdeen Centre for Trauma Research</b>  | <b>1-138</b> |

## PREFACE

Protecting civilian populations and using civil resources in support of North Atlantic Treaty Organisation's (NATO) objectives is the key function of the Senior Civil Emergency Planning Committee (SCEPC). The SCEPC coordinates planning in several areas, to ensure, when necessary, civil support for the Alliance's military operations or military support for national authorities in civil emergencies. The Joint Medical Committee (JMC) supports this work.

NATO Members and their Partner Nations are committed to providing working environments and management practices that promote the best health of all who work with NATO. Part of that commitment is recognising that it is unacceptable that people working with NATO, in whatever capacity, are injured by their work and reasonable arrangements ought to be in place to prevent harm. Ensuring the psychosocial welfare of all people involved with the work of NATO is a key part of that commitment. Risks to psychosocial wellbeing can be minimised by planning and implementing good management procedures.

As Chair of the JMC, I am therefore delighted to be able to introduce this non-binding guidance on Psychosocial Care for People Affected by Disasters and Major Incidents: a Model for Designing, Delivering and Managing Psychosocial Services for People Involved in Major Incidents, Conflict, Disasters and Terrorism.

It represents a significant piece of work undertaken by representatives from the Joint Medical Committee. It is intended as a conceptual and practical resource for people who develop governmental policy, design and plan services, or provide preparatory training for the staff of the services that are required. It brings together:

- a brief summary of the nature of disasters, traumatic events, major incidents and psychosocial trauma; core concepts and definitions; and, patterns of response;
- a strategic stepped model of care that links the impact of events with the core components of the model of care and the modalities for assessment and intervention; and
- a summary of the important aspects of strategic leadership, management and workforce development that should be covered when planning effective responses to people's psychosocial and mental health needs after disasters of all kinds, major incidents, conflict and terrorism.

Dr Edita Stok  
Chair  
Joint Medical Committee  
NATO

## FOREWORD

In Spring 2007, the North Atlantic Treaty Organisation Joint Medical Committee (NATO JMC) asked me, as the Civilian Representative of the United Kingdom (UK) on the committee, to lead work to develop this guidance for NATO Members and Partner Nations on a model of psychosocial care for populations affected by major incidents, conflict, disasters and terrorism that includes promoting the resilience and psychological wellbeing of all staff before, during and following major incidents. That model is presented and explained in this document.

An expert advisory group comprising representatives of NATO Members and Partner Nations was convened. The membership of the group is shown at Annex G. Initial scoping and development of the guidance was undertaken by teleconference and use of the Internet. Subsequently, the Aberdeen Centre for Trauma Research of the Robert Gordon University in Scotland was tasked with reviewing the literature and producing evidenced briefings for the contents of this guidance (see Annex H). Thereafter, a team from the expert group, led by the Scientific Adviser and the Project Manager, assumed responsibility for the drafting.

The guidance provides:

- a picture of the scope and nature of the impact of disasters, conflict, terrorism, and major incidents on the psychosocial and mental health of people who are affected by them or involved with them;
- agreed definitions of personal and collective psychosocial resilience;
- an evidence-informed and values-based approach to psychosocial intervention after disasters and major incidents of all kinds that takes the psychosocial resilience of persons and the collective psychosocial resilience of families, groups of people and communities as the anticipated responses but not as inevitable;
- guidance on the importance of developing people's personal resilience and the collective resilience of teams and communities before events occur and of supporting their resilience during the course of untoward events and afterwards;
- guidance on providing needs-led mental healthcare at the right times and in the most appropriate ways for the people who require it; and
- a description of a stepped model of care that embodies the principles identified here by recommending that a comprehensive plan should be based on six main components in which prominence is given to strategic leadership and planning, developing collective community resilience, and providing services that are proportionate to the needs of the people who are affected by these events.

It is recognised that the pathway of care may look different for each Member Nation and that there will have to be different country specific products to support the guidance.

I should like to express my personal gratitude to all who contributed their knowledge, experience, time and energy to the process of producing this guidance and its outputs. In particular, I should like to thank Professor Richard Williams, Professor of Mental Health Strategy in the University of Glamorgan and the Gwent Healthcare NHS Trust and the Scientific Adviser on Psychosocial and Mental Health to the Department of Health. I am most grateful to him for his considerable input and energy in developing this guidance and its content and for his continuing support in this area of work.

Dr Penny Bevan  
Director  
Emergency Preparedness Division  
Department of Health, England

## INTRODUCTION AND RECOMMENDATIONS

### Introduction

1. Disasters, terrorism and traumatic events, whatever their source or scale, bring with them the potential to cause distress. Sometimes that distress is severe. Every person who is directly or indirectly involved in such an event may be affected and many may need psychosocial support. A sizeable minority of people may develop other psychosocial conditions and/or mental disorders for which they require more substantial and, sometimes, sustained intervention, including treatment.
2. While there is a high incidence of military conflicts and terrorism, there is also evidence that the numbers of persons affected by natural disasters have increased very rapidly though the numbers of people killed by these events have fallen. This guidance recognises the national and international dimensions of disasters, terrorism and traumatic events as they involve, for example, commuters, visitors, tourists, relatives and the ripple effect of events.
3. The phrase 'disasters and major incidents' is used throughout this document to refer to emergencies, disasters of all kinds, conflict and war, terrorism and major incidents.
4. This document provides best practice guidance for NATO Members and Partner Nations about planning and managing psychosocial and mental health services in response to these traumatic events. It embraces services that are required for people of all ages while giving special focus to vulnerable age-groups including children, young people and older people. It aims to provide a model of care that integrates approaches and actions needed to promote the resilience and psychological wellbeing of survivors, indirectly affected persons and staff of the responding services before, during and following major incidents.
5. In the context of this guidance, staff include people who are:
  - civilians;
  - military personnel;
  - first responders (members of the public and professionals);
  - emergency and rescue services personnel;
  - humanitarian aid workers;
  - non-health and welfare employed persons; and,
  - staff of the healthcare services.
6. Given the inherently disruptive nature of disaster, terrorist attack and other traumatising events, the expert advisory group (Annex G) acknowledges that ideal or even usual standards of care may be affected. In the event that the demand for care exceeds or overwhelms the supply, the underpinning principle is to achieve the best outcomes based on the ability to achieve benefit. For this reason, the model of care at the centre of this guidance has been built on the best scientific evidence available, examples of good practice and shared knowledge that combine to provide a flexible template for planning services.
7. The purpose of the document is to provide a framework for people who develop governmental policy, design and plan services or provide preparatory training for the staff of services required in the event of major incidents. This guidance has therefore been prepared as both a conceptual and practical resource, covering the following key areas of information.

- The rationale upon which the model of care is based. This includes a summary of; core concepts; patterns of response; and the nature of disasters, traumatic events, major incidents and psychosocial trauma; populations at risk.
- A strategic stepped model of care. It links the impact of events with the core components of the model of care and provides information about effective assessment and intervention.
- A summary of the important aspects of strategic leadership, management and workforce development that should be covered when planning and delivering effective responses to people's psychosocial and mental health needs after disasters and major incidents.

## Recommendations

8. There are 20 main findings from the literature reviews and discourses with experts in the field that underpin the contents of this guidance. They, together with the associated recommendations are as follows.
  - a. Strategic preparedness supports psychosocial resilience and is, thereby, likely to improve responses to people's psychosocial needs and reduce the risks of severe distress and mental disorder.

The building blocks of good planning are:

- strategic, operational and tactical preparedness;
  - timeliness;
  - flexibility;
  - integration;
  - good communications;
  - timely and trusted sharing of information with the public and among the responding agencies;
  - efficiency and effectiveness; and
  - effective planning and co-ordination of service responses may maximise the collective resilience of the public and communities and the personal resilience of affected persons and responders
- b. Every jurisdiction requires an integrated disaster and major incident plan.
    - Every jurisdiction and area within it should have a disaster and major incident plan that is appropriate to its national, regional and local governance structures and which makes provision for a psychosocial and mental health responses that are fully integrated into wider disaster planning and preparedness.
  - c. How psychosocial responses are managed may define the extent and effectiveness of communities' recovery.
    - The evidence indicates that the way in which people's psychosocial responses to disasters are managed may be the defining factor in the ability of communities to recover.
    - Information and activities that normalise reactions, protect social and community resources and signpost access to additional services are fundamental to effective psychosocial responses.

## NATO/EAPC UNCLASSIFIED

- Everyone involved is likely to benefit from supporting arrangements in the immediate aftermath
- d. Restoring the social fabric of communities is important in responding effectively to the psychosocial and mental health effects of disasters and major incidents.
- Restoring the social fabric of communities, and protecting vulnerable people and communities against the psychosocial effects of disasters and major incidents are important components of disaster preparedness, responses to major incidents, and facilitating recovery.
  - The effectiveness of the responses made depend on leaders' knowledge of the resilience and vulnerabilities of affected communities.
- e. Decision-makers must understand the risk factors that affect the likelihood of people coping well with the psychosocial impacts of disasters or of developing mental disorders.
- This means that decision-makers must understand:
    - the health risks faced by people after disasters and major incidents;
    - the distressed emotional and dysfunctional behavioural responses that may occur;
    - the mental disorders that people may develop; and
    - the anxieties about survivors that relatives, friends and many other people may experience.
  - Particular populations at increased risk of psychopathological morbidity following disasters include:
    - women;
    - children and adolescents;
    - older people;
    - people who have pre-existing health problems; and
    - less affluent people.
- f. Factors that influence the philosophy of psychosocial and mental healthcare that is espoused by this guidance include:
- Substantial resilience of persons and communities is the expected response to a disaster, but is not inevitable.
  - Often, the responses that are experienced by resilient people can be difficult to distinguish from symptoms of acute stress disorders and later post-traumatic conditions.
  - The risk of psychiatric morbidity is greatest for those people who:
    - have high perceived threat to life;
    - are faced with a circumstance of low controllability and predictability;
    - have experienced high loss and physical injury;
    - have to live with the possibility that the disaster might recur;
    - have been exposed to dead bodies and grotesque circumstances; and
    - have endured higher degrees of community destruction.
- g. There is a broad spectrum of psychosocial responses to disasters and major incidents.
- Distress after disasters and major incidents is very common.
  - In most cases, distress is transient and not associated with dysfunction.

## NATO/EAPC UNCLASSIFIED

- But, some people's distress may last longer and be more incapacitating.
  - The majority of people do not require access to specialist mental healthcare, though a substantial minority of people may do so.
  - Screening, surveillance and clinical assessment are required by a proportion of survivors who are thought to be at particular risk.
  - A small proportion of affected persons may require long-term mental health services in response to their needs.
- h. The ways in which people respond fall into four main groups. Therefore, the approach that is supported by this guidance depends on distinguishing people who are:
- stunned in the immediate aftermath (resistant and resilient people);
  - proportionately and temporarily distressed but able to function satisfactorily in the short- and medium-terms (resilient people);
  - disproportionately distressed or distressed and dysfunctional in the short- to medium-terms; or
  - mentally disordered in the short-, medium- or longer-terms.
- i. The cornerstone of the plan should be to support people's resourcefulness.
- The psychosocial responses that are provided should recognise the important to people's recovery of sustaining their resilience and assisting their recovery. This means that:
    - services should recognise people's inherent resourcefulness but also their need for informally provided support and responsive services;
    - the public should be actively engaged in delivering disaster responses;
    - the emphasis of interventions should be on empowering communities and people who are affected;
    - the public must be trusted with accurate information that is provided regularly by credible persons;
    - services that offer psychosocial and mental health interventions should be made available to support survivors' resilience and to complement personal and collective resilience and coping;
    - it is important to take a positive and co-operative stance to responding effectively to enquiries from the media; and
    - avoiding the corrosive effects or rumour is also important.
- j. Survivors of disasters and major incidents require rapid action and sustained responses.
- Attending to basic needs (safety, security, food, shelter, acute medical problems, etc) is the first and highest priority.
  - Survivors and other affected persons require rapid, effective action followed by sustained mobilisation of resources.
- k. Psychosocial plans should be based on the principles of psychological first aid because the abilities of people to accept and use social support and the availability of it are two of the key features of resilience.
- l. First responders are a mix of people with differing capabilities and who face differing profiles of psychosocial risk.
- First responders include members of the public who are first on the scene as well as frontline rescue and emergency staff.

- They may also include staff of humanitarian aid, welfare and healthcare services, and military personnel.
  - Evidence shows that some first responders may be vulnerable to the psychosocial and mental health consequences of their involvement in disasters and major incidents while others are hardier.
- m. A coordinated approach is essential across the emergency response systems and rescue services.
- Integrated planning is required to support:
    - a balance of population health and personalised healthcare services;
    - rescue, humanitarian aid and welfare response organisations;
    - social care systems;
    - voluntary and non-governmental organisations;
    - military systems; and
    - military aid to civil powers.
- n. The strategic stepped model of care recommended in this guidance links the impact of events with the core components of psychosocial and mental healthcare that populations of people, communities and particular people require and the modalities of screening, triage, assessment and intervention. It is intended as a conceptual and practical resource for planners.

The strategic stepped model of care described here has six main components:

- strategic planning - comprehensive multi-agency planning, preparation, training and rehearsal of the full range of service responses that may be required;
  - prevention services that are intended to develop the collective psychosocial resilience of communities and which are planned and delivered in advance of untoward events;
  - basic humanitarian and welfare services that should be made available to everyone and which are centred on families;
  - providing psychological first aid that is delivered by trained lay persons who are supervised by the staff of the mental healthcare services;
  - providing screening, assessment and intervention services for people who do not recover from immediate and short-term distress; and
  - providing access to primary and secondary mental healthcare services for people who are assessed as requiring them.
- o. Continuing strategic planning is required throughout emergencies because all plans are likely to require adjustment and development in detail as the nature of particular major incidents become clearer. This means that strategic and operational planning must continue through all of the response and recovery phases.
- p. Developing and managing the psychosocial and mental health components of disaster and major incident plans should be the responsibility of the agencies and persons who are responsible for the whole of the plans for preparing for and responding to disasters and major incidents. There should be explicit arrangements for designing, developing, testing, rehearsing and managing the psychosocial and mental health components of the plan.
- Each emergency, disaster and major incident planning team should include a senior representative of the agencies that are designated to deliver psychosocial and mental healthcare responses and this person should chair a

## NATO/EAPC UNCLASSIFIED

multi-agency, psychosocial and mental healthcare expert advisory subcommittee that is appointed to advise the emergency planning committee.

- The psychosocial plans should be developed, managed and monitored by the multi-agency psychosocial expert advisory subcommittee and it should include survivors of past disasters and major incidents and mental health professionals.

q. Senior trained and experienced members of the staff of the social and mental healthcare agencies be appointed as formal advisers to commanders and managers at the strategic, operational and tactical levels during:

- planning;
- execution; and
- review of plans and regeneration after events.

This role requires:

- clinical skill and training in disaster psychosocial care;
- awareness of the concepts and practices of strategic leadership and management; and
- training in decision-making, consultation and supervision.

r. Managing the stepped model of care that is at the core of this guidance requires:

- providing effective command, control and coordination during and following an incident;
- fully integrating the psychosocial and mental health responses at the strategic, operational and tactical levels of command by appointing trained advisers;
- commissioners, incident response commanders, services and practitioners to adopt an ethical framework for planning and delivering services;
- commissioners, incident response commanders, services and practitioners to adopt a framework for good decision-making;
- commanders to ensure that appropriate services are made available in each phase of recovery and this requires services that are based on the principles of psychological first aid and which offer:
  - immediate humanitarian aid and welfare responses for everyone who needs them;
  - responses that recognise that the intensity and duration of people's exposure to the stressor, certain prior experiences, and the availability or otherwise of social support determine their likelihood of developing more serious psychological problems or mental disorders;
  - long-term and persistent follow-through; and
  - care for responders;
- commissioners, incident response commanders, services and practitioners to adopt pre-planned frameworks for:
  - corporate governance; and
  - clinical governance.

s. Execution of psychosocial and mental healthcare plans plan depends on managing and caring for staff well. Staff and agencies should be provided with:

- clear plans;
- statements of the expectations that are likely to fall on them;
- opportunities for training and rehearsal; and
- increased supervision and social support.

This means that all rescuers, responders and other staff involved should have:

- clear roles and responsibilities that are agreed in advance;
  - professional standards and expectations that are clear, practical and realistic; and
  - effective leadership and access to the support of colleagues
- t. Information-gathering and research are vitally important if lessons are to be learned from clinical practice in disasters and major incidents that will contribute to saving lives, minimising suffering, and reducing risks to staff in other disasters and events.
- Plans made for information gathering and research should be made beforehand and deal with the pressures that services may be under during a disaster or traumatic event and the restrictions that researchers face in meeting methodological standards in these circumstances.
  - Ethical procedures and research standards should not be compromised.

### **Implementing this Guidance**

9. In summary, this guidance is intended to assist NATO Members and Partner Nations to prepare effective responses. These responses should be led by government policy which should enable the responsible authorities within each nation to plan services that are based on a common platform and which are fully integrated into wider disaster planning and preparedness.
10. It proposes that Member Nations should adopt the model of care for psychosocial and mental health services that is described in this guidance because it:
- is empirically based (i.e. based on the best evidence available);
  - is flexible across events, cultures and time periods;
  - accommodates the needs of vulnerable and at-risk groups of people, including care providers;
  - is realistic in terms of the extent to which it can be implemented in an emergency situation given the personnel and resources available;
  - takes account of population dynamics that may affect first responder and service staff, including age and cultural differences;
  - is capable of evaluation;
  - acknowledges the importance of anticipated reactions, resilience and the natural healing potential of individuals, families and communities; and
  - endorses the primary principle of, first, do no harm.
11. There are certain general matters relating to developing policy to implement this guidance. The core finding from the work that was conducted to construct this guidance is that the services, including the psychosocial and mental health services that are required following disasters and major incidents only work effectively if the need for them has been anticipated. This requires understanding of the dynamic shifts that occur with the passage of time and clarity about how these services are to interdigitate with other services that offer psychosocial responses. Achieving psychosocial care and mental health services for moderate and large scale emergencies that are well integrated with the requirements for humanitarian aid, welfare and psychosocial care into the disaster response plans requires that lessons learned through research and experience are translated in integrated ways into policy at four levels. These levels are:

- a. governance policies;
  - b. strategic policies for service design;
  - c. service delivery policies; and
  - d. policies for good clinical practice.
12. Each of these four aspects of policy should be influenced by the kinds of evidence that are summarised in this guidance and should be ethical. Thus, there are important roles for practitioners who are skilled in mental healthcare and experienced and trained in disaster management to provide advice to the authorities as they develop each of these aspects of policy and conduct operations in the face of disaster.
  13. Governance policies relate to how countries, regions and counties are governed. Policies at this level are required that set the overall aims and objectives for responses to disasters and major incidents and, in the instance of the subject matter of this guidance, they should specify the need for services to be designed, developed and delivered that offer psychosocial and mental healthcare that is integrated into all disaster response plans. Strategic policies are then required that translate political imperatives into the intent and direction of development of specific components of the plans overall. This requires the responsible authorities to bring together evidence from research with eminence-based experience and their knowledge of the nature of areas of the country for which they are responsible and their profile of risks to design services through which to discharge the political imperatives and then mount programmes for managing the performance of those services to meet the objectives that are identified for them.
  14. Service delivery policies concern how particular services function and relate to their partner services and how affected populations are guided into and through them according to the evidence and awareness of the preferences of people who are likely to use them. Therefore, service delivery policies include evidence- and values-based models of care, care pathways and protocols and guidelines for care as well as processes for demand management, audit and review. Policies for good clinical practice concern how clinical staff take account of the needs and preferences of patients, deploy their clinical skills, and their work with patients to decide how guidelines, care pathways and protocols are to be interpreted in individual cases.
  15. The position taken in this guidance is that psychosocial care and mental health services that are capable of responding to a variety of types or causes of disasters and major incidents should be built upon the existing clinical skills and preparedness within each community. This raises matters for planning, training and for sustaining knowledge and skills.
  16. However, this guidance recognises that there is no common pattern across different countries about whether aid, welfare, psychosocial responses, continuing support and mental healthcare are provided by one agency or by several agencies. Therefore, the focus of this guidance is on the psychosocial and mental healthcare responses required and the common factors that should assist different nations to design them appropriately. Humanitarian assistance and welfare responses are not the subject of this guidance; however, these activities should be integrated with psychosocial responses.
  17. Evidently, policy at each of the four levels should be informed by culture and values as well as by evidence from science and experience gleaned from practice. Thus, Annex A reproduces the Madrid Framework that can be used as a framework for benchmarking how all policies relate to and deal with the values that are inherent in designing and delivering services.

## Summary

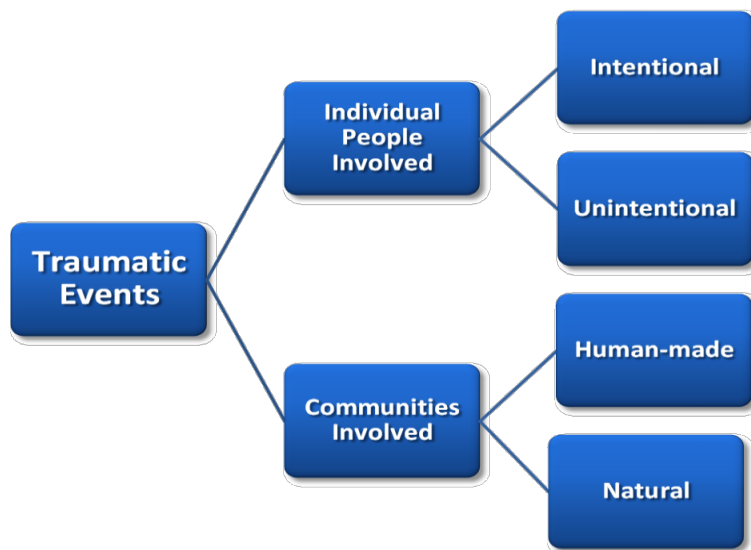
18. In summary, this paragraph lists the minimum key actions or objectives that are required of staff who are planning the psychosocial and mental health service responses to disasters. They include:
  - a. Integrating psychosocial and mental healthcare responses within the grand plan for preparing for and responding to disasters;
  - b. Fully integrating psychosocial and mental healthcare responses, usually sequentially;
  - c. Appointing psychosocial and mental health advisers to commanders of responses to major incidents and disasters;
  - d. Empowering communities and people;
  - e. Attending to the basic needs of the population first;
  - f. Planning and enacting a good public risk communication and advisory strategy that involves the public and the media and which provides timely and credible information and advice;
  - g. Ensuring staff are capable of working with diversity of values and cultures;
  - h. Ensuring that the psychosocial and mental health responses are comprehensive and stepped according to need, are of sufficient duration and are well co-ordinated;
  - i. Allocating and managing roles for mental health professionals; they should be well lead, managed, supervised and cared for; and
  - j. Promoting learning by planning and managing knowledge acquisition and its transfer, evaluation and performance management.
  
19. This guidance provides information and advice on achieving these objectives.

## THE NATURE OF DISASTERS, MAJOR INCIDENTS AND PSYCHOSOCIAL TRAUMA

### DISASTERS AND MAJOR INCIDENTS

20. Disasters include: conflict; flooding (now the most frequent calamitous occurrence); hurricanes; earthquakes; chemical, biological, radiological, and nuclear (CBRN) events; major industrial or transport accidents; multiple shootings; and, peacetime terrorist attacks.
21. The literature offers many ideas for defining a disaster while agreeing that it is almost impossible to find a universally acceptable one. The various definitions include descriptions of natural disasters such as floods and earthquakes, and human-made disasters such as war and conflict, together with some description of scale, cause or source. Some commentators see disaster in terms of the degree of threat to the social system and social vulnerability, the political impact and the effect on people who are involved. The World Health Organisation (WHO) has defined disaster as “a severe disruption, ecological and psychosocial, which greatly exceeds the coping capacity of the affected community”.<sup>1</sup>
22. Thus, there are many ways in which disasters and major incidents may be classified. Figure 1 provides one typology of traumatic events that is based on who is involved and the intentions of any human perpetrator.

Figure 1: Types of traumatic events<sup>2</sup>



23. Other typologies are based on the agents or causes disasters and major incidents. Some, for example might be termed natural disasters; while other events arise from technological accidents or are due to human-induced incidents.
24. Disasters, terrorism, active military service and major incidents have certain common features. They include their exceptional nature, their short-term predictability, their potential for destroying the infrastructure of societies and their potential for being

<sup>1</sup> World Health Organisation (WHO), 1992 (cited by Williams R on p264. The psychosocial consequences for children of mass violence, terrorism and disasters. International Review of Psychiatry 2007; 19(3): 263-277).

<sup>2</sup> based on p4 in Fullerton CS, Ursano RJ, Norwood AE, Holloway HH. Trauma, terrorism, and disaster. In Ursano RJ, Fullerton CS, Norwood A, (editors). Terrorism and disaster. Cambridge: Cambridge University Press, 2003, p1-20 and reproduced with permission.

experienced by some people as overwhelming. Massed events “... scar the memory of the individuals and communities they touch, they have the capacity to forever change the character and life style of individuals and communities, and they confront one’s perceptions of the world and individual and collective vulnerability and strength”.<sup>3</sup> Fundamentally, then, emergencies, disasters and major incidents are about people, their experiences, and how they respond. Therefore, incidents are not only physical events but also psychosocial events that involve people. It follows that plans made for responding to disasters and major incidents must include responses to their psychosocial effects.

25. Advanced planning – as compared with reactive planning – should provide for effective services after disasters and major incidents but, because the nature of events can rarely be predicted, plans must be altered progressively as circumstances require. This means that strategic, operational and tactical planning should be seen as processes rather than products. These processes must be underpinned by a reasonable understanding of both the myths and the realities (see Annex B) of human behaviour in times of extreme duress following a major event(s). There are differences in the use of the terms strategic, operational and tactical between the military context and the civilian context of major incident response. In this document the military usage is adopted.
26. The importance, for example, of differentiating between the nature of various major incidents and disasters is that, while all events have substantial psychosocial impacts, the ways in which they operate, the extent and duration of the effects, and the risks to mental health vary according to the type of threat and the nature of the population that is involved. This guidance assembles the best evidence available concerning typical human responses to such events. One of its features is to emphasise the importance of normalising the way humans respond because distress is typical and it does not necessarily indicate the need for special psychosocial service responses. However, the guidance also highlights the risk of adopting stereotypical views about people’s responses and their needs and then building them erroneously into response plans or training courses for first responders and other staff. The key to successful service delivery is to prepare plans that can be readily adapted as the realities of the situation become apparent.
27. To this end, some features of particular types of disaster are presented in this guidance. The intention is not to review in detail the impact of each of the causative agents or what is known about the populations affected. The numbers of people involved, the reactions of persons who are not directly affected, the particular spectrum of people’s responses and their needs all vary with type of disaster, the causative agent and the circumstances of the population. Nonetheless, sufficient conclusions may be drawn to enable a broad pattern of responses to be identified and planned for, albeit with the caveat that variations should be made to adapt the plan in particular situations.
28. Strategic planners and decision-makers must be prepared to be creative and flexible in designing and implementing services. They must be critically reflective in addressing the unique challenges of each disaster or major incident. This guidance seeks to underpin that creativity. As will be made clear in later sections of this document, planners and incident response commanders should be prepared to seek expert advice on variations to the general plan that may be required in particular circumstances.

---

<sup>3</sup> Pfefferbaum B. Caring for children affected by disaster. Child and adolescent clinics of North America; 1998; 7; 579-97.

**NATURAL DISASTERS**

29. While particular attention has been focused on military conflicts and terrorist incidents, there is also evidence that the numbers of people affected by natural disasters have increased very rapidly although fatalities have fallen. Figures 2 and 3 provide a summary.

**Figure 2: The numbers of disasters, people affected and people killed between 1951 and 2000**  
 Source: CRED/OFDA database)<sup>4</sup>

|                            | Decades    |             |             |               |               | Total                |
|----------------------------|------------|-------------|-------------|---------------|---------------|----------------------|
|                            | 1951-1960  | 1961-1970   | 1971-1980   | 1981-1990     | 1991-2000     | 1951-2000            |
| <b>Number of Disasters</b> | 367        | 717         | 1,162       | 2,081         | 2,985         | <b>7,312</b>         |
| <b>Persons Affected</b>    | 11,176,496 | 233,704,495 | 767,985,585 | 1,453,553,034 | 2,129,297,606 | <b>4,595,717,196</b> |
| <b>Persons Killed</b>      | 4,177,884  | 2,088,942   | 1,408,749   | 829,441       | 754,206       | <b>9,259,222</b>     |
| <b>Probability</b>         | 0.3748     | 0.0089      | 0.0018      | 0.0006        | 0.0004        | <b>0.0020</b>        |

**Figure 3a: Distribution of the numbers of persons affected and killed by type of natural disaster from 1966-1990**  
 Source: CRED/OFDA database)

| a                           | High Winds | Earthquakes | Floods  | Volcanoes | Famine | Droughts  | Total            |
|-----------------------------|------------|-------------|---------|-----------|--------|-----------|------------------|
| <b>Disasters</b>            | 1,165      | 387         | 1,004   | 64        | 20     | 380       | <b>3,020</b>     |
| <b>Affected (thousands)</b> | 214,846    | 52,584      | 784,553 | 983       | 22,247 | 1,235,783 | <b>2,311,000</b> |
| <b>Deaths (thousands)</b>   | 416        | 541         | 126     | 26        | 605    | 1,884     | <b>3,600</b>     |
| <b>Probability</b>          | 0.0019     | 0.0103      | 0.0002  | 0.0271    | 0.0272 | 0.0015    | <b>0.0016</b>    |

<sup>4</sup> Cited in Sundes KO, Birnbaum ML. Health disaster management: guidelines for evaluation and research in the Utstein style. Prehospital and Disaster Medicine 2003;17(Suppl 3):144-167.

**Figure 3b: Distribution of the numbers of persons affected and killed by type of natural disaster from 1991-2001 (Source: CRED/OFDA database)**

| b                           | High Winds | Earthquakes | Floods    | Volcanoes | Famine | Droughts | Total            |
|-----------------------------|------------|-------------|-----------|-----------|--------|----------|------------------|
| <b>Disasters</b>            | 847        | 244         | 1,042     | 60        | 45     | 277      | <b>2,465</b>     |
| <b>Affected (thousands)</b> | 276,631    | 36,249      | 1,483,232 | 2,041     | 38,236 | 434,785  | <b>2,234,961</b> |
| <b>Deaths (thousands)</b>   | 208        | 80          | 102       | 0.9       | 277    | 3        | <b>671</b>       |
| <b>Probability</b>          | 0.0008     | 0.0022      | 0.0001    | 0.0004    | 0.0072 | 0.00001  | <b>0.0003</b>    |

30. **Flooding**

- a. Flooding is, now, the most frequent type of natural disaster and a form that clearly illustrates the need to adjust strategic plans to actual circumstances during their implementation. This is because, while there has been relatively little high quality research in this area, the research that has been carried out suggests that the psychosocial impact is particularly prevalent and prolonged. The psychosocial and mental health consequences have a long tail rather than one low point and there may be a number of peaks and troughs in communities' experiences. This may well be because people's homes and livelihoods are directly affected and recovery takes a long time, as does financial and material recompense.
- b. During the night of 31 January 1953, the Netherlands was hit by one of the greatest natural disasters in its history. Spring tides and storms caused provinces Zeeland and a part of Noord-Brabant and South Holland to be flooded. As a result, 1,836 people and tens of thousands of animals drowned, 4,500 houses and buildings were destroyed and 200,000 acres of land was flooded. Fifty years later, people who were involved carry the emotional scars of this disaster. Additionally, some of the children and grandchildren, who were born after 1953, have also been affected. These observations point to one aspect of what has been termed the ripple effect of disasters and to the long-term consequences. Often, memories may become intertwined; memories of the inundations during the Second World War are sometimes confused with the collapse of the dikes in 1953, for example. Additionally, particular people's memories may become collective memories through mythology and culture.
- c. Research into the flooding of 1953 in the Netherlands has indicated that there are four phases in response to disasters: the disaster; rescue; evacuation; and recovery. However, it is not always possible to make a clear distinction between the phases and the dynamics of the various phases have much in common with the dynamics in society after disasters. Disasters also reveal weak points and tensions in societies.
- d. Research also shows that, in most cases, people only start to gather their belongings to make them safe after flooding has occurred; it appeared that the people of the Netherlands were caught by surprise by the flow of water, even though some of them had been warned well in advance. This raises awareness of

the tension for planners in balancing actions that are intended to promote preparedness with the risks of, inadvertently, giving rise to anxiety and rumours, on one hand, or encouraging complacency through the public being presented with the same message repeatedly, on the other hand. Achieving a good balance between alerting people but not provoking their anxieties and contributing to inappropriately is a feature of planning for all disasters and major incidents.

- e. As an example, research on the mental health effects of flooding on the population of Lewes in south-east England, flooded by torrential rain in June 2000, showed that nearly half of the population whose homes had been inundated had marked distress nine months after the event. Their experiences were sufficient for them to score as possibly having a mental disorder on a well-known mental health screening measure.<sup>5</sup> Interestingly, around one in every eight people whose homes had not been flooded, but who had experienced anxiety about the possibility were affected by community disruption, also scored as possibly having a disorder. This research also points up the importance of distinguishing between distress and disorder even though the experiences of the people involved may appear to be similar.
- f. This supports the importance of taking a long-term view of the responses that people require. While the model for planning for psychosocial care presented in this guidance is primarily focused on the period immediately after a disaster and subsequent months, it is important to continue planning throughout the duration of communities' recovery.
- g. Hurricane Katrina is acknowledged to be one of the worst natural disasters ever to strike the USA. The storm and its aftermath displaced over one million people, mostly African-Americans, and unveiled challenging issues for national disaster preparedness, socio-economic status and race. They included slow response; failure to provide survivors with water and food; attempts of insurance companies to minimise their liabilities; lack of medical and pharmaceutical resources; and lack of support for first responders.
- h. The lessons from Hurricane Katrina also highlight another general principle which the importance of dispelling and not supporting the development of rumours. Recurrently, providing credible information, trusting the public and the authorities treating people as partners has been shown to be a good principle.
- i. The lessons learned for mental health services after Hurricane Katrina emphasise the importance of:
  - designing a general template for a systematic plan to provide psychosocial and mental health services that can be tailored to actual needs and resources;
  - efficient communication and coordination;
  - identifying who should be and who is in charge;
  - allocating suitable funding – counter-terrorism tends to call for amounts of funding that are disproportionate to the risks of the various types of disaster and major incidents;
  - personal and community preparedness;

---

<sup>5</sup> Reacher M, McKenzie K, Lane C, Nichols T, Kedge I, Iversen A, Hepple P, Walter T, Laxton C, Simpson J. Health impacts of flooding in Lewes: a comparison of reported gastrointestinal and other illness and mental health in flooded and non-flooded households. *Communication and Public Health* 2004; 7(1):1-8.

- adequate training and preparation of the people who provide psychosocial care;
  - recognition of vulnerable groups, particularly the poorest but also less affluent people;
  - anticipating and addressing the needs of people who have chronic medical conditions during and subsequent to major calamities;
  - taking steps to counter rumour and chaos;
  - identifying the appropriate roles for mental health professionals and their post-disaster interventions;
  - knowledge management to promote learning post-disaster; and
  - evaluation of disaster responses.<sup>6</sup>
- j. Subsequently, three levels of intervention have been suggested:
- i. assessment:
    - of mental health needs: overall number impacted, degree of loss/impact of trauma;
    - of who is to benefit, how they are to be identified, what tools to use, who is to prepare and ask questions, who is to compile data; and
    - to determine if the process whereby people's psychosocial and mental health needs are ascertained can be combined with other case management and needs assessment processes;
  - ii. education and training is required:
    - for the general public by providing and disseminating information;
    - to inform 'gatekeepers', who determine access to services, about the psychosocial effects of trauma on adults, first responders, children, adolescents and their parents, and older people and to assist them to identify scenarios that require people to be referred rapidly to more specialised services; and
    - to prepare the staff of the mental health providers and train the trainers;
  - iii. integration: the teams that provide psychosocial care in crises should be integrated or networked with the teams that deliver the other community resources that are available.

## **TECHNOLOGICAL DISASTERS**

31. Technology-caused disaster may be defined as the breakdown of technological facilities, systems or services due to human action or inaction that could result in harm to people and the environment. It can be the result of failures of technological systems that control elements vital to health and wellbeing, accidental spillages of substances, deliberate or careless release of substances, illegal or badly designed disposal or storage areas, or leakage from such areas. The term is also used to include transport accidents and events that take place because buildings have been poorly designed and/or maintained.
32. Information about technological disasters is summarised in Figure 4.

---

<sup>6</sup> For example: Gheyntanchi A, Joseph L, Gierlach E, Kimpara S, Housley J, Frnaco Z, Beutler L. The Dirty Dozen, Twelve Failures of the Hurricane Katrina Response and How Psychology Can Help. *American Psychologist* 2007;62(2):118-130.

**Figure 4: Available information on numbers of technological disasters, the number of persons affected and the number killed for all technological disasters listed by decade from 1951 (Source: CRED)<sup>7</sup>**

|                            | Decades   |           |           |           |           | Total            |
|----------------------------|-----------|-----------|-----------|-----------|-----------|------------------|
|                            | 1951-1960 | 1961-1970 | 1971-1980 | 1981-1990 | 1991-2000 | 1951-2000        |
| <b>Number of Disasters</b> | 52        | 94        | 289       | 922       | 2,167     | <b>3,524</b>     |
| <b>Persons Affected</b>    | 410,356   | 98,629    | 1,906,099 | 2,262,013 | 727,628   | <b>5,303,725</b> |
| <b>Persons Killed</b>      | 8,401     | 5,577     | 90,105    | 66,105    | 87,648    | <b>257,836</b>   |
| <b>Probability</b>         | 0.0205    | 0.0565    | 0.0473    | 0.0292    | 0.1205    | <b>0.0486</b>    |

### CONFRONTATION, CONFLICT AND WARFARE

33. General Rupert Smith has pointed out that, in the late 19<sup>th</sup> and 20<sup>th</sup> centuries, the paradigm of industrial warfare was based on a sequence of events:

**Peace → Crisis → War → Resolution → Peace**

Since World War II, more than 200 major conflicts have taken place that would amount to wars, if war had been declared. This reflects a paradigm shift in the nature of warfare that has occurred in the last 60 years. There has been a move away from industrial warfare to a recurrent pattern of confrontation moving to conflict and back again on a cyclical basis in many theatres with no formal declaration of war.

34. Confrontation describes a state of opposition between states, countries and groups within them in which political and diplomatic services are engaged and military forces are deployed. Conflict means a hostile meeting of opposing military forces during which fighting occurs. Rupert Smith shows that both confrontation and conflict involve use of military force. In the former, the forces are deployed mainly to demonstrate that they represent force. The purpose of confrontation is to influence opponents in order to win a clash of wills. Thus, confrontation is psychological in its intent. In the case of conflict, military force is employed directly to destroy, capture territory and attain a decisive outcome.
35. As a consequence of this paradigm shift, the battlegrounds for modern confrontations and conflicts now lie within civilian domains rather than on discrete battlefields. These conflicts are often of low intensity and episodic, involve guerrilla armies, and victimise the civilian population.
36. Thus, in most recent human conflicts, warlike and terrorist actions on local environments resulting in hazardous situations for the health, wealth and social welfare of local populations that are then precipitated into much greater devastation or

<sup>7</sup> Cited by Sundes KO, Birnbaum ML. Health disaster management: guidelines for evaluation and research in the Utstein style. Prehospital and Disaster Medicine 2003;17(Suppl 3):144-167.

catastrophe. Resident and displaced populations, refugees and the people affected by famine are all caught up in conflict.

37. In addition, recent experience has raised particular concerns for providing services for personnel of the armed services and for the increasing number of children and civilian families that are now directly involved in conflict. The number of children and family members who are killed and injured is often much larger than the corresponding number of combatants.
38. There has been extensive study of the psychosocial and mental health effects of industrial warfare and more limited conflicts on combatants in the last century and in the first decade of the 21<sup>st</sup> Century. Some concepts resulting from these studies have been controversial. However, it is clear that witnessing or participating in hostilities, killing and destruction and experiencing threats to one's life and health, whether expected, sudden or continuous, can have substantial mental health consequences. It is also clear that these effects can be mitigated by effective leadership; instilling confidence in the system, the plans made and the equipment issued; and, particularly, by training and affiliation with buddies and groups of peers. Thus, elite and well trained forces experience fewer ill effects.
39. The experiences of war and conflict provide lessons that can be translated to managing psychosocial care in other situations including disaster, terrorism and other major events. A review of the history of military psychology and psychiatry shows that the aspiration of achieving positive psychosocial and mental health through effective selection procedures has not been fulfilled. However, substantial lessons for disaster psychosocial care have been learned from military practice. They include the importance of providing stepped and progressive models of care through which the specialisation of service responses is titrated against the needs of the people affected. Thus, people who experience distress, or distress combined with dysfunction, are first provided with simple interventions close to the frontline (i.e. in proximity to the source of their distress), soon after the traumatic events (i.e. with immediacy), and a good recovery is expected. The model of care proposed in this guidance incorporates the lessons of proximity, immediacy and expectancy, and of stepped services balanced with needs.

## **PEACEKEEPING**

40. Peacekeeping describes military operations that are intended to preserve peace and involves supervision by international forces of truces between hostile nations or groups. It is a term that is used mainly to describe actions that are sponsored by the United Nations (UN) and NATO.
41. Peacekeeping can be extremely stressful. The peacekeepers are exposed to danger caused by warring parties and, often, unfamiliar cultures and climates. They may be targets for attacks by some of the parties to conflict. Additionally, the requirement to engage with local populations to keep the peace brings risks and peacekeepers may witness atrocities.
42. The strain can give rise to effects on soldiers' wellbeing and operational effectiveness and is associated with them developing mental health problems, mental disorders and substance use and misuse. The rates of these conditions are greater in the armed forces deployed on peacekeeping duties than in the general population. However, post-traumatic stress disorder (PTSD) – a term used to describe a particular syndrome or type of mental disorder that is discussed later in this guidance – may be relatively

uncommon. Peacekeepers' families are also affected by the burden of worry that they experience.

43. It has been claimed that peacekeeping duties have produced even higher rates of stress casualties than is calculated from a formula that takes into account the numbers of soldiers who are killed and wounded.<sup>8</sup> The UN-Soldiers Stress Syndrome is the term given to a particular form of post-traumatic stress response in these personnel. Its characteristic feature is of distress evoked by fears of the soldiers' own anger. The latter may have been occasioned by duty-related provocations, threats or exposures to dangers under circumstances in which the military cannot fight back because of the carefully prescribed limitations on their actions.

## CHILD SOLDIERS

44. Involving children as combatants or in support of military combat has a long history; it is not a modern phenomenon. However, employing children in warfare is rising and peacekeepers are exposed increasingly to child soldiers. These findings emphasise the degree of involvement of civilians in modern warfare. Now, under international law, it is a crime to recruit children under 15 to armed forces or employ them in combat and 18 is the minimum age at which people may be directly involved in warfare. Nonetheless, a report to the UN Security Council in 2005 listing 54 parties to 11 conflicts that recruited children and there is information suggesting that children as young as six years old may be recruited to participate directly in military conflicts. Children may also be involved in terrorism by, for example, acting as bombers and suicide bombers. Additionally, children may be employed in a number of logistic roles as well as in combat. A good review is provided by Wessels.<sup>9</sup>
45. Study of employing children in conflict and war raises many issues. They include:
- the extent to which Western concepts of childhood are accepted by, and can be applied in non-Western cultures;
  - the cultures in which children who are soldiers have been brought up and the requirement to understand the pressures on them to become combatants or to support combat indirectly;
  - the effects that facing children as soldiers have on adult combatants;
  - the preparation that troops require if they are to face effectively and be equipped to deal with children who are combatants or threats to security; and
  - the needs of child soldiers and how they should be managed.

While this section provides a brief overview, it also raises more questions than answers.

46. Often children who become soldiers are portrayed as unwitting victims. However, the situation is rather more complicated than that. The availability of light weapons has greatly increased the potential for employing children as combatants. However, research has shown that the availability of weapons is only one of a range of factors that influence whether or not children become soldiers. There are economic, cultural, social and political pressures that act powerfully on children and which may make them more likely to become soldiers. They include:
- loss of caretakers;

---

<sup>8</sup> Weisaeth L..Historical background of early intervention in military settings. In Ørner R, Schnyder U (editors). Reconstructing early intervention after trauma. Oxford: Oxford University Press 2003.

<sup>9</sup> Wessells MG. Child soldiers: from violence to protection. Cambridge, Massachusetts: Harvard University Press 2006.

- provision of food and money;
- revenge; and
- pursuit of ideology and religion.

Sometimes, the only way in which children can save their own lives is by becoming soldiers.

47. There is evidence that, at the time of combat, child soldiers may show less fear than adult soldiers and greater disregard for life and the rules or laws of warfare. Inaction or hesitation by adult combatants in the face of child combatants can lead to more bloodshed and children's employment as soldiers also complicates negotiations between warring parties. Therefore, the military authorities should consider all of these matters as topics for their training of troops who require guidance on how they should act when confronted with child soldiers. A particular topic for consideration concerns young women and girls who are employed as soldiers. Additionally, troops require support post-conflict that enables them to raise and deal with their exposure to children as soldiers or perpetrators of terrorism.
48. Children's subsequent moral responses may be related to the length of time that they spend in an armed group and whether they see themselves as victims, are able to express remorse, or whether or not they continue to use violence habitually as a means of exerting control.<sup>10</sup>
49. While some sources conclude that children who are soldiers react to conflict very differently as compared to adults who are soldiers, there is also evidence that the psychosocial and mental health responses in the medium and long-terms of children who are forced to participate in military activities and in committing atrocities are similar to the reactions of children who are involved in other overwhelming or disastrous events.<sup>11</sup> Thus, the evidence is not yet conclusive. As a guiding principle, Shaw and Harris say that *"The essence of a traumatic situation is the particular meaning that the experience has for individuals and the difficulty in processing the experience into their preconceived cognitive views of the world"*. Cumulatively, there is evidence that children's psychological responses to their involvement in conflict as soldiers are determined by:
  - biological factors;
  - the children's developmental phases;
  - the intensity, type, duration of the traumatic experience including:
    - the intensity and duration of exposure to the stressor;
    - the degree of their participation in forced military activities;
    - whether or not they are mutilated;
    - witnessing killing of parents, family members and other community members;
  - children's fantasy lives and their interpretation of events;
  - level of emotional and cognitive development;
  - psychosocial factors including:
    - the degree of injury or life-threat;
    - the increased risk of displacement faced by child combatants and the difficulties of returning child soldiers to their communities given the events in which they have been involved;
    - losses of family members; and

---

<sup>10</sup> Barenbaum J, Ruchkin V, Schwab-Stone M. The psychosocial aspects of children exposed to war: practice and policy initiatives. *Journal of Child Psychology and Psychiatry* 2004; 45(1):41-62.

<sup>11</sup> Shaw JA, Harris JJ. Children of war and children at war: child victims of terrorism in Mozambique. In Ursano RJ, Norwood AE, editors. *Trauma and disaster – responses and management*. American Psychiatric Publishing: Washington DC; 2003.

- the disruption of continuity of communities/schools/families.<sup>12</sup>
50. The strategic approach taken in this guidance encompasses the needs of troops who face children as soldiers or the agents of terrorist and other atrocities as well as those of children who have been so engaged. The lesson for planning is that it should encompass the real risks and needs of affected populations rather than being limited by abhorrence or other reasons for preferring to stand aside from unpalatable situations.

## TERRORISM AND THREATS OF TERRORISM

51. Terrorism is distinguished from other natural and human-made disasters by the characteristics of extensive fear, loss of confidence in institutions, unpredictability and pervasive experience of loss of safety. Indeed, the psychological impact of events is the hallmark of terrorism and, in many instances, the primary targets are civilian and not military. Thus, the threat as much as the occurrence of terrorism provokes fear and anxiety. Consequently, greater effects on societies can be caused through, for example, Draconian security measures taken to prevent future events than may result from actual terrorist incidents.
52. In broad terms, people present themselves for healthcare evaluation relating to three types of problems following a potential terrorism, or to disaster-related toxic (biological, chemical or nuclear) exposure. They are:
- people with a disease or injuries that are due to the toxic agents;
  - people who have the physical manifestations of disease and a concurrent psychiatric condition that may confuse the clinical picture presented by either or both conditions; and
  - people who have not been exposed, but fear that they have been; this group of people is likely to be many times larger than the other two combined and, again, this may be the intention of perpetrators.

Anxiety and fear provoked by concerns about the possibility of having been exposed can complicate the medical picture. Physiological signs of autonomic nervous system arousal, along with anticipated somatising behaviours and dysphoria, mimic symptoms and signs of the physical effects of biological and chemical agents.

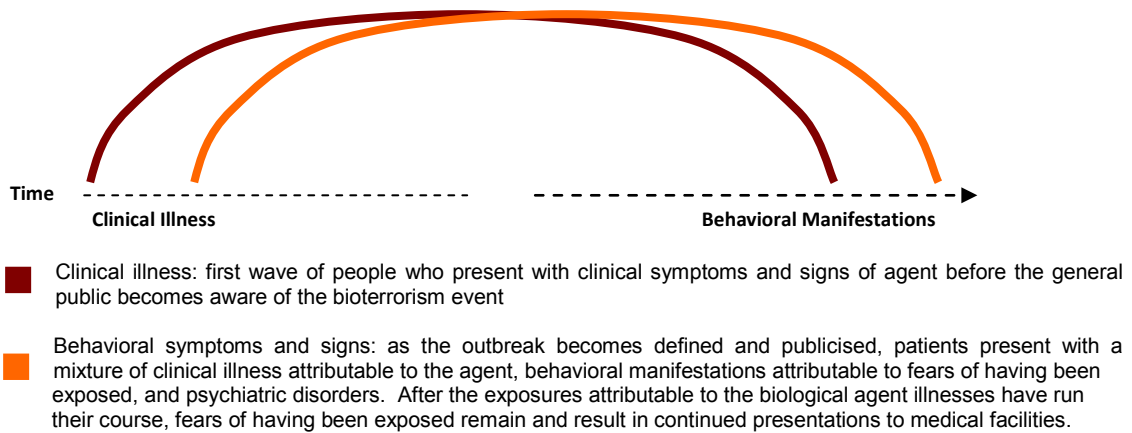
53. Although panic does occur after disasters, there is a large literature on the topic which agrees that panic is rare. Comparatively though, little research has been carried out on bioterrorist incidents, therefore studies of 'mass hysteria' - also known as 'mass sociogenic illness' - following actual or perceived exposures to biologic or toxic agents may be relevant to terrorism. Communicating risk is a critically important public health authority response to help the public react safely and appropriately.
54. Figure 5 represents the phases of individual and community responses to chemical or biological agent exposure.

---

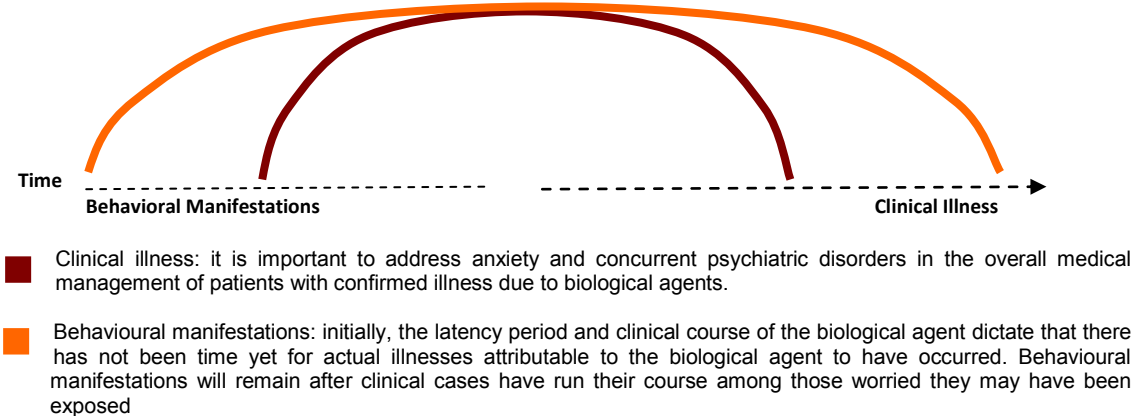
<sup>12</sup> Williams R. The psychosocial consequences for children of mass violence, terrorism and disasters. *International Review of Psychiatry* 2007; 19(3):263-277.

**Figure 5: Phases of individual and community responses to chemical or biological agent exposure<sup>13</sup>**

**Covert Exposure**



**Announced Exposure**



**PANDEMICS AND EPIDEMICS**

55. A pandemic is a worldwide spread of disease with outbreaks or epidemics occurring in many countries and in most regions of the world over time. Pandemics have the potential for global reach of mass destruction and, historically, have been more devastating than any other type of disaster.
56. An epidemic is a usually sudden outbreak of disease that becomes very widespread and affects a whole region, or a continent. Thus, epidemics affect more than the expected number of people and cause more than the number of cases of particular diseases that ordinarily occur in particular communities or regions during given periods of time. Diseases are described as endemic when they are present in a community at all times but in low frequency.
57. There are virtually no empirical data on the psychosocial and mental health impact of mass outbreaks of infectious disease such as a pandemic. This is largely because few pandemic health threats in the last century have been studied by scientists. However, the Severe Acute Respiratory Syndrome (SARS) near-pandemic in 2002-2003 has been studied. Almost half of the community population exposed to the SARS

<sup>13</sup> reproduced with permission from Rundell JR, Christopher GW. Differentiating manifestations of infection from psychiatric disorders and fears of having been exposed to bioterrorism. In Ursano RJ, Norwood AE (editors). Bioterrorism. New York: Cambridge University Press; 2004. Also, quoted on p 166 by Rundell JR in Assessment and management of medical-surgical disaster casualties. In Ursano RJ, Fullerton CS, Weisaeth L, Raphael B (editors). Textbook of Disaster Psychiatry. Cambridge: Cambridge University Press; 2007.

outbreaks experienced increased stress during the outbreak; nearly 20% exhibited psychosocial responses, and many felt horrified and helpless. Frontline health workers may be particularly vulnerable to negative mental health consequences of treating outbreak victims.

58. Special attention to the following matters is required:

- communicating risk;
- safety communication through public/private collaboration;
- psychological, emotional, and behavioural responses to public education, health surveillance of populations, and early detection efforts;
- psychological responses to community containment strategies such as quarantine, movement restrictions, school/work/other closures;
- sustaining the psychosocial resilience of the staff of healthcare services;
- managing health service surge and continuity; and
- responses to mass prophylaxis using vaccines and antiviral medication.

59. There has to be particular consideration for staff who may come into contact with infected people. The SARS outbreak had significant psychosocial effects on healthcare staff in Toronto and the effects on their families were substantial.<sup>14</sup> Research on the staff of a Toronto hospital showed that:

- the effects differed with respect to occupation and perception of risk;
- almost two-thirds of surveyed staff reported increased levels of concern for personal and family health;
- four factors were associated with risk of concern for health of self and family:
  - perception of risk;
  - living with children;
  - effects on lifestyle; and
  - being treated differently because of a person's work in a hospital.

60. Around 30% of staff who were involved as participants in the research were significantly distressed at the time. Factors associated with distress included:

- part-time employment;
- lifestyle impacts; and
- effects of precautionary measures on a person's ability to do his or her job.

61. The staff of one Toronto hospital showed that they were adversely affected by fear of contagion and of infecting family, friends and colleagues<sup>15</sup> Caring for health workers is challenging, and the uncertainty has a psychosocial impact on staff. The hospital's response required:

- clear communication;
- sensitivity to the psychosocial responses;
- collaboration between disciplines;
- authoritative leadership; and
- provision of psychosocial support.

---

<sup>14</sup> Nickell LA, Crighton EJ, Tracy CS, Al-Enazy H, Bolaji Y, Hanjrah S, Hussain A, Makhlof S, Upshur REG. Psychosocial effects of SARS on hospital staff: survey of a large tertiary care institution. *Canadian Medical Association Journal* 2004; 170(5):793-798.

<sup>15</sup> Maunder R, Hunter J, Vincent L, Bennett J, Peladeau N, Leszcz M, Sadavoy J, Verhaeghe LM, Steinberg R, Mazzulli T. The immediate psychological and occupational impact of the 2003 SARS outbreak in a teaching hospital. *Canadian Medical Association Journal* 2003; 168(10):1245-1251.

62. A paper on the long-term psychological and occupational effects on hospital staff found that healthcare workers experienced the SARS outbreak as stressful.<sup>16</sup> In the interval of 13 to 26 months afterwards, healthcare workers reported higher levels of burnout and distress. The authors say that “*variance in adverse outcomes was explained by a protective effect of the perceived adequacy of training and support and by a provocative effect of maladaptive coping style and other individual factors*”.
63. It is important to note that, while the proportion of staff that was affected by distress was substantial only one healthcare worker of the 139 studied in Toronto developed PTSD in the one to two years that followed, although seven (5%) had new episodes of mental disorder<sup>17</sup>. That frequency might have been not grossly dissimilar to the rate that might have been predicted for staff who were unaffected by SARS though the very low numbers, the circumstances and short duration of follow-up prevent any statistical analysis or robust conclusions on this matter. However, the incidence was associated with past psychiatric history and inversely related to years of healthcare experience and perceived adequacy of training. It also has to be set against the life-time prevalence of depressive or anxiety disorders or substance misuse in similar communities that are unaffected by SARS.
64. Thus, despite the relatively high frequency of less severe anxieties and worries at the time of the SARS outbreak, the incidence subsequently of new episodes of disorder was similar to community incidence rates. This indicates that, despite symptoms of distress, the resilience of hospital staff who continued to work in the hospitals in Toronto was sustained. Nonetheless, training for future events should bolster health care staff’s resilience and is particularly important for people who are more vulnerable or less experienced.

## RURAL HEALTH AND WELLBEING AND OUTBREAKS OF ANIMAL DISEASES

65. However, poverty is more common in rural than urban areas and especially so in the most remote areas. People who live on low incomes may be dispersed over large, sparsely populated regions. Their poverty is often less visible as is lack of access to services and poor transport and it has a major impact on the health of people and their families. Other problems are social isolation, social stigma, gaining access to services because of the unsocial hours worked, and economic difficulties.
66. Economies of scale mean that most services are located in urban areas. This creates problems for access particularly in urgent and crisis situations. There are also implications for the time, money and effort required to travel to services, particularly when access to transport may be a problem. Access to information is difficult and inadequate in rural areas both physically and in appropriate formats.
67. The stigma for people with mental health problems and disorders can be particularly strong in rural communities. This is partly caused by the social structure in which the service user movement is weak; many communities also have a deeply ingrained culture of stoicism and self-reliance. The latter can have both negative and positive effects. When combined with problems of access to services, stigma may result in people receiving services late in the trajectory of their needs.<sup>18</sup>

---

<sup>16</sup> Maunder RG, Lancee WJ, Balderson KE, Bennett JP, Borgundvaag B, Evans S, Fernandes CMB, Goldbloom DS, Gupta M, Hunter JJ, McGillis L, Nagle LM, Pain C, Peczeniuk SS, Raymond G, Read N, Rourke SB, Steinberg RJ, Stewart TE, VanDeVelde-Coke S, Veldhorst GG, Wasylenki DA. Long-term psychological and occupational effects of providing hospital healthcare during SARS outbreak. *Emerging Infectious Diseases* 2006; 12(12):1924-1932.

<sup>17</sup> Lancee WJ, Maunder RG, Goldbloom DS. Prevalence of psychiatric disorders among Toronto hospital workers one to two years after the SARS outbreak. *Psychiatric Services* 2008; 59(1):91-5.

<sup>18</sup> <http://www.mind.org.uk/About+Mind/Networks/ruralMinds/>

68. Set against this background, certain groups of people in rural communities are at high risk of developing mental health problems and disorders, including farmers and farm workers and their families. Two specific agricultural crises in the UK, caused by Bovine Spongiform Encephalopathy (BSE) and foot and mouth disease, have had devastating long-term effects on agricultural communities.
69. After the 2001 foot and mouth crisis in the UK:
- the physical and emotional health of local people was significantly worse than that of the main population and high levels of stress, anxiety and depression were identified;
  - less than a quarter of people who were affected sought advice about their health since the start of the outbreak despite many of them stating that their health had been affected;
  - farmers were more likely to turn to their own communities and to veterinary surgeons for support; and
  - few people said that they would welcome more support from health services with many preferring to use anonymous support agencies, such as self-help materials or computer-based treatments.<sup>19</sup>

## COMMUNITY RESILIENCE AND RESTORING COMMUNITIES

70. Protecting vulnerable people and communities against disaster is a critical component of disaster preparedness and responses to major incidents. Particular populations, for example, women, children and adolescents, older people, people who have pre-existing health problems and less affluent people are at increased risk of psychopathological morbidity following disasters.
71. Research into resilience has shown that two interacting factors are of great importance in how people respond to and cope with disasters and major incidents. First, a key strength is people's ability to form relationships with others and accept their support. The second factor concerns the amount of psychosocial support families and communities offer. People who are able to form attachments well and who are offered support are less likely to develop post-traumatic mental disorders than people who have difficulty in accepting support and/or who are not offered it. Therefore, it seems likely that lack of social support, and concurrent life stress have greater effects on whether or not people have an adverse psychosocial response to a disaster or major incident than pre-existing factors such as demographics, pre-existing psychiatric illness and family psychiatric history.
72. This means that effective community provision of psychosocial support is a critical factor in mitigating the psychosocial consequences of disasters and major incidents. However, it is also the case that, in most countries, this kind of intervention is not necessarily offered on a needs-led or rational basis. People who are least affluent and poor are affected most by disasters and they demand and receive less attention than their more fortunate, and, in some cases, less needy peers.
73. Poverty and social disadvantage also have major effects on collective, community and personal resilience. Most definitions of poverty include some description of economic deprivation, that is, lack of income. Poverty is not only deprivation of economic or material resources but a violation of human dignity too. This, in itself, does not take

---

<sup>19</sup> Peck DF. Foot and mouth outbreak: lessons for mental health services. *Advances in Psychiatric Treatment* 2005; 11:270-276.

account of the variety of social, cultural and political aspects of deprivation and social disadvantage that are often associated with poverty. Many research studies show that disadvantage and poverty are overlapping but also distinct risk factors.

74. Reports from the UN indicate that at least half the world's population live in cities. For the developing world, this means that many cities have large populations living away from their families, and communities and other social networks, are crowded into poor housing and located away from services of any kind. Often they live on inhospitable terrain, including flood plains and sloping ground. Plainly, these indirect effects of poverty also have impacts on social and community cohesion and the risks of disasters.
75. Even if the number of disasters were to remain the same each year, and this is not the case, the numbers of people who are living in poverty in cities is increasing by tens of millions of people each year. Their proximity to coasts and rivers places them at increased risk of the effects of pluvial, fluvial and coastal flooding. Some 500 million people now live in the most active volcanic and seismic zones of the planet. Economic growth everywhere means that there is more investment to be destroyed, and more people are at risk of losing their livelihoods and suffering the psychosocial and mental health consequences of disasters.

**Summary box 1: The nature of disasters, major incidents and psychosocial trauma**

**Key points: the nature of disasters, traumatic events, major incidents and psychosocial trauma**

This section provides a summary of the nature of disasters, conflict, traumatic events, major incidents and terrorism and the rationale on which the guidance and the strategic stepped model of care are founded.

This guidance is aimed at mitigating the psychosocial effects of traumatic events on people generally and on responders. Responders include people who are:

- civilians;
- military personnel;
- first responders (members of the public and professional);
- emergency and rescue services personnel;
- humanitarian aid workers;
- non-health and welfare employed persons; and,
- staff of healthcare services.

## PSYCHOSOCIAL RESPONSES TO DISASTERS, MAJOR INCIDENTS AND SUSTAINED ADVERSITY

### INTRODUCTION

76. On average, a disaster occurs somewhere in the world each day. Although some are anticipated, it is very difficult to predict accurately when disasters may occur or what is likely to be the nature of the next major incident. This imposes a challenge for services and those people who determine policy. In particular, it imposes an obligation to have rehearsed and tested plans available that are sufficiently flexible to be adapted to circumstances that have not been anticipated. They must also be sufficiently clear to enable rapid, prioritised and comprehensive actions to be taken.

77. The common characteristics of disasters and major events are their potential to affect and disadvantage many persons and to create many stressors that include:

- threat to life and physical integrity;
- exposure to dying people and to corpses;
- bereavement;
- profound loss;
- social, employment, school and community disruption; and
- continuing hardship.

The most common experiences resulting from disaster are social and material loss and bereavement. People may experience multiple losses. Failure to confirm death, locate bodies and to ascertain the possibility of the survival of close family and friends may delay grief for substantial periods of time.

78. The psychological and behavioural consequences of disasters result from interactions of the:

- direct impact of the disaster or major incident, for example, destruction and death;
- consequences of the response, for example, economic loss, disruption, etc;
- impact of subsequent preparedness or counter-terrorism strategies, for example, behavioural and social ramifications of new security procedures; and
- people's personal and community circumstances, past experiences and resilience; and
- health affects on people who are involved directly or indirectly or who carry the burden of worry and care for survivors.

79. This means that people who are responsible for planning and responding to major events must understand the various ways of meeting the psychosocial needs of people who are affected by those events.

80. It is important for all authorities to consider the need to:

- work with each of the other legitimate authorities in the countries in which they are involved; and
- be aware of how responsibilities are allocated by the administrations with which they work.

81. People react in various ways to traumatic events. Reactions are determined by various factors including pre-trauma, peri-traumatic and post-traumatic factors. Most people of all ages recover from their acute response, whatever the traumatic event. This process

can take up to several months, depending on the nature of the trauma and the response. A sizeable minority of people goes on to develop more significant problems and disorders that have direct and indirect impacts on their lives. Thus, the ways in which humans respond to powerful psychological trauma can be illustrated by a spectrum with resistance and resilience, and growth at one end and identifiable and sometimes severe and/or sustained psychopathology at the other.

82. This section of the guidance begins by reviewing some of the myths that are commonly attached to psychosocial response to disasters and major incidents, summarises an abstracted summary of how people generally react psychosocially before providing more detail on the factors that influence the prospects of people developing more severe responses and information that relates to how people's responses vary. All of these matters should inform the planning for and the systems and services that are set up to respond to the psychosocial needs of populations of people that are affected by disasters and major incidents.

### **THE CHALLENGE OF CATASTROPHIC EVENTS: PSYCHOSOCIAL MYTHS AND THE REALITIES**

83. There are many common myths about human behaviour and sensitivities before, during and after disasters and major incidents; a summary is at Annex B. Planners as well as practitioners should understand them if they are to make arrangements to train first responders and all staff properly and to design appropriate psychosocial care for survivors, people who are indirectly involved and, not least, for first responders and staff of emergency and health agencies. This section identifies three common myths and provides a substantial commentary on panic.

#### **Immobilisation by Fear**

84. A first myth is that people who are rendered victims are immobilised by fear and helplessness and feel hopeless. While this may occur in some large-scale events that destroy the infrastructure of large areas, it is far from the general case. Many people directly involved are first to take action; they are the first responders.

#### **Chaos within Responding Agencies**

85. Another myth is that disasters create chaos within responding agencies. Often, disasters and major incidents create unity and improve inter-agency cooperation rather than disorganisation. It is also important to realise that there can be little easy division between the needs of first responders, including professional and emergency staff, and the needs of the survivors whom they are seeking to assist. Everyone in the dynamic is at risk of psychosocial impact. This is the reason for this guidance referring to survivors rather than victims.

#### **Panic**

86. The subject of how people behave after disasters and major incidents is considerable importance for planning for disasters because it has implications for:
- how societies and communities plan and prepare for disasters of all kinds including the public education they provide and their approaches to developing collective resilience;
  - how and what governments and the responsible agencies communicate with the public at the times of major incidents;

- how agencies respond in the immediate, short and medium terms; and, particularly, for
- how the responsible agencies manage the scene in the immediate aftermath of events.

87. However a pervasive myth concerns panic. Indeed, this is one of the most persistent myths that appears resistant to researched evidence to the infrequency of its occurrence to the extent that there are widely-held beliefs that panic after single-incident major events is common. Panic is defined as an *'acute fear reaction marked by loss of self-control followed by non-rational and non-social flight'*.<sup>20</sup>

88. Research and common experience shows that, contrary to belief, panic, as defined here, occurs less frequently than many people suppose. If panic does occur it is most likely when people:

- feel trapped and helpless;
- think there is no effective leadership or management; and
- believe that resources will be provided on a first come, first served basis.

This is likely to be a particularly pertinent factor in relation to CBRN incidents.

89. However, there is a volume of evidence from many events of differing natures which show that that, while people are stunned in the immediate aftermath of a potentially traumatic event, they often show remarkable altruism and behave in rational and selfless ways, even to the extent of putting themselves at greater risk in order to care for strangers. Recently, these findings have been described by research on people who were directly involved in the bombings in London on 7 July 2005.<sup>21</sup>

90. An informative research review of panic in respect of terrorism and CBRN releases is provided by Sheppard et al.<sup>22</sup> This guidance quotes from that because it covers a number of matters that have important consequences for governments, planners and responders.

91. Sheppard et al summarise the situation by saying that *"Governments and commentators perceive the public to be prone to panic in response to terrorist attacks – conventional or involving chemical, biological or radiological weapons. Evidence from [our analysis of] five such incidents suggests that the public is not prone to panic, although people can change their behaviours and attitudes to reduce the risk of themselves being exposed to a terrorist incident. Sheppard et al continue "By evaluating public reactions to terrorism or CBR releases in a limited number of case studies, this paper ... [proposes] that panic remains rare in these scenarios. Instead, we suggest that although the public may change their behaviours or attitudes, in ways that might be viewed as irrational by public authorities, to reduce their risk of being personally exposed or threatened by terrorism, these actions tend to have an internal logic and as such are amenable to change. Assumptions of panic may therefore be counterproductive.*

92. The matter of amenability to change of public reactions to disasters and major incidents has substantial implications for societies' and communities' plans for developing their resilience prior to any emergency and the authorities' contributions to those plans.

---

<sup>20</sup> Quarantelli EL. The disaster recovery process: what we know and do not know from research. Preliminary Paper 286. Disaster Recovery Center; 1994.

<sup>21</sup> Drury J, Cocking C; 2007. [www.sussex.ac.uk/affiliates/panic/Disasters%20and%20emergency&20evacuations%20\(2007\).pdf](http://www.sussex.ac.uk/affiliates/panic/Disasters%20and%20emergency%20and%20evacuations%20(2007).pdf)

<sup>22</sup> Sheppard B, Rubin GJ, Wardman JK, Wessely S. Terrorism and dispelling the myth of a panic prone public. *Journal of Public Health Policy* 2006; 27:219-245.

Furthermore, this aspect of the topic also emphasises the key importance of how and in what ways the media are engaged in emergency preparedness and for strategies for effective public communication prior to, during and after all kinds of disastrous events.

93. A second point illustrated by Sheppard et al relates to cultural dimensions that impinge on how people respond to disasters. They say *“While our discussion centres on providing a wide-ranging perspective of the public’s response, it needs to be kept in mind that social and cultural backgrounds between and within countries may influence the behavioural responses to terrorism, and this should be factored to ensure effective terrorism risk communication strategies. Rather than one cohesive ‘public’, there are many different sectors within societies based on different demographic, social, psychological, and medical characteristics”*.
94. In respect of the protective actions that people and the public may take, Sheppard et al say that *“Behavioural responses may be divided into acts of omission, such as not making unnecessary journeys, and acts of commission, such as taking prophylactic medication despite the inherent risk of side effects. Evidence suggests that the public are aware of these differences, and tend to adopt responses proportionate to the risk. Drawing upon the literature in the social and natural sciences, our discussion encompasses differing risk perceptions of terrorist threats and consequences of attacks”*. Therefore, they find that *“During an emergency evacuation ... the presence of heightened anxiety and distress among the evacuees combined with a fear of dying is not sufficient to label them as panicking”*.
95. Sheppard et al state that *“Panic in this sense demands four additional factors: a hope of receiving apparently scarce or dwindling resources; a focus on achieving personal safety instead of assisting others; a degree of contagiousness; and the adoption of irrational behaviours.”*<sup>23</sup>
96. The matter of whether or not, in an emergency, the public complies with what the responsible authorities predict will occur, with what they would prefer to occur, or with their plans or instructions often appears to frame the factors that bring influential people, including planners, responders and journalists, to use the word ‘panic’ in respect of apparently non-compliant behaviour of persons or groups of people. In this regard, Sheppard et al say *“This ... irrational, element is particularly important, but is often misapplied. One set of behaviours might be construed as the best actions by emergency planners, journalists, or public health officials in possession of all the relevant information, with sufficient time to make an informed choice, and possibly also the benefit of hindsight, but these behaviours will not necessarily appear to be the best actions to someone denied these resources and having to make rapid decisions under intense stress. Incorrect decision-making due to incomplete information or insufficient resources is not the same as irrational decision-making and as such is not sufficient to categorise someone as panicking”*.<sup>24</sup>
97. Much of the research into how people behave after disasters has focused on studying particular people. Recently, very promising lines of enquiry have been developing that consider the social psychology of disasters. That research has thrown further light on how groups of people behave together as disasters unfold and afterwards. These enquiries also challenge assumptions made about panic showing that, for example, people trapped together during the bombings in London on 7 July 2005 formed bonds rapidly with strangers and that they were more likely to display altruistic behaviours

<sup>23</sup> Keating JP. The myth of panic. Fire Journal. 1982:57-147.

<sup>24</sup> Keating JP. The myth of panic. Fire Journal. 1982:57-147.

rather than panic in either the technical sense that has been adopted here or in the more colloquial ways in which that term is often, inaccurately, used.<sup>25</sup>

98. In summary, the presence or absence of panic may be a critical matter that affects morbidity and mortality in the immediate period following an emergency. However, myths about this important matter may also raise the risks because they may be included within the assumptions on which major incident plans are developed and put into action. Therefore, accurate information about topics of this nature is vital as is more research into how fear and anxiety interact with behavioural responses to amplify or attenuate people's perceptions. A closely related matter is the work that is required to develop plans that enable the authorities to modify people's responses through accurate and authoritative risk communication strategies. Research is in progress in this domain, but it is too early to report on it in the edition.

### **The Realities of How People Respond to Disasters and Major Incidents**

99. There are several conclusions that stand out from the literature.
- People and communities show remarkable psychosocial resilience. Up to approximately 75% of people recover psychosocially without requiring expert intervention given the care, assistance and good relationships with their families and friends and the support of their communities. However, this proportion changes with the nature of the disaster or major incident.
  - Resilience allows for optimism but it must not allow complacency. The potential for immediate and short- to medium-term distress is great and a high percentage - around 25% - of people who are involved experience long-term health complaints after their exposure to traumatic events. The risks are substantial for a sizeable minority of people to develop a mental disorder or other psychological morbidity and dysfunction in the medium- or long-terms. The range of services required by people who suffer these problems are disproportionately high.
100. On the other hand, the psychosocial impact of disasters and major incidents also produces ripple effects and psychosocial responses are usually required on a wider scale than may be predicted initially. Major incidents, disasters and terrorism may occur in one location but they often have far wider effects on people and communities. Commuters may be involved in travel-related incidents as are tourists and visitors. Survivors and responders have relatives, work colleagues and other highly concerned people who are not directly involved. Additionally, planners should be aware of the convergence of staff of aid and relief agencies, offers of assistance and advice and materials in the aftermath of major incidents. Not least, there needs to be active and positive engagement with the media.
101. Thus, even local events may have national and international effects. A good example of a technological disaster that had short-, medium- and long-term consequences is the explosion at Chernobyl. Well after the immediate, regional impact that event resulted in transmission of radiation over a huge area of the world which brought medium- and long-term effects on an international scale that have had their psychosocial components.

---

<sup>25</sup> Drury J, Cocking C; 2007. [www.sussex.ac.uk/affiliates/panic/Disasters%20and%20emergency&20evacuations%20\(2007\).pdf](http://www.sussex.ac.uk/affiliates/panic/Disasters%20and%20emergency&20evacuations%20(2007).pdf) and <http://www.london.gov.uk/assembly/resilience/2006/77reviewnov22/04u-univ-sussex.pdf>

102. A substantial literature has developed that identifies and explains the effects of the high prevalence and high stressfulness of disasters and their impact on people's mental health and level of functioning.

### **AN OVERVIEW OF HOW PEOPLE OF ALL AGES RESPOND PSYCHOSOCIALLY TO TRAUMATIC EVENTS**

103. The social psychological aspects of disasters require further research because many past studies have focused on individuals' psychopathological responses. This guidance recognises the need for that work to be refined, but also for increased foci on how groups of people behave in the aftermath of emergencies. Relying solely on better understanding of individual people runs the risk of diminishing the importance of group contexts. This guidance recognises their importance to resilience and recovery of social support and group processes. Additionally it recognises the level of importance to morale, behaviour under fire and subsequent recovery that is afforded in military organisation and training to identifying with buddies, small teams and units.
104. Nonetheless, much of the rest of this chapter is informed by the greater volume of research on how particular people respond to disasters and major incidents and the factors that increase or decrease the risk they face of developing a more severe response or a mental disorder.
105. Additionally, this guidance recognises that there is lack of an agreed terminology for describing people's responses to adverse circumstances and events. Therefore, Annex C provides definitions of the terms that are used in this guidance and which are recommended because of their clarity and support from research. A number of the terms are summarised here as an introduction to how people respond psychosocially to disasters and major incidents.
106. **Psychological Trauma**
- a. Major incidents and disasters challenge our beliefs about ourselves, our families and friends and the world. Ordinarily, people make three fundamental assumptions:
    - the world is essentially a good place;
    - life and events have meaning and purpose;
    - they are valuable and worthy.<sup>26</sup>
  - b. Psychological trauma occurs when events challenge these assumptions and take a person beyond their tolerance. Occasionally, events are so hurtful that people question and alter their fundamental views of the world. These events cause damage not only because of the immediate harm caused but because of the lingering need for people to re-evaluate themselves and the world.
  - c. Put in another way, psychological trauma occurs when the coping resources of a person, family or community are overwhelmed, or are threatened to be overwhelmed, by a particular event. The event may be a single, acute incident, it may be a prolonged one or there may be a series of events occurring over a period of time. It should be noted that it is the personal meaning of the event and not the event itself which determines whether or not something is traumatic.

---

<sup>26</sup> Janoff-Bulman, R. Shattered assumptions: Towards a new psychology of trauma. New York: Free Press; 2002.

107. **Stress**

- a. The challenge of defining stress and the differing meanings and uses of that term are considered in Annex C. This guidance uses the term to describe the challenge to people and groups of people that may arise from untoward events that are of such a nature and/or severity as might cause them psychosocial trauma.
- b. Thus, most of the people who are involved in traumatic events experience stress and it may have effects that range from enhancing people's resilience and personal skills through to provoking serious mental disorders. In other words, stress may be alerting, galvanising, improve resilience and raise performance, but it may also cause the emotional experience of distress, reduce performance to the point of temporary and, sometimes more sustained dysfunction, and particularly if the stress is sustained, provide a risk to mental health. Often, the differences in response turn on personal characteristics, developmental experiences, life experiences, training, family, team and group memberships, and the leadership and social support offered to people.<sup>27</sup>

108. **Distress** – Distress is the term that describes the experiences and feelings of people after external events that challenge their tolerance and adaptation. It is initiated and maintained directly by primary and secondary stressors and subsides if the stressors disappear or as people adapt to the changed circumstances. Distress is an anticipated human emotion, not a disorder, when it and any associated psychosocial dysfunction emerges and persists in proportion to external stressful situations. Differentiation between distress and disorder is evaluative because it is not defined by objective standards and differences are open to cultural considerations and differing personal perceptions and values.

109. **Dysfunction** - Dysfunction means any impairment or abnormality, however caused, of function in the social, emotional, physical and/or cognitive domains.

110. **Mental disorder** - The term disorder is used when people's experiences, emotions and behaviours are more intense, frequent, sustained or incapacitating than might be expected of the general population or when these features deviate from an anticipated norm and culturally sanctioned responses to external circumstances and situations. Recent developments advise using the term when internal psychological dysfunction(s) are implied that may reflect, be mediated by, or result from neurochemical disorder.

111. **Complex Trauma**

- a. The notion of complex psychological trauma stems from the differentiation that may be made between two broad patterns of events and how people respond to them.
- b. The first relates to the psychosocial impact caused by single, life-changing incidents that lead to 'shock', full and detailed memories, and misperceptions in a large number of people in the immediate aftermath.
- c. The second pattern is that of complex trauma in which responses are provoked by long-standing or repeated ordeals that result in anticipation, massive denial, dissociation, self-anaesthesia, identification with the aggressor, and rage. Researchers have distinguished patterns of response on the basis of the nature

---

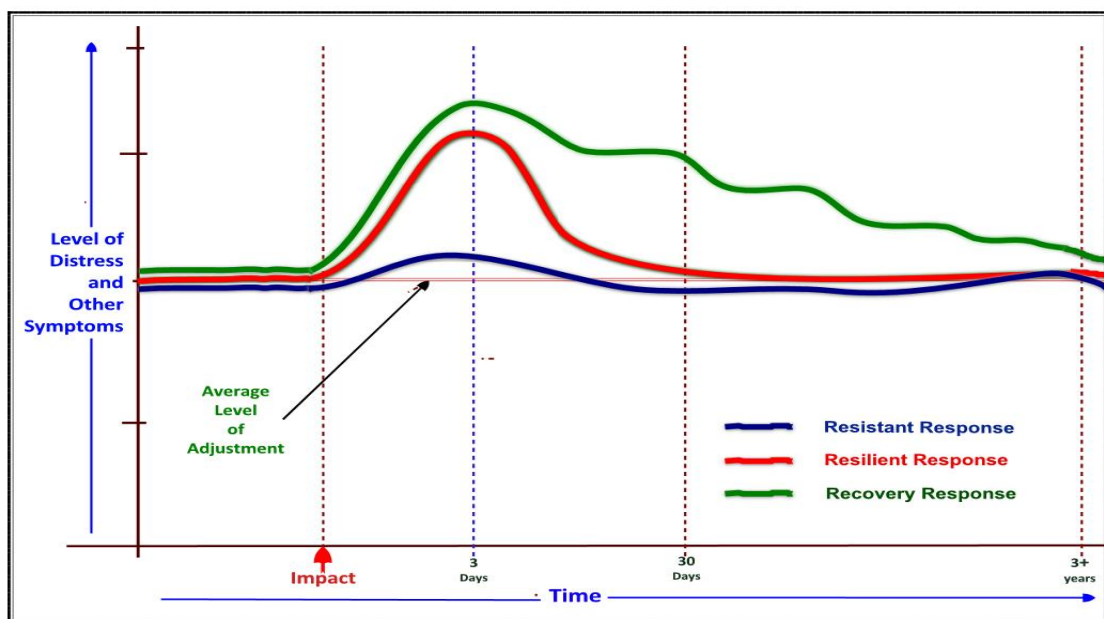
<sup>27</sup> Alexander DA. Stress among police body handlers. A long-term follow-up. British Journal of Psychiatry 1993; 163:806-808.

and patterning of the traumatic events. There are also crossover patterns identified between the two types.

112. **Resistance, Resilience and Recovery**

Figure 6, is reproduced from Annex C (in which it is Figure 5) to show some of the features that distinguish resistance, resilience and recovery. It shows how people who are resilient or likely to recover and people who go on to develop mental disorders may, initially, have similar experiences. This means that the narrative of how people respond over time is the best method of telling apart people who are resilient but experiencing temporary distress from the people who experience more sustained distress from which they are likely to recover and, again, other people who may suffer more serious and sustained disorders.

Figure 6: resilience from resistance and recovery<sup>28</sup>



113. **Resistance** - Resistance is a concept that describes the ability of people to respond to stressors with only very minor or no change. It is related to resilience, but the two are not identical concepts, and the terms should not be used interchangeably.

114. **Resilience**

- a. The term resilience may be applied in two ways. The first is to describe how particular people respond to the challenges they face and is dependent on their personal characteristics, repertoire of knowledge, skills and capabilities (inherent and acquired), the qualities of their relationships, and their life experiences and circumstances. This is known as personal resilience.
- b. In this guidance, personal resilience is defined as a person’s capacity for adapting psychologically, emotionally and physically reasonably well and without lasting detriment to self, relationships or personal development in the face of adversity, threat or challenge. It maps onto the concepts of hardiness and sense of

<sup>28</sup> Diagram constructed by Williams r and Kemp V after ideas contained in Layne CM, Warren JS, Watson PJ, Shalev AY. Risk, vulnerabilities, resistance and resilience: towards integrated conceptualization of posttraumatic adaptation. P 497-520 in Friedman MJ, Keand TM, Watson PA (editors). Handbook of PTSD, Science and Practice. New York: Guilford Press; 2007. This diagram is produced with permission from Guilford Press.

coherence and is also characterised by people having good capacities and capabilities for forming attachments to other people, being able to sustain good relationships with other people, and also being able to accept social and emotional support from them. Thus, resilience is a dynamic process of interaction between people, and others and the environment around them. It describes more than people being subject to protective factors or lacking risk factors that affect their lives.

- c. The second application of the term is to describe how groups of people, organisations, communities, and countries respond to, cope with, and recover from disasters and catastrophes. This is termed collective resilience.
  - d. **Hardiness** - the term hardiness is related to resilience and resistance and consists of three components. *Commitment* implies that hardy people view potentially stressful events as meaningful and interesting. *Control* means that people see themselves as able to change events. *Challenge* means seeing change as normal and as providing opportunities.<sup>29 30 31 32</sup> Hardiness, therefore describes some of the features of personal resilience.
  - e. **Sense of coherence** – Sense of coherence (SoC) is a concept that is similar to and overlaps with hardiness. SoC describes a perception that events are *comprehensible, manageable* and *meaningful*. A strong SoC in adults has been shown to be a stable protective factor for health that is independent of known risk factors and inversely related to distress. It is also a potential marker of people's capacity to adapt to social stress. There is support from research for SoC having a role both in mediating and buffering the impact of adverse experiences on psychological well-being in adulthood.<sup>33</sup>
115. **Recovery** - In psychosocial care, the term recovery is used to describe dynamic and continuing interactional processes that involve each person's strengths and vulnerabilities, the resources that are available to them and the positive aspects and constraints of the environment around them. It entails the active involvement of each person and group of people in managing their own psychosocial problems and mental disorders and reclaiming, gaining and maintaining a positive sense of self, roles and life beyond the healthcare. This paradigm for recovery is supported by the empirical evidence.

## THE FOCUS OF DISASTER PSYCHOSOCIAL AND MENTAL HEALTHCARE: THE PSYCHOSOCIAL APPROACH

116. The adjective psychosocial refers to personal psychological development in the context of a social environment. It is a specific term that is used to describe the unique internal processes that occur within people. It is usually used in the context of psychosocial interventions, which include psychoeducation, psychological therapies and or psychopharmacological treatments.

<sup>29</sup> Maddi SR, Kobasa SC. The hardy executive: health under stress. Homewood IL: Dow Jones-Irwin; 1984.

<sup>30</sup> Kobasa SC, Maddi SR, Courington S. Personality and Constitution as Mediators in the Stress-Illness Relationship. *Journal of Health and Social Behavior* 1981; 22: 368-378.

Kobasa SC, Maddi SR, Kahn S. Hardiness and health: a prospective study. *Journal of Personal and Social Psychology* 1982; 42(1):168-77.

<sup>31</sup> Kobasa SC, Maddi SR, Kahn S. Hardiness and health: a prospective study. *Journal of Personal and Social Psychology* 1982; 42(1):168-77.

<sup>32</sup> Kobasa SC. Stressful life events, personality, and health: an inquiry into hardiness. *Journal of Personal and Social Psychology* 1979; 37(1):1-11.

<sup>33</sup> Antonovsky, A. Unravelling the mystery of health: how people manage stress and stay well. San Francisco: Jossey-Bass; 1987.

117. Also, human responses vary according to the array of stressors that arise from events, the way in which and the extent to which they are involved, the social support systems available to them, the nature of the events and the ways in which they are managed.
118. Thus, the psychosocial approach espoused in this guidance is based on commitment to a broad range of eclectic approaches to planning and responding to disasters and major incidents. It includes social, psychological, educational, other non-healthcare and non-medical, and healthcare responses to the psychosocial impacts and, within that broad category, services for people who become distressed or who fail to adjust or develop dysfunction and mental disorders.
119. Reviews, conducted to support the preparation of this guidance, of preparations for a possible influenza pandemic, high profile disasters, terrorist incidents and the shifted paradigms of warfare since World War II and the Cold War have highlighted the need to:
- develop appropriately planned, coordinated, flexible, multi-agency responses to disasters and major incidents;
  - provide services that sustain and develop the psychosocial resilience of populations, communities and potential responders;
  - create capabilities and the service capacity to provide services for the substantial numbers of people who may show more sustained distress; and
  - create capabilities and the service capacity to provide mental health services for the significant but smaller proportion of affected people who develop mental disorders.
120. While children and young people have been shown to be remarkably resilient in the face of disasters and major incidents, the literature and experience also highlight the huge impacts of major incidents and disasters of all kinds on vulnerable groups that include children and young people and older people. This reflects their dependency on the care afforded by others whose own thoughts, feelings, optimism, health and resilience may be compromised. Regarding children and young people in particular, there is the added concern of the psychological significance of events on their development.
121. This guidance endeavours to resolve that challenge by adopting defined terms and an approach that distinguishes people who are:
- stunned in the immediate aftermath (resistant and resilient people);
  - proportionately and temporarily distressed but able to function satisfactorily in the short- and medium-terms (resilient people);
  - disproportionately distressed or distressed and dysfunctional in the short- to medium-terms; and
  - mentally disordered in the short-, medium- and longer-terms.
122. These are simplified distinctions because having one form of impact does not preclude developing the others and it can be very difficult to distinguish proportionate and disproportionate distress from disorder. In reality, there is a continuum and distinctions that are required to understand the psychosocial consequences of major incidents and to plan services may prove somewhat arbitrary when they are applied in operational settings and involve distressed people. However, as has already been indicated, monitoring the trajectory of how particular people and groups of people respond is a helpful way in which to determine progress over time and to decide who is likely to recover and who needs more substantial intervention.

123. In summary, this guidance recommends that effective responses to the psychosocial and mental health tasks that face governments and the relief agencies, rescue and social and healthcare services should be made as components part of an integrated response to disasters and major incidents. The psychosocial tasks include:
- endeavouring to develop and support people's resilience and capacities for recovery;
  - assisting people to cope in the immediate aftermath though they may be stunned, disorientated and frightened;
  - recognising the transient distress that affects most people and assisting people who require help to deal with the immediate humanitarian, welfare and emotional consequences;
  - ensuring that actions taken by responders and the services in regard to people's psychosocial and mental health needs are integrated with responses provided by the rescue and emergency services and the humanitarian aid and welfare services;
  - providing evidence-based psychological therapies at the right time for a smaller number of people whose reactions are more persistent or associated with dysfunction;
  - providing services that are able to assess the psychosocial needs of people whose reactions and distress do not diminish;
  - providing timely access to non-specialised and specialist mental healthcare for a proportion of affected people (a small proportion of affected people may require sustained mental healthcare that is delivered over years); and
  - recognising in service design that some people may not develop a consequential mental disorder until a number of years has elapsed.
124. The presence of close family relationships is a notable feature influencing people's resilience and their recovery from disasters and major incidents. However, as well as being sources of support, families and friends are also sources of conflict and strain, for several reasons. First, survivors, relatives and the staff of responding agencies all experience timescales differently. Second, survivors who were directly involved may be reluctant to share their experience with people, even close relatives, who were not directly involved because they believe that their relatives and friends cannot understand. Third, there are strong temptations for survivors to wish to protect their relatives and, fourth, survivors may discount the effects on people who were not directly involved.
125. The Sudden Trauma Information Service Helpline (STISH, 2008) advises that, *"commonly, those exposed to traumatic events feel out of control and helpless for a spell. It is, therefore, important for them to take control again of their lives and to feel that they can do things to help themselves."*<sup>34</sup> They should try to:
- *keep up usual daily routines;*
  - *talk, when they feel able, to those whom they trust;*
  - *find time for relaxation;*
  - *eat regular meals;*
  - *use physical exercise;*
  - *be aware of certain drugs and potions which may interfere with sleep;*
  - *develop good sleep habits; and*
  - *avoid excessive use of alcohol.*

---

<sup>34</sup> STISH: Sudden Trauma Information Service Helpline. [http:// www.stish.org](http://www.stish.org)

*If people have concerns about self-help methods, particularly if they have a medical condition, they should consult their general practitioner”.*<sup>35</sup>

126. It is also important to remember that the everyday needs of populations continue during and after disasters and major incidents. Also, plans made to respond to exceptional psychosocial and mental health needs must be sustainable to provide for the longer term. They must take into account the ripple effect and the impact on people at a distance from the epicentre of events. They must be an integral part of the wider disaster response plans and also fit with business continuity plans made in parallel.
127. Indeed, there is empirical evidence to support certain intervention practices and programmes in the immediate and mid-term following disaster and mass violence. The principles are to promote a sense of safety, calming, self and collective efficacy, connectedness and hope.<sup>36</sup>
128. Thus, the literature highlights the following matters, which are explained in more detail in this guidance.
  - Attending to people’s basic needs (safety, security, food, shelter, acute medical problems, etc) is the first and highest priority.
  - Information and activities that normalise reactions and which protect social and community resources and which signpost access to additional services are fundamental to effective psychosocial responses.
  - Psychological first aid, clinical assessment, screening and surveillance may be the best interventions in the early phase of recovery.
  - A coordinated approach is essential across the emergency response systems and rescue services. Integrated planning must also accommodate population health and personalised healthcare services, humanitarian aid and welfare response organisations, social care systems and voluntary and non-governmental organisations.
  - Survivors and other affected persons require rapid, effective action followed by sustained mobilisation of resources.
  - Sustaining the social fabric of the community and facilitating recovery depend on leaders’ knowledge of the resilience and vulnerabilities of affected communities. Decision-makers must understand the distress, disorder, health risks and behaviour responses to events and anxieties about them of particular people and groups.
  - The risks presented to professional first responders and to the staff of agencies that intervene are clear; therefore, this guidance stresses the importance of providing staff and agencies with clear plans, training and rehearsal. There should be clear practical and professional expectations and realistic standards, effective leadership and access to colleagues and agencies that are able to provide responsive psychosocial and mental health services that are titrated against their needs.

---

<sup>35</sup> <http://www.stish.org/content/view/37/72/>

<sup>36</sup> Hobfall, SE, Watson P, Bell CC, Bryant RA, Brymer MJ, Friedman MJ, Friedman M, Gersons BPR, de Jong JTVM, Layne CM, Maguan S, Neria Y, Norwood AE, Pynoos RS, Reissman D, Ruzek JI, Shavlev AY, Solomon Z, Steinberg AM, Ursano RJ. Five essential elements of immediate and mid-term mass trauma intervention: empirical evidence. *Psychiatry* 2007;70(4): 283-315.

- It is important to implement plans that strike an appropriate balance between protecting survivors' privacy and confidentiality and the need to share information across agencies, respond effectively to enquiries, and provide evidence for the future through research.
- Selective application of psychological therapies, including trauma focused cognitive behavioural therapy (TFCBT) or eye movement desensitisation and reprocessing (EMDR), may be best initiated several weeks after the major event.

Put briefly, the evidence indicates that the way in which people's psychosocial responses to a disaster are managed may be the defining factor in the ability of a community to recover.

129. This means that that:

- the emphasis of interventions should be on empowering communities and people who are affected by sustaining and drawing on their resilience;
- the public should be actively engaged in delivering disaster responses;
- the public must be trusted with accurate information; and
- services that offer psychosocial and mental health interventions should be made available to support survivors' resilience and complement personal and collective resilience and coping.

130. The WHO, with other agencies, has published guidance on many aspects of planning for disasters and major incidents including psychosocial interventions.<sup>37</sup> The Sphere Project has published a guidance handbook that sets out key corporate and clinical governance standards.<sup>38</sup>

131. Next, this guidance provides a more detailed picture of how people and populations of people respond psychosocially to disasters and major incidents. The sections that follow provide more information which develops the core principles for responding to people's psychosocial needs.

## THE CURVE OF ADJUSTMENT

132. Over the last 20 years various authorities have asserted that people follow a longitudinal pattern over time of responses to disasters and major incidents. Thus, Figure 7 presents a hypothetical curve of adjustment following major disasters, in order to present a graphical summary. Further experience and research has shown that the shape of the curve varies with the nature and predictability of events, the resilience of the persons involved and the facilities that are brought to bear in the aftermath.

133. Figure 7 presents the common finding that adjustment is not a straight line of feelings, capacities, and effects. The depth and duration of the peaks and troughs are variable and the areas between the solid and interrupted lines illustrate this variability of severity. Similarly, the timeline is variable. Earlier, for example, this guidance has referred to the delayed and more sustained peak of distress that occurs in flooding. Nonetheless, this curve of adjustment highlights the hypothetical and phased risks to the psychological wellbeing of survivors, responders and observers as well as the importance of effective delivery of services.

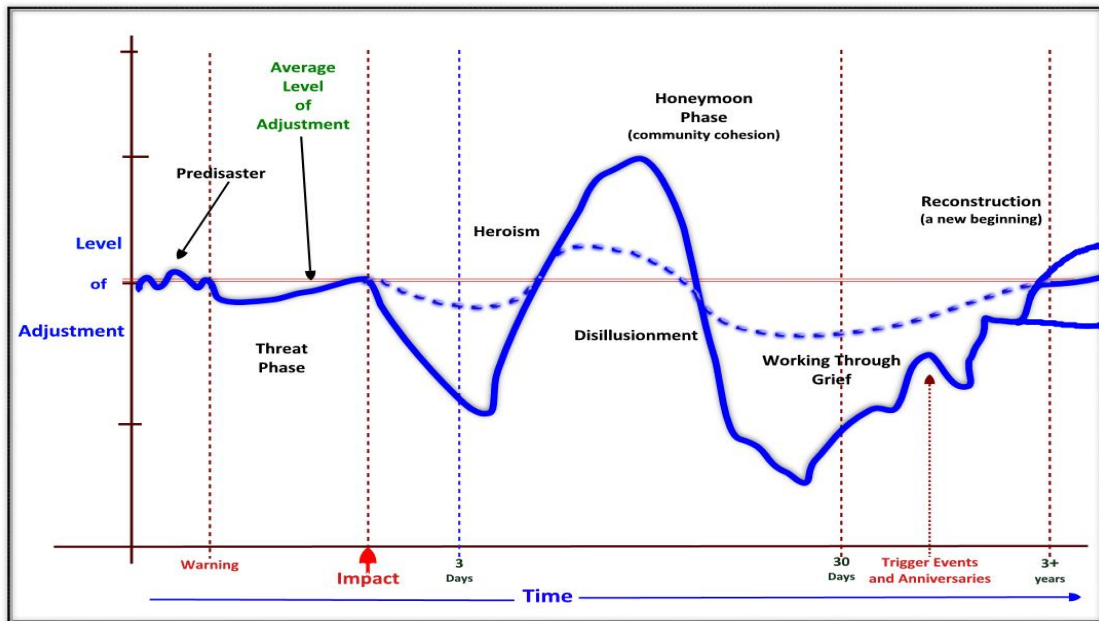
---

<sup>37</sup> See, for example, the IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings that can be found at: <http://www.humanitarianinfo.org/iasc/content/products/docs/Guidelines%20IASC%20Mental%20Health%20Psychosocial.pdf>

<sup>38</sup> [http://www.sphereproject.org/index.php?option=com\\_content&task=view&id=27&Itemid=84](http://www.sphereproject.org/index.php?option=com_content&task=view&id=27&Itemid=84)

134. The curve has been adjusted from its original source to show that people's experiences may be variable. The occurrence, for example, of forewarning of a disaster makes a difference to the shape of the curve. Also there is variability of outcome. Many people return to a reasonably ordinary level of adjustment while others may be impaired for a more substantial period of time. However, there is evidence that some people suffer acute stress but go on to better levels of adjustment than they showed before the event(s).

Figure 7: The curve of adjustment<sup>39</sup>



## IMPACT AND BURDEN

135. The psychosocial effects of major incidents, disasters and more protracted adverse circumstances may arise from people's direct involvement in the events. The impact may also arise indirectly. A variety of mechanisms may be involved.

- Many people who are in the vicinity of events may be worried about what has taken place and what may occur in the future and whether or not they might become directly involved. These effects are more likely if accurate information is sparse or poorly disseminated, which allows rumour to be seen as credible.
- Adverse reactions are known to be more prevalent if the events are less visible, such as those involving the release of noxious and CBRN agents.
- Another example of indirect effects concerns the impact on the long-term psychosocial development of particular people or their relatives' involvement in traumatic scenarios. Clearly, children and young people are a focus of concern in this regard.

<sup>39</sup> modified after ideas from Raphael B and Zunih and Myers. Raphael B. When disaster strikes: how individuals and communities cope with catastrophe. New York: Basic Books; 1986. Reproduced with permission from Training manual for human service workers in major disasters 2<sup>nd</sup> edition. Washington DC: Department of Health and Human Services, Substance Abuse and Mental Health Services Administration; 2000 and reproduced in adapted form on p 8 in Ursano RJ, Fullerton CS, Weisaeth L, Rapael B Individual and community responses to disasters. In Ursano RJ, Fullerton CS, Weisaeth L, Raphael B (editors). Textbook of disaster psychiatry. Cambridge: Cambridge University Press; 2007.

136. In addition to the psychosocial impact of disasters are the effects of psychosocial burdens that may arise for relatives, friends and carers. Concern and worry about other people is also stressful, and the effects that may stem from it are described as conveying burden.
137. Some people may be affected by psychosocial impact caused directly and/or indirectly and also by burden. When more than one member of a family is directly involved in a disaster, each person is likely to suffer the psychosocial impact of the events, but they are also likely to be concerned for other family members. Situations of this nature can compromise the care that family members are able to afford each other at times when that care is most needed. This can lead to reverberations between psychosocial impact and psychosocial burden so that people in this situation are subject to a number of stressors which serve to prolong distress and bereavement and to delay recovery.
138. Responders and the services in which they work should be aware of this network of relationships if they are to be most effective in mitigating the psychosocial effects of major incidents and adversity.

### PROTECTIVE AND RISK FACTORS

139. Figure 8 presents an extensive, but by no means exhaustive, list of factors that may influence the depth and extent of a disaster's impact and the relative resilience of people and communities in their recovery:

**Figure 8: Factors that influence the depth and extent of the impact of disasters<sup>40</sup>**

- Demographic characteristics of affected community members
- Racial and ethnic distribution of the various neighbourhoods
- Primary languages spoken by the residents of the different communities
- Age distribution of the survivors
- Range of family composition within neighbourhoods
- At risk and medically fragile populations
- Structure of the local economy and range of jobs lost, and those still available
- Specific populations with limited resources (for example, migrants)
- Educational resources, including schools, that are located in the area
- Resources for childcare in the communities
- Spiritual life of the community including:
  - Churches and church schools destroyed
  - Churches as part of the primary community infrastructure for communities and neighbourhoods
- Resources for older people including nursing homes, retirement communities and community centres
- Educational level and professional training within the communities
- Number of insured versus uninsured homes and businesses
- Number and state of the habitable properties in the area including:
  - Number of rental properties as primary residences versus owned/mortgaged homes
  - Number and locations of residences that are primarily temporary homes
  - Availability of temporary housing stock
- The extent of relocation including:
  - Number of whole communities relocated
  - Number of survivors displaced and living with relatives or living in temporary housing in other communities
  - Number of survivors relocating to other areas
- Previous community experience with catastrophe
- Personal and community expectations about the occurrence of, for example, hurricanes, floods, tornadoes, and/or earthquakes
- Awareness of population with the response and recovery processes related to the frequency of natural disasters or terrorist attacks

---

<sup>40</sup> IMPACT: Dutch Knowledge & Advice Centre for Post-disaster psychosocial care. [www.impact-kenniscentrum.nl](http://www.impact-kenniscentrum.nl)

140. Needs assessments should take account of:

- available community resources and not just assessment of loss indicators;
- additional categories of impact from terrorist incidents, such as indicators of evacuation due to imminent danger and indicators of the number of people involved in rescue/recovery activities; and
- special circumstances associated with the disaster or major incident, including questions specific to the degree of human causation, indirect impact on the affected community, and the extent of the continuing threat and uncertainty.

141. There is substantial evidence that perceptions of the availability and utility of social support buffer the effect of stress and can affect the prevalence of distress and psychological symptoms, including depression and anxiety. Greater social supports are generally associated with lower stress. People who have good social support networks tend to be better adjusted regardless of disaster exposure.

142. A longitudinal study of social support mobilisation and deterioration after the flood in Mexico in 1999 showed that lower levels of social support were received by people who had experienced mass casualties and displacement, and for women and persons with lower education.<sup>41</sup> These disparities grew larger in time suggesting the importance of social as well as psychological functioning in the aftermath and in the long-term following disaster.

143. The risk factors that increase a person's likelihood of developing a more severe or a pathological response to trauma are summarised in Figure 9.

**Figure 9: Risk and vulnerability factors<sup>42</sup>**

**A: Pre-traumatic event factors**

- Personal capabilities and attributes
  - Poor attachment capacity
  - Few current attachments
  - Female gender
  - Extremes of age and development (children and older people)
- Past personal experiences
  - Sexual abuse in childhood
  - Substance misuse
  - Previous psychiatric history
  - Disadvantage (social, educational or economic)
- Environment
  - Concurrent life stressors
  - Lower social capital

---

<sup>41</sup> Norris FH, Baker CK, Murphy AD, Kaniasty K. Social support mobilization and deterioration after Mexico's 1999 flood: effects of context, gender and time. *Am J Community Psychol.* 2005;36(1-2):15-28.

<sup>42</sup> after Alexander DA. Early mental health intervention after disasters. *Advances in Psychiatric Treatment* 2005;1:12-18 and reproduced with permission.

**B: Peri-traumatic event factors**

- Nature of incident/disaster
  - o Human-made disasters
  - o Sudden and unexpected events
  - o Exposure to grotesque scenes and sensory experiences
  - o Proximity (there is, generally, a dose-response relationship)
  - o Nature of involvement (closer involvement increases the risk)
  - o Extended exposure (for example entrapment)
- Impact of the event
  - o Higher perceived level of threat to life (self or others)
  - o Physical injury
  - o Extensive personal loss

**C: Post-traumatic event factors**

- Response to the event
  - o Severe acute stress responses
  - o Presence of survivor or performance guilt
- Burden consequent on the event
  - o Lack of social and/or family supports
  - o Relocation or displacement
  - o Financial and social or relationship problems
  - o Adverse reactions from others (for example blame or rejection of suffering)

144. Several factors are associated with the development of PTSD, including female gender, younger age, low socio-economic status, lack of education, low intelligence, ethnic minority status, psychiatric history, childhood abuse, previous trauma, adverse childhood experiences, family psychiatric history, trauma severity, lack of social support, subsequent life stress, peri-traumatic emotions and peri-traumatic dissociation. Of these, perceived lack of social support, subsequent life stress, peri-traumatic dissociation, peri-traumatic emotions and severity of trauma are the factors that are most associated with the development of PTSD.

145. The literature in this area indicates the following features of risk.

- A well-known predictor of post-disaster mental disorder is the occurrence of other adverse life events in the post-disaster period. This may include events directly related to the disaster as well as indirectly associated and unrelated events, such as being assaulted or losing an elderly parent to natural causes.
- The presence of pre-existing psychiatric illness or symptoms is not sufficient to account for post-disaster psychiatric morbidity. The literature indicates that people who require intervention after a disaster do not all have the expected accompanying risk factors and coping strategies of the usual populations of people who have mental health disorders who have a much higher frequency of past psychiatric problems and altered coping and functioning.
- Very vulnerable survivors may be most susceptible to the potentially deleterious effects of some psychological interventions and they may do better if treatment were to be delayed.

## PATTERNS OF RESPONSE

146. Maslow's Hierarchy of Needs (see Annex D) is a well established model in which humans' priorities and motivations for dealing with their needs form a hierarchy.<sup>43</sup> This approach is relevant to understanding how people respond to disasters and major incidents and what they perceive as priorities. These priorities depend on the extent to which people's lives and survival are threatened, and the extent to which their needs for food, warmth and safety are affected. Once solutions have been found to those needs, needs arising from disruptions to relationships and matters relating to self-esteem and self-fulfilment become more prominent.
147. This guidance is consistent with Maslow's Hierarchy of Needs and empirical evidence concerning the need for authorities to promote a sense of safety; calming; self and collective efficacy; connectedness; and hope in the immediate and mid-term in survivors and those affected by disasters. However, an approach to care that is founded solely on Maslow's Hierarchy risks oversimplifying people's complex and interacting needs. Nonetheless, provided the hierarchy is not interpreted too literally, it is a reasonable basis on which to understand the priorities in people's lives after disasters. While the remainder of this section focuses on people's psychosocial responses and needs, Maslow's Hierarchy also points out the importance of taking an integrated response to ascertaining and meeting people's needs. For this reason, services that offer psychosocial care must be properly recognised and fully integrated into a comprehensive plan for responding to disasters and major incidents.
148. It is known that in the immediate aftermath of sudden events and after people's initial involvement in longer and more sustained emergencies, a very substantial proportion of survivors show a stunned reaction from which the vast majority recover given basic humanitarian and welfare aid. These experiences may last as little as a few hours or as long as several days and they are a normal part of people's adaptive responses to stress. These adaptive reactions are preoccupying, focus attention on the danger, enable people to recruit their mental abilities and may facilitate action. In many people, they are accompanied by a short period of physical and psychological exhaustion.
149. Perhaps, 75% of survivors of disasters show no mental disorder but exhibit transitory psychological experiences that are best described as distress that is sometimes accompanied by dysfunction. Their experiences may be of very variable intensity and duration. Provided these experiences are short-lived, they might be considered to be normal and, as such, they are anticipated (see Figure 10).

---

<sup>43</sup> Maslow A. Motivation and personality. New York: Harper; 1954.

Figure 10: The nature of anticipated immediate reactions to major incidents (adapted from Alexander 2005<sup>44</sup>)



| Psychological Reactions          |                                   | Social Reactions       | Physical Reactions |
|----------------------------------|-----------------------------------|------------------------|--------------------|
| <b>Emotional Reactions</b>       | <b>Cognitive Reactions</b>        |                        |                    |
| Shock and numbness               | Impaired memory                   | Regression             | Insomnia           |
| Fear and anxiety                 | Impaired concentration            | Withdrawal             | Hyperarousal       |
| Helplessness and/or hopelessness | Confusion or disorientation       | Irritability           | Headaches          |
| Fear of recurrence               | Intrusive thoughts                | Interpersonal conflict | Somatic complaints |
| Guilt                            | Dissociation or denial            | Avoidance              | Reduced appetite   |
| Anger                            | Reduced confidence or self-esteem |                        | Reduced energy     |
| Anhedonia                        | Hypervigilance                    |                        |                    |

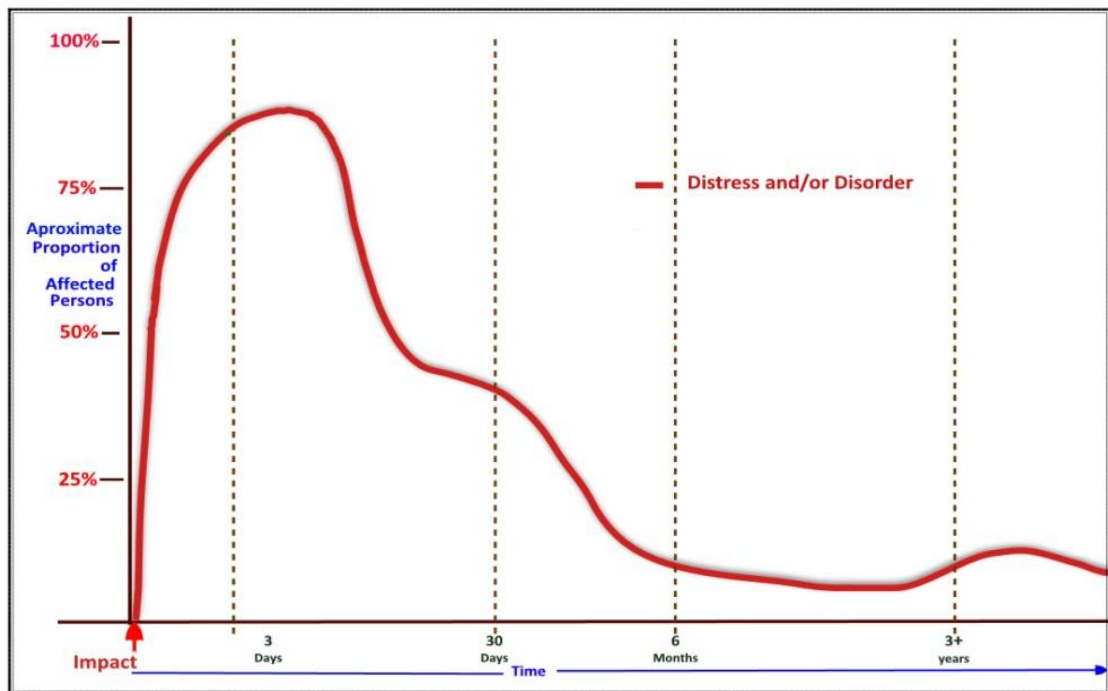
150. People who show lesser and transient reactions are described as resistant and most of the remainder as resilient because their abilities to cope and be effective in the short-, medium- and longer-terms are not seriously compromised beyond the period in which they feel the reactions. The subjective experience of these reactions is appropriately described as distress.
151. A substantial proportion, perhaps between 20% and 40%, of affected people may experience more sustained distress that may last more than several days, may grow in severity after the events or their involvement in them have subsided but, usually, diminishes within a month of their disengagement or resolution of a critical situation. Again, some of the people affected in this way are resilient, others are distressed and dysfunctional, and a third group is suffering acute stress disorders. A proportion of people who have these more profound responses may go on to develop other mental disorders. Figure 10 lists some of the features of the anticipated immediate responses that occur immediately after people's exposure to major incidents although similar experiences may also be indicators of distress that also occurs frequently.
152. Hostility, with its accompanying social disruption, feelings of frustration and perception of chaos are common following disaster. In some cases, it may be helpful for people to recognise that the return of anger can be a sign of a return to normal – i.e. it is again safe to be angry and to express one's losses, disappointments and needs. In other

<sup>44</sup> after Alexander DA. Early mental health intervention after disasters. *Advances in Psychiatric Treatment* 2005;1:12-18 and reproduced with permission.

cases, the presence of hostility should remind care providers to assess the risk of family violence and substance misuse.

153. Somatisation – the presentation of physical ailments that principally or entirely derive from stress or anxiety – is commonly witnessed in the experience of patients who are depressed or anxious or seeking care in medical clinics. Sleep disturbances following trauma are common problems. They may be due to grief, to anxiety related to recurrent disastrous events, to the ongoing threat of terrorist attacks, or to underlying mental disorder such as depression or PTSD. Somatic symptoms can be an indicator of disaster-related distress. Assessing exposure to disasters and major incidents may be overlooked by overburdened primary care physicians. Somatisation must be managed both in the community at large and in individual patients. First responders and disaster and rescue workers also report increased somatic symptoms after exposure.
154. The proportion of affected people who go on to develop a mental disorder is also very variable. It is unusual for the proportion to be greater than one third in the medium term though higher rates are reported after certain events and particularly those in which there is substantial loss of life or great risk of death to other people. It is estimated that from 0.5 to 5% of all those people who survive major incidents may develop a long-term mental disorder. The types of disorder they develop include, particularly but by no means exclusively, anxiety states, depression, post-traumatic stress disorder, substance misuse and substance-related disorders.
155. So far, this guidance has described a generalised pattern of how populations of people respond over time to traumatic experiences. This summary is depicted diagrammatically in Figure 11.

Figure 11: Psychological responses to major incidents<sup>45</sup>



<sup>45</sup> reproduced with permission from Williams R and Alexander DA. Psychosocial resilience and distress in the face of adversity, conflict, terrorism or catastrophe. In Mahoney PF, Hawley A, Burris DG, Hopperus-Buma A, Ryan J, (editors). Conflict and catastrophe medicine: a practical guide. 2nd ed. Guildford: Springer-Verlag; in press 2009.

156. The curve in Figure 11 is intended to show a variety of features that describe how populations of people who have been affected by major incidents or disasters respond over time. It portrays the high frequency of people responding with proportionate distress very soon after a disaster or major incident. Resistant people show the least debilitating responses. Most resilient people are capable of being involved in rescue work and recover rapidly in the following days provided they are offered support. However, a proportion may take longer to recover. Some of them develop an acute stress disorder and require more substantial intervention. A smaller number of people go on to develop a longer-term mental disorder. Some people may not develop these conditions until several years after the event.
157. The picture of people's responses over time may be, however, be more complicated than this generalised pattern in that it varies considerably with the nature of events and the circumstances in which they occur. Current knowledge about resilience, risk and protective factors shows that it is difficult to predict who is likely to recover from their immediate reactions or from distress with support from families or provision of community and welfare services and who may have more sustained distress or develop a mental disorder. For these reasons, the generalised picture, summarised here, of how people respond psychosocially to traumatic events is intended to underpin planning, preparing and strategic management of services rather than to suggest that there is a single orthodoxy of clinical provision.
158. However, at clinical and operational management levels, there is an international consensus that how people progress during the first month provides the most helpful basis for predicting people's prognosis. If distress is diminishing four weeks after exposure to a major incident, the people concerned are more likely to continue to recover. But if their distress is continuing, is increasing or is causing substantial problems for them or other people, a full assessment of their mental health needs is required.
159. Thus, the strategic stepped model of care explained in detail later in this guidance and which lies at its core is built on an understanding of the ways in which people respond to traumatic events in general terms and on their evolving patterns of need. Primarily, the model is intended to be a tool for planners rather than for clinicians because responses to each person's need requires the seamless integration of services.
160. Despite the variability of individual and group responses to major incidents, it is possible to plan for sufficient psychosocial services provided flexibility is built in to allow adjustments as the nature of events clarifies. As an example, psychosocial reactions after flooding may not follow the speed of development that has been set out so far; distress may be prolonged, develop more slowly and peak later (at around nine months after the event and as community life begins to return to more usual patterns).
161. The literature suggests there are four groups of people for whom services may be requested in the immediate, post-immediate and longer-terms. They are as follows:

*Group 1: Resistant people who show transient distress*

- People who have only minor and transient distress in the immediate circumstances of disasters or traumatic events.

*Group 2: Resilient people*

- People who have more substantial distress but which usually only lasts for two to three days after traumatic events and is not associated with any substantial level of dysfunction.

*Group 3: People who have more sustained or persistent distress associated with dysfunction and/or impairment*

There are two subgroups.

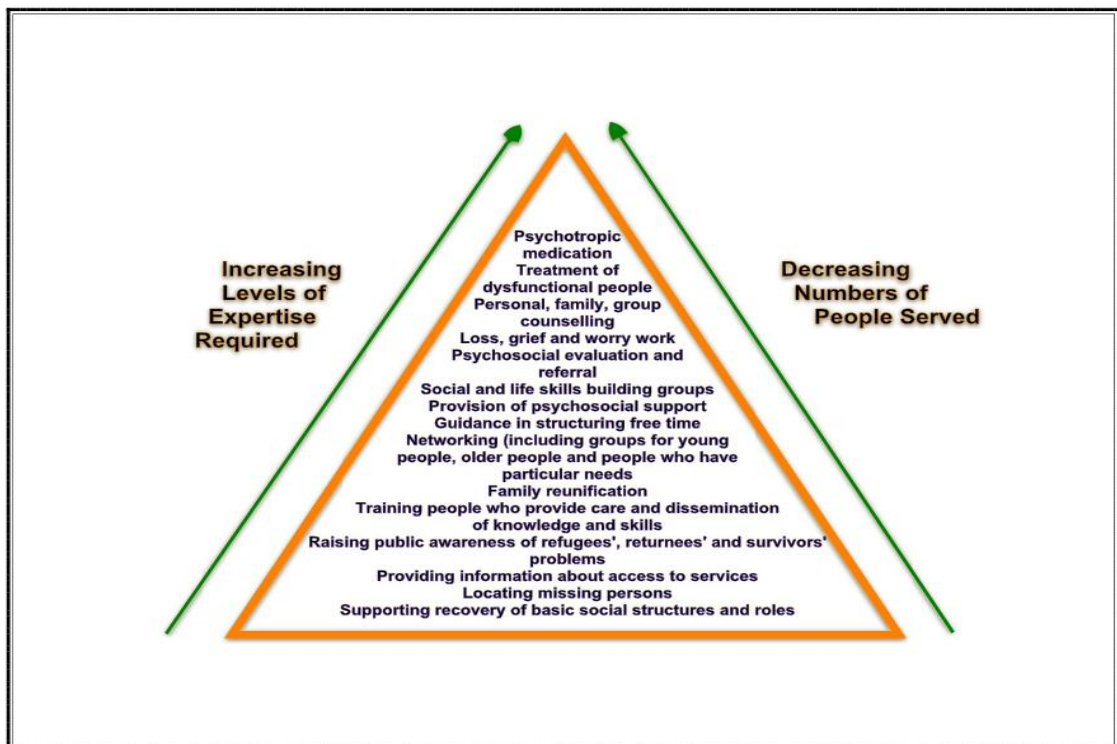
- People who are likely to recover, but whose recovery takes more time.
- People who may be in the course of developing a mental disorder.

*Group 4: People who develop a mental disorder*

- People who develop a defined mental disorder.

162. In general terms, the needs of people who have been involved in disasters and major incidents become greater and potentially more complex in passing from Group 1 to Group 4, while the numbers of people involved decreases. Accordingly, there is a progression in the level of expertise required to deliver responses. This situation is depicted in Figure 12.

**Figure 12: Pyramid of community psychosocial interventions<sup>46</sup>**



<sup>46</sup> modified after figure 8.2 on page 88 in Ajduković D, Ajduković M. Systemic approaches to early interventions in a community affected by organized violence. In Ørner R, Schnyder Ulrich (editors). Reconstructing early intervention after trauma: innovations in the care of survivors. Oxford: Oxford University Press: 2003. Reproduced with permission.

163. Therefore, this guidance is based on providing a stepped programme of responses in which services are titrated against the needs of the people affected and their progress over time. This means providing:
- empathic, practical and pragmatic support for everyone that is delivered by and through families and community groups and augmented by responders who should be aware of the principles of psychological first aid;
  - access to psychological first aid for people who have more sustained distress;
  - assessment of people who remain distressed at around a month after events accompanied by access to psychological therapies as required;
  - access to the full range of mental health services for people who develop a mental disorder or who have severe symptoms earlier than 28 days; and
  - access to services for responders and staff of the rescue, recovery, welfare and health services because of their direct and indirect exposure to risk.

### POPULATIONS AT RISK

164. Populations at risk include staff, vulnerable people, children, young people, older people, people who have substantial pre-existing healthcare problems and needs, people who have sensory impairments, poor and disadvantaged people and those people who are subject to adversity. The populations at risk also includes rescuers, first responders and staff of the emergency, humanitarian aid, welfare and healthcare services and personnel of the armed forces. Evidence shows that people in each of these groups are more vulnerable than the general population or carers who are not exposed to disasters or major incidents to suffering the welfare, psychosocial and mental health effects of catastrophes.
165. The stepped, strategic model that is presented in this guidance applies to all populations. However, the key to responding to special populations lies predominantly in being aware of them and their particular needs. This requires planning and rehearsal, and the use of tools such as targeted mapping of local populations so that special groups may be accommodated within universal major incident plans.
166. The crucial factors in designing post-disaster psychosocial and mental health services that are able to respond adequately to people at particular risk include:
- understanding the cultural, ethnic and socio-economic factors involved in working with special populations;
  - being aware of the prevalence of any concurrent or pre-existing psychosocial conditions or mental disorders and of declining quality of life;
  - conducting hazard-mapping to identify vulnerable geographical and social areas; and
  - offering education services to community workers, rescue services staff, service armed services personnel, responders and healthcare staff.
167. The wide occurrence of special populations emphasises the importance of:
- being aware of the composition of communities and groups of people;
  - training community staff and the personnel of the armed forces;
  - promoting public health activities and prevention measures;
  - taking active steps to promote coping within communities;
  - being aware of cultural expression, rituals and ceremonies;
  - designing services of adequate duration; and
  - planning adequate rehabilitation services into responses.

168. **Children's Reactions to Disaster, Conflict and Major Incidents**

- a. Trauma in children can be defined as any condition which seems to be unfavourable, noxious or drastically injurious to development. There is no hierarchy of atrocity for those involved. The literature reports recurrent findings of greater repugnance felt by most societies when children are involved in or affected by violence and when they are its perpetrators.
- b. All too often, children are the victims of military conflict and terrorism. In the decade to 2003:
  - two million children were killed and six million were injured or permanently disabled in war zones;
  - one million children were orphaned and 20 million displaced to refugee camps or other camps as a result of military conflict; and
  - civilians, mostly children and their mothers, comprised 80 to 90% of all who died or were injured in conflicts.

Additionally, in 2005, 17 million children were displaced from their homes as a result of humanitarian emergencies.

- c. Children are as inherently vulnerable as adults. However, while children are remarkably resilient to traumatic events, they are also recognised as highly vulnerable. This apparent paradox relates to children being affected by a variety of routes and because, even if they are personally resilient, they are usually dependent of adults who may be injured, killed, pre-occupied with coping with events or forcibly separated from their children. Thus, children are likely to be multiply affected because they may be:
  - directly involved;
  - indirectly involved (as a result of indirect effects and parental burden, as described above); or
  - perpetrators of violence (specifically including child soldiers).
- d. Put in other words, children's vulnerability depends on a complex mixture of personal and circumstantial variables. They include their personal resilience, whether or not they have been affected by trauma previously, the direct and indirect effects, the burden that falls on their parents or caretakers, their age, level of development, their capabilities for forming attachments and the nature of the psychosocial support and parenting available to them as well as any lasting effects on their development.<sup>47</sup> Given their relative dependency on the care of others, children are particularly vulnerable to the indirect effects of trauma on their development and to the secondary effects of burden resulting from the care provided by their parents being compromised.
- e. This also means that children's reactions to disaster and other traumatic events are individual and vary according to their:
  - age and developmental level;
  - proximity to the events;

---

<sup>47</sup> see, for example, Pfefferbaum B, North C, Doughty D, Pfefferbaum R, Dumont C, Pynoos R, Gurwitch R, Ndeti D. *Death Studies* 2006; 30(6):561-577.

- exposure to events that impact on family members whether family members have been directly affected or not;
  - personal, family and material losses; and
  - family and community responses.
- f. Commonly, they exhibit short-term reactions as a component of their resilient response:
- stunning and numbness;
  - anxiety and fear;
  - horror and disgust;
  - anger;
  - loss of trust;
  - demoralisation, hopelessness and helplessness; and
  - survivor and performance guilt.
- g. Children's and young people's reactions also vary with the time that has elapsed after an event. For a short time children and young people may regress behaviourally and/or emotionally immediately after traumatic events but they usually recover fairly promptly. The short-term behaviours that are listed above are considered to be anticipated reactions. Usually they describe distress and improve with time and provision of adequate family, peer, school, and community support.
- h. Children and young people are particularly vulnerable to the indirect effects of major incidents of all kinds. Their development may be affected and this may have long- and very long-term consequences. They can be readily affected by adults', and, particularly, their parents', caretakers' and teachers' own experiences of disaster and their capacities to cope. Children and young people are also burdened by the care they feel for their parents and other close family members and friends.
- i. The concept of complex trauma can be applied to child abuse. It has within it exposure and adaptation as dual problems. It is the experience of multiple or chronic and prolonged, developmentally adverse traumatic events. Often these are of an interpersonal nature, including sexual or physical abuse, war and community violence. The settings within which these events occur and the cumulative impairment that results make children particularly vulnerable to further disasters and major incidents.
- j. Contrary to past beliefs, there is evidence that pre-school children are not protected by their early level of development from the psychosocial impacts of disasters. They too are directly affected and also affected indirectly by their parents' compromised abilities to care for them. Pre-school children in New York City who were exposed to high-intensity events, on or after 9/11, had sleep problems and showed anxious and depressed behaviours. Those who had previously been exposed to other traumas were at greater risk.
- k. Adolescents who have been exposed to terrorist events show higher levels of alcohol and cannabis use compared with their peers. These effects appear to be independent of symptoms of depression or post-traumatic stress. However, other research has shown that some Israeli adolescents reported benefits to their resilience and development after their contact with terrorist events.

- l. Another observation is that the symptoms of distress that children commonly experience in the aftermath of disasters and traumatic events may be difficult to distinguish from the poor concentration and overactivity that occur in attention deficit/hyperactivity disorder (ADHD). This may be because the arousal systems in the brain are involved in both conditions. Care is advised in diagnosing and prescribing for children and young people who are referred with apparent ADHD when they have suffered significant psychosocial trauma.
- m. Factors that mediate or moderate children's recovery include:
  - frequency of exposure to reminders of traumatic events;
  - frequency of exposure to reminders of loss;
  - type and severity of secondary stresses and adversities;
  - impairment in the functioning of caregivers;
  - quality of family functioning;
  - overcrowded or adverse living conditions;
  - nature of school and community milieu;
  - quality of peer relationships;
  - physical injury, disability, and rehabilitation; and
  - intercurrent trauma and loss.
- n. Schools can and should play important roles in restoring and normalising community life for children and families. Authorities should include schools in the plans made to respond to the psychosocial needs of populations after disasters, terrorism and major incidents. Therefore, education as well as disaster planners require advice on matters pertaining to children's psychosocial needs and care from professionals who are trained and experienced in working with children. Schools should be encouraged to play their full roles in assisting children and families after disasters and major incidents. The support of teachers and other staff who are familiar to them are usually very effective and experienced by children as an extension of ordinary life. Often, therefore, the risks from disruption that accrue from introducing counsellors into recovery scenarios, albeit that they are trained, outweigh the advantages. It is better that trained people work indirectly through advising and supervising adults with whom children are familiar.
- o. In summary, children and young people are frequently involved in major incidents of all kinds. The kinds of services that they require are similar to those required by people of all ages. The strategic stepped model presented in this guidance is fully applicable to them. The psychosocial response services for children should not be separated from those that are provided for adults given the community and family orientation that is recommended in this guidance. However, planners, commanders of responses to major incidents and practitioners should be aware of the increased vulnerability of children to the indirect psychosocial effects of catastrophes of all kinds and to the communicated effects on them of their parents' own experiences. They should modify their plans accordingly.
- p. The agencies that deliver psychosocial response services should employ professionals who are trained and experienced in working with children and young people to advise others and provide specialist services.

**169. The Impact of Disasters and Major Incidents on Older People**

- a. While the volume of research on the differential vulnerability of older people to disasters is limited, there is some evidence about how older people respond. One study of older adults who were inundated by flooding showed that flood exposure

was related to increases in depressive, anxiety and somatic symptoms 18 months afterwards. Men, people of lower occupational status and people aged 55 to 64 were at greater risk of psychological symptoms. Another study has considered the effects over time and shows that careful consideration should be given to the gap between the event and the onset of symptoms. The survey showed that the major impact of a hurricane on older adults diminished in about 16 months.

- b. Older people are particularly vulnerable to physical danger and injury. There is also evidence that frail older people who live alone or in long-term care settings are particularly vulnerable to bioterrorism and other emergencies due to their complex physical, social and psychological needs.
- c. About 80% of older adults have at least one chronic condition that makes them more vulnerable than healthy people during a disaster or major incident. These conditions often stem from physical infirmity and injury, and they may have sequelae that are not direct consequences of the disaster. Chronic conditions, especially when they are combined with the physiological, sensory, and cognitive changes experienced as part of aging processes, often result in frail older adults having special needs during emergencies. Planning and coordination are essential to meet these needs. The features of services that help to prepare responders and practitioners to protect and assist older adults during a disaster include:
  - enabling professionals from diverse fields to work and train together;
  - ensuring that advocates for older adults participate in community-wide emergency preparedness; and
  - using community mapping to identify the areas in which many older adults live.
- d. The research shows that approaches that integrate humanitarian aid, welfare provision, and psychosocial and mental healthcare in which domestic, community and institutional interventions are brought together are more likely to be effective for older people than single approaches that are planned and delivered separately. Again, this resonates with a principle that is core to this guidance.
- e. Older people are frequently involved in major incidents of all kinds. The kinds of services that they require are similar to those required by people of all ages. The strategic stepped model presented in this guidance is fully applicable to them. The psychosocial response services for older people should not be separated from those that are provided for adults of working age and children given the community and family orientation that is recommended in this guidance. However, planners, commanders of responses to major incidents and practitioners should be aware of the increased vulnerability of older people to the direct and indirect psychosocial effects of catastrophes of all kinds and to the communicated effects on them of their families' experiences. They should modify their plans accordingly.
- f. Community resources for older people can and should play important roles in restoring and normalising community life for families. This potential should be reflected in actively including them in the plans made to respond to the psychosocial needs of populations after disasters, terrorism and major incidents. Therefore, planners require advice on matters pertaining to older people's psychosocial needs and care from professionals who are trained and experienced in working with them.
- g. The agencies that deliver the psychosocial response services should employ professionals who are trained and experienced in working with older people to advise others and provide specialist services.

170. **Rescuers, First Responders and Staff of the Humanitarian Aid, Welfare and Healthcare Services and Personnel of the Armed Services**

- a. Evidence shows that first responders are vulnerable to the psychosocial and mental health consequences of their involvement in disasters and major incidents. First responders may include members of the public who are often first on the scene, and are ill recognised for their important contribution, as well as frontline rescue and emergency staff. They may also include staff of humanitarian aid, welfare and healthcare services, and military personnel.
- b. Responders are at risk through their work on disasters and major incidents. However, some of them may also be indirectly affected through their own losses of loved ones, colleagues and homes, for example. This was the case in the tsunami, the Kashmiri earthquake and Hurricane Katrina.
- c. Now, there is an increasing awareness of the needs of first responders and of emergency services staff and research is taking place on how best to manage them and respond to their needs for preparation and psychosocial care at the time and afterwards.
- d. However, the psychosocial impacts on staff of caring for people who have multiple and/or major injuries remains less well recognised. Positively, there is evidence that staff who are exposed to trauma on a regular basis and those who work in traumatic and / or stressful environments benefit from regular clinical supervision and psychosocial support. These facilities decrease staff's lack of feeling that they have made a positive contribution, which is one of the elements of burnout, by promoting awareness of their feelings and enabling them to reflect on the good work that has been done even if the circumstances are stressful and traumatic.<sup>48</sup>
- e. The frequency of care providers suffering psychosocial problems and mental disorders varies across the literature. Some sources suggest that rescuers, staff of the blue light services and staff of emergency departments are more at risk of developing adverse psychosocial and mental health consequences from their work. Often, features that affect them relate to the frequency with which they come into contact with emergencies and traumatic events that involve death, physical injury and distress, the situations to which they respond, the environments in which they work and the cultures of the organisations that employ them. Research on ambulances services staff in Scotland, for example, has shown that their mental health and emotional well-being appear to be compromised by accident and emergency work.<sup>49</sup> Around one third of these staff had high levels of general psychopathology, burnout and post-traumatic symptoms, which were more likely in staff who had experienced a particularly distressing incident in the previous six months. Recently, however, several sources have called these assumptions into question. A study of the effects of the bombings in Madrid, for example, showed low rates of psychiatric disorders in the police officers who were involved.<sup>50</sup>

<sup>48</sup> Hacker Hughes JGH, Collins SM. Caring for the carers. An approach to supporting health care professionals working in stressful clinical environments. *Proceedings of the British Psychological Society* 1994; 2(1):49.

<sup>49</sup> Alexander DA, Klein S. Ambulance personnel and critical incidents: impact of accident and emergency work on mental health and emotional well-being. *British Journal of Psychiatry* 2001; 178:76-81.

<sup>50</sup> Gabriel R, Ferrando L, Corto'n ES, Mingote C, Garci'a-Camba E, Liria AF, Galea S. Psychopathological consequences after a terrorist attack: an epidemiological study among victims, the general population, and police officers. *European Psychiatry* 2007; 22:339-346.

- f. Given the differences of opinion about the vulnerability of staff and the requirement for more research, this guidance has adopted an interim position. This guidance takes it as reasonable to plan on the basis that the prevalence of mental disorder for staff after major incidents lies between that of the general population and care providers who are not involved in traumatic events, on one side, and the prevalence of similar problems in the survivors of disasters, terrorism, conflict and major incidents, on the other.<sup>51</sup> Thus, the rates of PTSD in care providers at some time after a major event varies in the research literature from 10 to 20% and depression and anxiety disorders occur in around 10%. Care providers are recorded as having higher prevalence of alcohol misuse compared with survivors (up to 25% compared with 10%).
- g. The experiences of staff and the nature of the distress, problems and disorders that they may develop are similar to the experiences of people who are directly involved in catastrophic events. Thus, staff may experience transient distress or develop more sustained problems of distress and dysfunction and, possibly, mental disorders. Employers should be aware that distress may present indirectly and that it may manifest as conflict with managers or superior officers, reduced workplace performance, increased alcohol use, withdrawal, lowered mood, unexplained physical complaints and decline in general health. Staff are also exposed to a gradient of risk.
- h. Whatever the position on the vulnerability of rescuers and emergency staff that is supported by further research, employers should be aware of the cumulative impact of their staff's repeated exposure to traumatising events. The opinion of Cooper is that *"Managing stress at work and developing and maintaining a 'feel good' factor in the workplace should not just be about managing absence or squeezing the last drop of productivity out of employees; in a civilized society, it should be about quality-of-life issues as well, such as reasonable hours, family time, manageable workloads, some control over one's career, a sense of security at work and being valued by management"*.<sup>52</sup>
- i. Sparks and Cooper have found seven factors that influence the physical and mental health of staff in differing combinations.<sup>53</sup> They are:
- perceived job control;
  - career development;
  - workplace climate or culture;
  - the job and workload;
  - the home-work interface;
  - role clarity; and
  - relationships at work, particularly with the boss.
- j. The background and contextual factors that should be considered include occupational stressors, work relationships and patterns of interpersonal conflict, team morale, workload, shift working and the supporting resources that are available. The specific factors include whether or not staff are exposed to mass disasters, serious incidents, loss of life and injury (particularly involving children and colleagues), seeing people die, and being the subject of verbal aggression or violent attack. The advice offered by Sparks and Cooper is that by identifying the

<sup>51</sup> A good review is provided by Speets AM, Keller IM, Smilde-van den Doel DA. Psychosocial consequences of the deployment of uniformed care providers in major disasters and accidents. Amsterdam: IMPACT; 2007.

<sup>52</sup> Cooper CL. Stress prevention in the police. Occupational Medicine 2003;53:244-245.

<sup>53</sup> Sparks K, Cooper CL. Occupational differences in the work-strain relationship. Towards the use of situation-specific models. Journal of Organisational Psychology 1999; 72:219-229.

organisational stressors, it is possible to devise a coherent and systematic intervention strategy.

- k. Personnel of the armed forces are not only involved directly and indirectly in violent events but they also provide the rescue, emergency, recovery and force regeneration services. They are, therefore, multiply exposed.
- l. On the basis of this analysis, this guidance advocates that all plans should include specific provisions for the psychosocial care of military personnel and all of the staff of the services that respond to disasters prior to and in preparation for events, at the time, in the aftermath and in the long-term. This may present some challenges because experience shows that it is easy to identify military personnel and staff who have been in the first line of responses or in prominent roles but much less so to identify the full range of people who are at risk. They include, for instance, mountain rescue teams, body handlers, divers, salvage, engineering and demolition workers. They also include staff of rehabilitative establishments and services that provide longer-term care for people with major injuries and disabilities consequent on trauma and the staff of mental health services. In addition, are staff from the service support and logistic units and departments who are not directly involved in contact with survivors, but are involved in unusual work and exposure to stressing materials, stories and unusual working hours and conditions in support of personnel who are more directly involved. In hospitals, for example, staff of the pathology, radiology and facilities management departments and professional and general managers are all-too-easily overlooked.
- m. There are compelling humanitarian reasons for ensuring that staff have ease of access to services in ways that are not perceived as patronising or stigmatising. There are also sound economic and organisational reasons for this approach if services are to diminish attrition caused by excessive demands made on their staff.
- n. Additionally, in many jurisdictions, employers have duties of care concerning the health and safety of their staff. Organisations must have clear policies and procedures for assisting their staff. The moral and/or legal duty of care also imposes tasks for occupational health services. The importance of preparing and training staff and providing services for them is covered in the closing section of this guidance.

## **PREVALENCE**

- 171. Inevitably there is variation in the prevalence and incidence figures for distress, dysfunction and post-traumatic mental disorders arising from disasters and other major incidents. This is partly because researchers have used different designs and methods to assess pathologies but also because the features of the trauma itself impact differently on the psychosocial health of survivors. Events that are human-made, including terrorism, that are sudden and shocking and associated with massive loss of life and injury, are more likely to be deleterious to the psychosocial health of survivors and first responders. The same applies to events in which people witness grotesque scenes. Inadequate post-disaster support and antipathetic attitudes to survivors are also likely to result in higher levels of post-traumatic psychopathology.
- 172. Another particularly important variable that affects the prevalence of disorders found after major incidents relates to the nature of psychiatric diagnosis. This concern has given rise to two approaches to diagnosis; the cultural universality approach in which advocates advise the use of Western diagnostic categories across the world, and the

cultural specificity approach in which supporters advocate for relating people understanding of psychosocial experiences to the cultures in which they live.

173. Diagnoses of mental disorder are essentially evaluative because most of them do not turn on gold standards of validity, biological markers or precise measures. Therefore, formulations of people's problems, including their diagnoses, are affected by the values, cultures and preferences of people who present their experiences and by the values, cultures and preferences of the assessors. The assessors include relatives, who are always important but particularly so when children and older people are being considered, referrers and practitioners.
174. A recent review of the literature has shown that the prevalence of some of the most common specific disorders and syndromes and their associated risk and protective factors varies across cultures.<sup>54</sup> Differences in prevalence may also occur within cultures. This gives rise to a relativist position with regard to use of psychiatric diagnoses across the world. However, the same review also showed that patterns of comorbidity and responses to treatment vary little across cultures.
175. Additionally, there is evidence that prevalence rates are affected by the classificatory systems that are used and within different iterations of the same classification. ICD-10 and DSM-IV, for example, give different rates of disorders with DSM-IV giving higher rates in some instances and ICD-10 in others.
176. Nonetheless, a widely accepted view is that the levels of serious and mild to moderate mental disorders are likely to double after major catastrophes and this is helpful as a basis for planning.
177. After the bombings in London in 2005, 32% of the people who were directly involved as survivors of one of the bombings and who were referred for specialist mental health assessment had a mental disorder of some kind that was related to the bombings and 72% of that group had PTSD.<sup>55</sup> Other disorders included travel phobia, adjustment disorder, complicated grief, generalised anxiety disorder, and major depressive disorder. The majority of patients appeared to recover in the subsequent two years. The researchers believe that their intervention programme led to many more people receiving interventions than would have resulted from standard referral arrangements and, while more comprehensive follow up data are being collected, their greater improvement than would be expected on the basis of natural recovery alone.
178. PTSD, for various reasons, has been much more rigorously and frequently researched than other post-traumatic conditions. Some authorities assert that depression and anxiety may be the more common disorders than PTSD after trauma. Psychotic conditions are rarely triggered by traumatic events. Mass sociogenic illness has also been reported in response to fears of CBRN terrorist incidents.
179. Concerns have been expressed about the possibility of overestimating the prevalence of PTSD in population-based surveys. The thinking is that the full range of people's problems might be missed if the focus is too firmly on PTSD. In essence, these authorities are concerned that PTSD is not a sufficient model to describe people's responses to trauma.

---

<sup>54</sup> Canino G, Alegria M. Psychiatric diagnosis: is it universal or relative to culture? *Journal of Child Psychology and Psychiatry* 2008; 49(3):237-250.

<sup>55</sup> Brewin CR, Scragg P, Robertson M, Thompson M, d'Ardenne P, Ehlers A. Promoting mental health following the London bombings: a screen and treat approach. *Journal of Traumatic Stress* 2008; 21(1):3-8.

180. The most prevalent diagnoses in children in New York City after the 9/11 attack were agoraphobia (14.8%), separation anxiety (12.3%) and PTSD (10.6%). The prevalence rates of PTSD symptoms two months following the Asian tsunami in children aged 7-14 years were 13% for children living in camps, 11% in children from affected villages and 6% in children from unaffected villages.

### **COMORBIDITY**

181. A consistent finding is that many people who develop a mental disorder as a consequence of their exposure to a major incident may have more than one problem, a mixture of problems in one or more differing domains of their lives, or co-occurring disorders. This is particularly the case when PTSD is the primary diagnosis and research has found co-occurring mental disorders in up to 85% of people who are diagnosed as having PTSD. Some researchers have speculated about whether or not PTSD is a separate condition.
182. The conditions that most frequently co-occur with PTSD are depression, anxiety disorder, social phobia, panic disorder and substance misuse. Depression is likely to occur in about half of all patients with PTSD; substance misuse is likely to be evident in about the same proportion of male patients with PTSD, but the figures for females are close to one third. Commonly, generalised anxiety and phobic anxiety disorders are co-morbid with PTSD and they also occur in patients without PTSD.
183. The high frequency of comorbidity means that services should be designed such that they are able to recognise and respond to the full range of needs that people may have rather than focusing solely on the most prominent diagnosed disorder.

**Summary box 2: Psychosocial responses to disasters, major incidents and sustained adversity**

**Key points: psychosocial responses to major incidents, disasters and sustained adversity**

This section raises awareness of the experiences and psychosocial needs of people who are affected by disasters and major incidents. Thereby, it provides information for the responsible authorities to support them in planning responses to psychosocially traumatic events

Resistance, personal and collective resilience, and recovery are explained and distinguished as are their implications for the people and communities that are affected.

This section describes the distress and dysfunction that affect many survivors and the responses that distressed people require as well as the mental disorders that people may develop and the appropriate responses that are required to respond to them effectively and at the right time.

It shows how people who are resilient, or likely to recover, and people who go on to develop mental disorders may have, initially, similar experiences.

Other important features that contribute to psychosocial responses are also distinguished. They are:

- impact and burden;
- protective and risk factors;
- prevalence of distress and mental disorders;
- comorbidity; and
- patterns of response.

## GOOD PRACTICE IN DESIGNING, COMMISSIONING AND DELIVERING SERVICES

### THE APPROACH

184. The philosophy of care that underpins the design of services, and how they are commissioned and delivered, should be based on: (a) explicit values; and (b) principles that are derived from the best evidence that is available.
185. The needs of the people who are involved in each event should be central to any response and assessment of them should:
- be based on accurate assessment of the prevailing situation;
  - take account of people's physical, psychological, social and mental health needs; and
  - lead to access to facilities, resources and services that have been pre-planned and which involve multiple agencies.
186. The philosophy of care takes account of the following six key observations.
- Emotional reactions to trauma are extremely common and may be either anticipated or indicative of more serious problems.
  - It is difficult to predict who is most likely to be seriously affected most, but certain risk factors are known.
  - People's profiles of psychosocial responses vary with time and circumstance.
  - Socio-economic disadvantage and inter-personal problems may predict long-term problems and enter survivors into a cycle of disadvantage and poor health.
  - Good management at the time of the event with effective follow-through and care planning may lessen the longer-term impacts.
  - Mental health professionals who are involved as advisers or as practitioners should be members of multi-disciplinary teams.
187. Central aspects of the philosophy of care that underpin this model, informed by the values and the evidence, are as follows.
- The resilience of individuals and communities is the expected response to a disaster (but is not inevitable). This means that temporary experiences that have effects on how people respond to other people are common but not necessarily indicative of longer-term problems and disorders. The responses often experienced by resilient people can be difficult to distinguish from symptoms of acute stress disorders and later post-traumatic conditions. Therefore, a stepped and progressive approach to care is necessary.
  - The risk of psychiatric morbidity is greatest for those people who have high perceived threat to life; are faced with a circumstance of low controllability and predictability; have experienced high loss and physical injury; have to live with the possibility that the disaster might recur, and have been exposed to dead bodies and grotesque circumstances.

- The risk of psychiatric morbidity is associated with a high degree of community destruction and with people living in developing countries.
  - In the aftermath of large-scale disasters, early identification of people who are at risk is central to delivering effective intervention.
188. It is important to distinguish resilience from recovery. The concept of recovery implies a generally short- to medium-term, but more extended response to trauma that may well compromise a person's ability to cope. It is because it is difficult to distinguish the reactions of people who are resilient from those of people who have an acute stress disorder and from the reactions of the lesser number of people who are developing longer-term problems that the 'four-week rule' is advocated in this philosophy of care. This guidance does not propose that people do not receive services in the first four weeks, but that the services provided should follow the principles contained in the concept of psychological first aid.
189. It follows from this summary that services should match need with delivery in the stepped and progressive model of care that this guidance proposes.

## VALUES

190. The values that underpin this guidance are based on the ethical principles developed by the UK Committee on the Ethical Aspects of Pandemic Influenza (CEAPI).<sup>56</sup>
191. The fundamental ethical principle in that ethical framework is that services for people who require them due to their psychosocial responses to major incidents should be based on equal concern and respect for everybody who is involved. They include survivors, persons who are displaced as a result of untoward events, and responders. This means that:
- everyone matters;
  - everyone matters equally - this does not mean that everyone is treated the same but according to their needs;
  - the interests of each person are the concern of all of us, and of society;
  - the harm that might be suffered by each person matters, and so minimising the harm that disasters and major incidents cause is of central concern.
192. The other core values in CEAPI's ethical framework that should guide the design of services are:
- respect;
  - minimising the harm that major incidents or adversity can cause;
  - fairness;
  - working together;
  - reciprocity;
  - keeping plans and responses in proportion to threat and need;
  - flexibility;
  - good decision-making:
    - openness and transparency;
    - inclusiveness;
    - accountability;
    - reasonableness.

---

<sup>56</sup> [http://www.dh.gov.uk/en/Publichealth/Flu/PandemicFlu/DH\\_065163](http://www.dh.gov.uk/en/Publichealth/Flu/PandemicFlu/DH_065163)

## PRINCIPLES OF SERVICE DESIGN

193. The philosophy of care that underpins this guidance is based on the broad analysis of how people respond psychosocially to major incidents and adverse circumstances, the values that have been developed for planning services for pandemic flu by the UK government and the principles of good practice that emerge from the literature.
194. **The Overarching Principle** – The overarching principle is that services should do no harm.
195. **Cultural Diversity** - People who design, deliver, lead or manage the psychosocial responses should recognise the differing meanings that experiences may have for people from a range of cultural backgrounds, and should be sensitive to the tension between providing culturally-specific and universal services.
196. **Core Precepts**
- a. The philosophy of care for immediate, short- and medium-term responses following disaster and mass violence should build on the principles of promoting for everyone who is involved:
    - a sense of safety;
    - calming;
    - self and collective efficacy;
    - connectedness; and
    - hope.
  - b. As regards responding to the psychosocial needs of all involved persons the following are salient principles.
    - The collective resilience of the public and communities and the personal resilience of affected persons and responders may be maximised by effective planning and co-ordination of service responses. Everyone involved is likely to benefit from supporting arrangements in the immediate aftermath.
    - The majority of people do not require access to a specialist mental health service, but a minority of people may require more specialised mental healthcare.
    - The responses of people who are resilient or who have only short-term acute stress disorder or who may be in the minority that develops a mental disorder may appear superficially similar. Therefore, the challenge is to determine who requires and should be provided with access to which services and when.
    - The psychosocial responses of affected people are phasic:
      - the numbers of people who are distressed and the severity of their reactions rise rapidly, after the onset of untoward events, but they also tend to decline rapidly with some notable exceptions;
      - although the numbers of people who are distressed, and the severity of their reactions, tend to decline after an event, subsequent adverse life events may occasion further and severe distress;
      - account should be taken of anniversary reactions;

- some people who develop a mental disorder may not present their suffering and needs until a considerable time has elapsed that may amount to a number of years; and
  - services should be responsive to the potentially differing needs of each person, family and community.
- A small proportion of affected persons may require services long-term in response to a number of needs.
  - In many jurisdictions, the services required to support resistant and resilient people who may, nonetheless, have immediate and short-term distress, and those required by the smaller numbers of people who have acute stress disorders and smaller numbers of people who develop mental disorders are the responsibility of different governmental departments, agencies and other bodies.
- c. In addition, the literature highlights the key principles for designing and delivering psychosocial and mental health services.
- Most people recover.
  - Interventions are required early after disasters, and the need for them can be expected to continue through into the long term and may last for years.
  - Post-disaster populations can be most effectively approached by considering levels of exposure and pre-existing characteristics.
  - It is important to differentiate psychiatric disorder from distress and dysfunction. This makes it possible to treat psychiatric disorders without discounting, or unnecessarily pathologising, distress that does not amount to disorder.
  - Early intervention itself might increase each survivor's expectancies of developing psychological symptoms or increase awareness of psychosocial distress (though these concerns about pathologising have not yet been systematically formulated and researched).
  - It is important to focus on survivors' continuing ability to adapt and cope.
  - It is extremely important to offer social support.
  - It is important to provide active outreach to survivors.
  - It is vital to identify survivors who are at high-risk.
- d. The literature also indicates that services should:
- be person- and community-centred by:
    - identifying all who are involved in an incident or situation and taking active steps to avoid mistaken identities;
    - actively enabling local involvement and participation of people, groups and agencies from affected communities;

- being sensitive to the cultural diversity of affected communities and people taking appropriate account of approaches based on cross-cultural universality and culturally specific theories; and
- providing honest, accurate and timely information;
- build on available resources and existing capacity;
- prioritise the needs of living people over dealing with people who have died, but in such a manner that services are sensitive to the needs and beliefs of people who are bereaved and the importance of paying attention to cultural rituals that are associated with death and disposing of bodies and human remains;
- sustain and develop the resilience of communities and people and protect the resilience of responders;
- provide responses in which the contributions and roles of a variety of agencies are well integrated by:
  - integrating services to respond to the humanitarian, welfare, social, physical, psychological and mental health needs of all who are affected;
  - integrating a plan for psychosocial care into the regional and local strategic and operational incident response command, leadership and management systems for disaster and major incident management; and
  - providing good signposting to services;
- be organised to deliver a stepped programme of care in which:
  - services respond proportionately to need;
  - need is titrated against specialisation of service response;
  - the patterns of people's responses to disastrous circumstances are recognised; and
  - there is an appropriate balance between not pathologising people's distress and failing to recognise early indications of the presence or risk of mental disorder.

## 197. Service Responses

- a. Prominent authorities recommend that the following general approach is taken in response to disasters and major incidents that cause disruption and dislocation of services and that destabilise communities.<sup>57</sup>
  - Provide direct services as soon as is feasible after the event. This may require providers who are experienced in disaster recovery to be the core of the intervening workforce. They should help to build first-line capacity as a platform for further help and support. Assistance may have to be brought in temporarily from the outside to give attention to immediate needs and to begin the recovery process in communities that lack resources. However, it is of the greatest importance that needs assessment, planning and service delivery be done in full co-ordination with, and explicit knowledge of local providers. Otherwise, importing resources into resource-scarce environments can increase competition and suspicion between the local authorities and providers. This approach also provides opportunities for local resources to be

---

<sup>57</sup> Ajduković D, Ajduković M. Systemic approaches to early interventions in a community affected by organized violence. In Ørner R, Schnyder U (editors). *Reconstructing early intervention after trauma: innovations in the care of survivors*. Oxford: Oxford University Press; 2003.

rebuilt and strengthened. Outside help should at no time be imposed. Cultural understanding and sensitivity are required to ensure good relations with indigenous resources, however limited they may be.

- Empower local care providers to assume increasing responsibilities for delivering services in their community. This can be achieved by providing in-field training from the beginning of an intervention. This increases professional self-esteem and helps local resources to grow rapidly.
  - Work with key community leaders, local media and government institutions, so that they are made aware of the benefits to be derived from early community-based interventions. This is crucial for increasing the likelihood of support for long-term follow-up and the sustainability of intervention programmes. These approaches also take account of local value systems, resources that may be at the disposal of key people and/or exist within their larger communities, and will help to restore a more usual quality of functioning.
- b. The services provided should be designed to accommodate the phasic nature of most people's responses and to respond to the needs of some people for assistance with recovering from distress that is proportionate to their experiences while others may require timely and effective interventions for mental disorders.
- c. The services provided should recognise the potential for disasters and major incidents to have long-term effects on a small proportion of affected people and enable proportionate responses to be provided over a substantial period of time, if they are necessary.
- d. Where the involvement is contemplated of agencies that come from outside the areas that are affected by disasters and major incidents, it is very important that the staff of those agencies understand the culture of the communities within which they intend to work and the staff must also be capable of conversing in an adequate range of local languages.
- e. The importance of these principles is that services that respond to the psychosocial and mental health needs of people in much disrupted communities should be met by means that fit well within the more general recovery programmes. Furthermore, psychosocial programmes are unlikely to be beneficial until communities are beginning to be restored. The immediate psychosocial interventions should be made by rescuers and responders working to support families and communities.

## **RESEARCH**

198. It is crucially important that information-gathering and research take place since lessons learned from clinical practice in disasters and major incidents will contribute to saving lives, minimising suffering, and reducing risks to staff in other disasters and events. However, the pressures that services may be under during a disaster or traumatic event and the restrictions researchers face in meeting methodological and ethical standards in these circumstances can risk reducing or even eliminating opportunities for research.
199. Healthcare organisations should support and encourage researchers to consider plans for data collection or research studies in advance of events, and provide all reasonable support for projects that may be beneficial for affected people and staff.

200. An event that places psychosocial and mental healthcare resources under significant extra pressure is likely to produce similar problems for many other health and social care facilities, and to reduce communication between practitioners. This may result in missed opportunities for collaborative research and learning about the event and its effects on patients, staff, the population and resource consumption. Consequently, there may well be added value in establishing a local coordinating committee to pull together important information and to support learning processes during the course of the response.
201. It is important to emphasise that research activities should be integrated, monitored, and subject to ethical scrutiny despite the difficulties that in-field disaster research creates with regard to seeking ethical approval.

**Summary box 3: Good practice in designing, commissioning and delivering services**

**Key points: good practice in designing, commissioning and delivering services**

The philosophy of care that underpins the design of services is derived from three sources:

- the rationale;
- explicit values; and
- principles derived from the best evidence available.

The overarching principle is that services should do no harm.

The needs of the people who are involved in each event should be central to any response and assessment of them should:

- be based on accurate assessment of the prevailing situation;
- take into account people's physical, psychological and social needs; and
- lead to access to facilities, resources and services that have been pre-planned and which involve multiple agencies.

The philosophy of care takes account of the following six key observations:

- emotional reactions to trauma are extremely common and may be either anticipated or indicative of more serious problems;
- it is difficult to predict who is likely to be affected most, but certain risk factors are known;
- people's profiles of psychosocial responses vary with time and their circumstances;
- socio-economic disadvantage and inter-personal problems that may follow may predict long-term problems and enter survivors into a cycle of disadvantage and poor health;
- good management at the time of the event with effective follow through and broad care planning may lessen the longer-term impacts; and
- mental health professionals who are involved as advisers or as practitioners should be members of multi-disciplinary teams.

## THE AIMS AND GOALS OF CARE

### THE AIMS OF CARE

202. The aims of providing care that is sensitive and responsive to the needs of people after disasters, conflict, major incidents, including those due to terrorism, and emergencies of all kinds are to:
- prepare communities to develop and sustain their collective resilience and to diminish the potential disruption and the accumulated psychosocial consequences on them;
  - prepare people to develop and sustain their resilience and to diminish the potential psychosocial consequences on them;
  - respond proportionately, flexibly and in a timely way to the phased needs and preferences of people who are affected so as to mitigate the psychosocial and mental health effects on them;
  - ensure a continuum of care provided in an integrated way that recognises that people's needs are immediate, and may also prevail in the short-, medium- long -, and, in some instances, in the very long-term; and
  - recognise the risks to, and needs of responders by providing services that keep them well-informed and involved, provide training and opportunities for sharing their experiences and which provide access to welfare, aid and healthcare services as required.

### THE GOALS OF CARE

203. **Prevention** - Preventing distress that is more than transient, and preventing disorders, requires promotion of the collective psychosocial resilience of communities, families, individuals, first responders and service staff. This involves effective and timely intervention to assist recovery when, or soon after, problems occur. Prevention requires restoration of community networks and provision of responsive services that are based on the best evidence that is available.
204. **Promoting Resilience** - The psychosocial responses provided recognise the important role in people's recovery of sustaining their resilience and, so far as is possible, of assisting them in their recovery. This means that:
- services should recognise people's inherent resourcefulness but also their need for support and responsive services;
  - high quality information provided regularly by credible persons can have powerful positive effects; and
  - it is important to take a positive and co-operative stance to responding effectively to enquiries from the media.
205. **Promoting Recovery**
- a. Effective services should be provided that promote people's timely recovery when they have distress that is more than transient or of limited duration or a mental disorder.
  - b. Services should provide assessment, interventions and care that take a positive and holistic approach to their tasks and focus on reducing people's short-, medium-, and longer-term distress, impairments and on prevention and treatment

for people who have mental disorders. This goal points up the importance of a multi-agency approach to designing and delivering the services required.

**206. Services for Families**

- a. In the absence of effective services, the burden that falls on families and the risk factors that relate to them can be associated with worsening family and personal problems. Problems that are experienced by adults may also place children at greater risk of developing psychosocial problems. All services, including those in other parts of the caring system and in other agencies, should focus on the needs of children and younger people and their families.
- b. Specialist services with staff who are skilled in working with families should focus on providing intervention services for children, younger people and other family members and are commended by this guidance. However, there may be only a limited number of practitioners who are able to perform competently these wider functions following a disaster or traumatic event.
- c. Interventions that have been found to assist people who have problems soon after a disaster or major incident include:
  - helping families to identify the cause of the stress;
  - limiting further exposure to the causes of stress; and
  - advising families about rest and maintaining their biological rhythms (for example going to sleep at the same time each night and eating at regular intervals).

**207. Services for Communities**

- a. The rescue, recovery and psychosocial response services should provide a balance between services that are orientated to the health of populations of people, supporting communities and families and delivering care services for particular people according to assessed need and, where it exists, evidence of the effectiveness of interventions.
- b. Important elements in securing the health of the community are:
  - consultations with other healthcare professionals, such as those who are likely to come into contact with people who are seeking medical care for injuries etc;
  - consultations with community leaders who need assistance in identifying at-risk groups, and understanding the phases of recovery;
  - consultation with other agencies that may be supporting communities; and
  - educating people in communities to help to identify people who have worsening or persistent symptoms; these may include anxiety and family conflict that can be triggered by the fear of new threats or by the economic impact of the loss of a job after a traumatic event.
- c. Incident response commanders at the strategic, operational and tactical levels need to have advice available to them on psychosocial and mental health matters, and must adopt a framework for good decision-making.

**208. Services for Responders and the Staff of Services**

- a. Training in the main topics for providing psychosocial and mental healthcare in response to emergencies should be provided for all staff who are first responders, deliver rescue and emergency care, and provide psychosocial and mental healthcare. The level of training should be tailored to the roles, responsibilities and levels of specialisation of the staff.
- b. Services should be provided to sustain all these staff. They, too, are vulnerable to the psychosocial effects of disasters and major events.

**209. Attractive, Accessible, Responsive, and Safe Services**

- a. Services must be attractive, welcoming, and accessible, appropriate to the needs of families, and capable of responding to their variable and often complex needs. Families' own wishes and views must be taken into account, so far as this is possible, in the aftermath of a disaster or major incident.
- b. Services should aim to be capable of establishing relationships with families, be based on trust, and should be assertive about any risks and the needs for incisive action that may be required on certain occasions to protect the interests, wellbeing and health of vulnerable groups, particularly, children, younger people and older people.
- c. To these ends, agencies should aim to coordinate and communicate with a number of organisations and people who may be involved in delivering a shared pattern of care. This highlights the need for mature policies on confidentiality and information-sharing taking account of operations in the aftermath of a disaster or traumatic event.

Summary box 4: The aims and goals of care

**Key points: the aims and goals of care**

The aims of care providing care that is sensitive and responsive to the needs of people affected are to:

- prepare communities;
- prepare people;
- respond proportionately;
- ensure a continuum of care; and
- recognise the risks to and needs of responders.

The goals of care are focused on delivering attractive, accessible, responsive and safe services. The key components are:

- prevention that is firmly embedded in the needs of people, their families and their communities and the associated community and other networks;
- promoting resilience by recognising how people affected might respond and, therefore, the kinds of services that they might require and the need for and uses of information including that provided by and for the media;
- promoting recovery;
- providing services for families and communities to support self-help approaches; and
- recognising the particular needs of responders and staff of services.

## A STRATEGIC STEPPED MODEL OF CARE

### THE CORE COMPONENTS OF THE MODEL OF CARE

210. The model of care described in this guidance has six main components that are summarised below and presented graphically in Figure 13. This model comprises of two components that relate to (a) strategic planning and (b) prevention through developing the collective psychosocial resilience of communities and the personal resilience of people within them as well as the resilience of the staff of responding agencies. The remaining four components describe services with which people may come into contact as a consequence of how they respond psychosocially.
211. This model covers the needs of affected populations and those of responders and staff of agencies that provide care. There is no evidence to suggest that the psychosocial responses of survivors, witnesses, survivors who act as first responders and staff of agencies that are involved in providing emergency care can be differentiated. Therefore, survivors and staff should be offered similar services according to the same model of care. However, the mechanisms and methods of service delivery may not be the same.
212. The six components are summarised as follows.
- a. **Strategic planning:** Comprehensive multi-agency planning, preparation, training and rehearsal of the full range of service responses that may be required. This requires inclusion of psychosocial response plans in all planning for emergencies and major incidents. It also means that the psychosocial plan is included in exercises to test the strategy and practice delivery of the plans. Psychosocial and mental healthcare advice is required by planners when they design, test and implement the plans and by incident response commanders at strategic, tactical and operational levels.
  - b. **Prevention:** Services that are delivered in advance of untoward events and which are orientated to developing the collective resilience of groups of people and communities. The intention of this component is to mitigate the inherent and consequential stressors that are produced by later major incidents and disasters and, thereby, reduce the impacts of events on communities, families and particular people.
  - c. **Level 1 services:** Basic humanitarian and welfare services that should be made available to everyone and which are based on families and communities. They should be based on the principles of psychological first aid.
  - d. **Level 2 services:** Provision of psychological first aid that is delivered by trained lay persons who are supervised by the staff of specialised mental healthcare services. The supervising mental health professionals should have been trained in supervision and managing the psychosocial and mental health effects of major incidents and disasters.
  - e. **Level 3 services:** Provision of screening, assessment and intervention services for people who do not recover from immediate and short-term distress. They are provided by primary care organisations that are augmented by advice and supervision provided by staff of specialist mental health services. This component should include provision of psychological first aid. Critically, they should also provide more substantial assessment and intervention services:

- I. from around four weeks after the beginning of an incident or from four weeks after people's involvement in more sustained adverse circumstances; and
- II. earlier than four weeks for people who have more severe distress or emerging or concurrent disorders.

f. **Level 4 services:** Provision of access to primary and secondary mental healthcare services for people who are assessed as requiring them.

213. Figure 13 also shows how the six components are progressive, cumulative and continuing rather than discrete alternatives.

**Figure 13: The core components of the strategic stepped model of care<sup>58</sup> (© Williams R & Kemp V and reproduced with the permission of the copyright holders)**



<sup>58</sup> © Copyright for Figure 13 and its associated concepts is asserted by R Williams and V Kemp in 2008 and reproduced with permission.

## STRATEGIC LEADERSHIP, PLANNING AND PREPARATION

214. Figure 13 has been constructed to show that strategic leadership and planning continue throughout and after each emergency. This is because, although designing and testing a plan for psychosocial care prior to events is very important, no general plan can be assumed to be appropriate to each situation. Therefore, plans usually require adjustment in the light of events in each major incident and review afterwards is also important in order to learn lessons for the future.

## DEVELOPING COLLECTIVE COMMUNITY RESILIENCE

215. Earlier, this guidance has focused on developing communities' collective resilience as an important contribution to minimising the psychosocial impacts of disasters when they do occur. It is not easy to see how communities might be prepared for all forms of disaster in circumstances in which it is difficult to predict when and where they might occur. Neither is it desirable to maintain communities in high states of anticipation for sustained periods. However, preparations should be made and this is best when the approaches taken empower people to deal with potential challenges to their own wellbeing. One such approach has been mounted in the Netherlands and is cited here to illustrate the principles that underpin a reasonable approach to developing the resilience of communities.
216. One of terrorism's aims is to disrupt community life through violent actions. The Impact Dutch knowledge and advice centre for post-disaster psychosocial care has proposed that interventions are put in place which can be activated rapidly at the point of threat or onset of an event, and which are aimed to assist communities to sustain their collective resilience to terrorist disruption.<sup>59</sup> Impact recommends a number of precautionary measures: setting up dormant central support centres; developing a plan; developing a strong network of professionals; identifying, networking and training volunteers; giving thought to providing information and setting up silent websites; learning about the human social capital in each community; preparing meeting points to encourage and enable personal interaction and dissemination of information and to provide support when it is required; and preparing an infrastructure for research.
217. Impact has designed three supporting products: a public campaign; lesson material for primary schools including a musical; and material for professionals that describes community-based interventions.
218. These interventions set out to reinforce social cohesion and support. Evidently, these resources would be beneficial in other forms of disaster.

## SERVICES WITH WHICH SURVIVORS AND RESPONDERS MAY COME INTO CONTACT

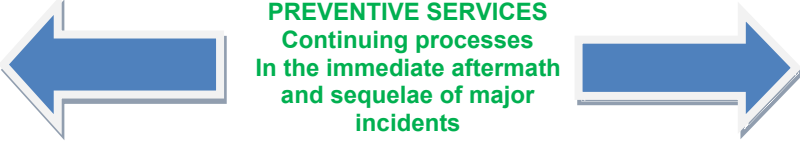
219. Figure 14 illustrates how the psychosocial and mental health consequences of major disasters and incidents link with the core components of the model of care and the modalities for assessment and intervention. Developing collective and community resilience prior to disasters and major incidents and providing support and care for families are services that should be universally available. Psychological first aid and augmented primary care should be available to people who are thought to be particularly vulnerable. Augmented primary care and access to the specialist mental health services should be accessible to people who are thought to have developed mental disorders. Figure 15 integrates the strategic concept with the components of

---

<sup>59</sup> Smeets EC, de Ruijter AM. Community-based interventions in the wake of terrorism: citizens and resilience. Amsterdam: IMPACT, Dutch knowledge and advice centre for post-disaster psychosocial care; DATE or URL REQUIRED

the model with which survivors are likely to come into contact after a major incident or disaster.

Figure 14: The model of care<sup>60</sup> (© Williams R & Kemp V and reproduced with the permission of the copyright holders)

| Effects on people  | Model of care  | Modalities   |
|--|--|--|
|  <p><b>PREVENTIVE SERVICES</b><br/>Continuing processes<br/>in the immediate aftermath<br/>and sequelae of major<br/>incidents</p>   |  |  |
| <p><b>Group 1: Resistant and Resilient People</b></p> <ul style="list-style-type: none"> <li>• People who have minor, transient and short-term distress in the immediate circumstances of the disaster or traumatic event</li> </ul>   | <p><b>Level 1:</b><br/>Family and community services that are informed by the principles of Psychological First Aid (PFA)</p>  | <p>First Responders who all require familiarity with the principles of Psychological First Aid</p> <p>Family &amp; Community Services based on the principles of Psychological First Aid</p> |
| <p><b>Group 2: Resilient People</b></p> <ul style="list-style-type: none"> <li>• People who have more substantial distress that usually lasts for 2/3 days after the disaster or traumatic event</li> </ul>  | <p><b>Level 2:</b><br/>2a. same as Level 1<br/>2b. with the addition (or not) of PFA as required</p>   | <p>Psychological First Aid provided by lay practitioners who have been trained to deliver this modality of intervention</p>  |
| <p><b>Group 3: Distressed People</b></p> <ul style="list-style-type: none"> <li>• People who are resilient but who are taking longer to recover;</li> <li>• People with an acute stress disorder; and</li> <li>• People who may be in the course of developing a mental disorder.</li> </ul> | <p><b>Level 3:</b><br/>3a. same as Level 1<br/>3b. PFA<br/>3c. assessment in Primary Care</p> <ul style="list-style-type: none"> <li>• If severe, get treatment immediately</li> <li>• If not severe, get reviewed at one month after event in Primary Care</li> </ul> | <p>Assessment and appropriate treatment in Primary Care augmented by access to formal psychological therapies</p>  |
| <p><b>Group 4: People who develop a mental disorder</b></p> <ul style="list-style-type: none"> <li>• People who develop a defined mental disorder</li> </ul>   | <p><b>Level 4:</b><br/>4a. same as Level 1<br/>4b. may have had and continue to require PFA<br/>4c. have had assessment repeated at 1 month<br/>4d. referral of selected of people to specialist mental health services</p>  | <p>Specialist Mental Healthcare</p>  |

<sup>60</sup> © Copyright for Figure 14 and its associated concepts is asserted by R Williams and V Kemp in 2008 and reproduced with permission.

Figure 15: Roles of services in delivering the model of care<sup>61</sup> (© Williams R & Kemp V and reproduced with the permission of the copyright holders)

| Approach  | Humanitarian and Population Healthcare  |   | Personal Healthcare Services  |  |
|---|---|---|---|--|
|   | Level 1   | Level 2   | Level 3   | Level 4  |
| <b>Nature of Problems</b>   | <b>TRANSIENT &amp; SHORT-TERM DISTRESS</b><br>Resistant & Resilient People  | <b>MEDIUM-TERM DISTRESS</b><br>Resilient People   | <b>LONGER-TERM DISTRESS OR MENTAL DISORDER</b><br>People with Persisting Distress that is Sustained by Persisting Stressors and Mental Disorders  | <b>MENTAL DISORDER</b><br>People with Mental Disorders       |
| <b>Nature of Care</b>   | <b>Universal Programmes of Prevention and Care</b>  | <b>Universal and Selective Programmes of Prevention and Care</b>  | <b>Universal, Selective and Indicated Programmes of Care</b>  | <b>Universal, Selective and Indicated Programmes of Care</b> |
|   | Restoration of Psychosocial Environment by Normalising Relationships and Services<br><br>Informed by the Principles of Psychological First Aid  | Restoration of Psychosocial Environment by Normalising Relationships and Services<br><br>Psychological First Aid  | Primary Healthcare<br>Mental Health Assessment<br><br>and<br>Access to Psychological Therapies  | Specialist Mental Healthcare                                 |
| <b>Agents</b>   | First Responders, Families, Friends, Neighbours, Communities, Schools and Workplaces  | Trained Lay Therapists with Professional Supervision  | Trained Lay Therapists with Professional Supervision<br><br>Augmented Primary Care Services (primary healthcare teams working with staff of community mental health services)   | Specialist Mental Health Services                            |
| <b>Indicative Time Line</b><br>(days post incident, if appropriate) | <b>0 to 14</b>  | <b>3 to 30</b>  | <b>28 to 365</b>  | <b>28 and continuing</b>                                     |
| <b>Roles of Mental Health Professionals</b>                         | Provision of specialised advice to the Commanders of the Response Services at Strategic (Gold), Tactical (Silver) and Operational (Bronze) Levels<br><br>Provision of a Liaison Mental Health Service for Responders<br><br>(requires training in disaster mental healthcare) | Direction, Management and Supervision of Lay Therapists<br><br>Provision of a Liaison Mental Health Service for Responders<br><br>(requires training in disaster mental healthcare and supervision) | Advice to Primary Healthcarers<br><br>Direction, Management and Supervision of Lay Therapists<br><br>Advice to Specialist Mental Healthcare Services<br><br>Conducting Some Specialist Assessments<br><br>Supervision of Other Healthcarers<br><br>(requires training in disaster mental healthcare and consultation techniques ) | Delivery of Specialist Mental Healthcare                     |

<sup>61</sup> © Copyright for Figure 15 and its associated concepts is asserted by R Williams and V Kemp in 2008 and reproduced with permission.

220. The main tasks for care services are:

- prevention;
- restoring family and social networks and communities;
- conducting health impact assessments of affected populations in order to inform planning of services and interventions; and,
- delivering a stepped, flexible, progressive, strategic model of care that:
  - o is built on the principles of psychological first aid;
  - o is led by the needs of all of the people who are involved;
  - o provides a framework for integrating humanitarian aid, welfare services and all aspects of psychosocial and mental healthcare;
  - o underpins a continuum of care across agencies; and
  - o is open to evaluation, review and adjustment in the light of experience and emerging evidence.

## **PREVENTION**

221. The complexity of social resilience programmes means that their effectiveness has received limited empirical support. However, eight characteristics have been identified that are consistently associated with effective community prevention programmes. Effective services should:

- use varied teaching and consultation methods;
- give sufficient information and training to assist people to meet population needs;
- incorporate research into the plans and include outcome evaluation;
- be based on the best evidence available;
- foster positive relationships with partner agencies;
- be appropriately timed;
- be socio-culturally relevant; and
- have well trained staff.

## **RESTORING FAMILY AND SOCIAL NETWORKS AND COMMUNITIES**

222. Giving and receiving social support is a positive sign of psychosocial wellbeing. The ability of people to accept support, and its availability, are two of the most crucial features on which this guidance is based.

223. Secondary consequences after disasters, conflict and major incidents are effects on social and family life and they are important determinants of long-term psychosocial health. Therefore, an important aspect of community-based interventions is to understand and intervene, if and when necessary, to reduce the effects of disruption to family life. The continuum of care, which is another core aspect of this guidance, highlights the requirement for psychosocial responses to aim to preserve and restore functional, historical and interpersonal continuities of people, families, organisations, and communities through all the stages of recovery after disasters.

224. Some opinion leaders point to misconceptions that arise from two biases. The first is towards describing people's responses in psychopathological terms which can result in underestimating their ability to cope with disaster. The second is orientated to normalising people's responses, but this can result in underestimating the probability or extent of expected disruption. Giving priority to supporting reconstruction of family and societal networks is an approach that balances these risks. An increasing literature

shows that this approach is at least as important as the physical reconstruction that may be required after a disaster.

## PSYCHOLOGICAL FIRST AID

225. Psychological first aid (PFA) is not a single intervention or treatment; it is an approach that is designed to respond to people's psychosocial needs after major incidents or disasters which comprises of a number of elements.<sup>62 63</sup> Some of the most important components are as follows: attention to basic needs (e.g., safety, food and communication); early interventions (e.g. reducing physiological arousal and providing information and support); assessing needs and screening (e.g. to ensure immediate needs are being addressed and to identify any additional interventions that might be required); monitoring the rescue and recovery environment (e.g. monitoring media coverage and the services being provided); outreach and information dissemination (e.g. by the use of information leaflets, websites and media interviews); technical assistance, consultation and training (e.g. improving the capacity of organisations to provide what is required to re-establish community and family networks etc); fostering resilience, coping and recovery (e.g. psychoeducation, fostering natural support networks, and looking after the bereaved); triage (e.g. identifying vulnerable and high-risk individuals and groups, and arranging referral for specialist help if required), and treatment (e.g. formal treatments including pharmacotherapy).
226. In summary, PFA is an approach that is intended to reduce people's initial distress in the immediate aftermath of traumatic events and foster adaptive functioning. PFA underpins all levels of care that are described in the model that is central to this guidance. A more substantial description of PFA is provided in the section on Programmes of Care.

## A CONTINUUM OF CARE

227. While the steps represented by each of the six levels in the model of care described here may appear to be discrete they are intended as a continuum of service provision that promotes seamless care for the people who require it.
228. This guidance recognises that the allocation of responsibilities across government departments and agencies varies from county to country. Therefore, to achieve a continuum of care, it identifies the principles on which effective services should be founded rather than prescribing a single method by which they are delivered.
229. In some countries, for example, the plan is for information and advice centres to be set up as the first-line for providing humanitarian aid and access to welfare services as well as access to psychosocial and mental health services. In this way, they act as one-stop agencies. However, the structure of frontline and other services is different in other jurisdictions.
230. The general principles for ensuring that people who are affected by disasters have access to the services they need are that: (a) the frontline services established to provide direct access to survivors and others are actually capable of this response; and (b) the other services work together to deliver programmes of care. Each agency has to be clear about its specific role and capabilities, and understand the roles of the

---

<sup>62</sup> Raphael B. When disaster strikes: how individuals and communities cope with catastrophe. New York: Basic Books; 1986.

<sup>63</sup> Brymer M, Jacobs A, Layne C, Pynoos R, Ruzek J, Steinberg A, Vernberg E, Watson P. Psychological first aid: field operations guide 2<sup>nd</sup> edition. National Child Traumatic Stress Network and National Center for PTSD; 2006. Also at: [www.nctsn.org](http://www.nctsn.org) and [www.ncptsd.va.gov](http://www.ncptsd.va.gov).

agencies with which it must cooperate. In this way, disparate agencies can form networks of care and the whole dynamic can be rehearsed and tested through exercises. Whatever the structure of agencies, the model in this guidance identifies the important components and functions that are required to deliver adequate psychosocial and mental healthcare.

**Summary box 5: A strategic stepped model of care**

**Key points: a strategic stepped model of care**

The strategic stepped model of care links the impact of events with the core components of psychosocial and mental healthcare that populations of people, communities and particular people require and the modalities of screening, triage, assessment and intervention. It is intended as a conceptual and practical resource for planners.

The strategic stepped model of care described in this guidance has six main components. It comprises of two components that relate to:

- strategic planning; and
- prevention through developing the collective psychosocial resilience of communities and the personal resilience of people within them as well as the resilience of the staff of responding agencies.

The remaining four components describe services with which people may come into contact as a consequence of how they respond psychosocially.

The six components are summarised as:

- comprehensive multi-agency planning, preparation, training and rehearsal of the full range of service responses that may be required;
- services that are delivered in advance of untoward events and which are orientated to developing the collective resilience of groups of people and communities;
- basic humanitarian and welfare services that should be made available to everyone and which are centred on families and communities and which should be based on the principles of psychological first aid;
- providing psychological first aid that is delivered by trained lay persons who are supervised by the staff of mental healthcare services (supervising mental health professionals should have been trained in managing the psychosocial and mental health effects of major incidents and disasters and staff supervision);
- providing screening, assessment and intervention services for people who do not recover from immediate and short-term distress; and
- providing access to primary and secondary mental healthcare services for people who are assessed as requiring them.

## PROGRAMMES OF CARE

### TYPES OF PROGRAMMES

231. The programmes for the care that is required are categorised as:

- Universal Programmes;
- Selective or Targeted Programmes; and
- Indicated Programmes.

232. Universal programmes are the interventions that should be available to communities and everyone who has been directly and indirectly involved in a major incident, including responders – irrespective of whether they develop a mental disorder. Targeted programmes are offered to a group of people who are selected on the basis of readily ascertained information about the risks they are running, also on the basis of what is known about their resilience and their potential for developing more sustained distress or a disorder. Indicated interventions are made available to people who have developed sustained distress, a disorder or comorbid disorders

233. Universal programmes should be offered unselectively to everyone who is involved. Provision of the two other categories of programmes is based on selection. Usually, selection for targeted programmes is conducted on the basis of apprehending the risks that particular people are running; whereas offers of access to indicated programmes are based on assessment of personal need. Therefore, this section presents guidance on universal programmes and information about screening and triage before it covers selective and indicated programmes.

234. A guideline for early psychosocial interventions after disasters, terrorism and other shocking events is provided by IMPACT.<sup>64</sup>

### UNIVERSAL PROGRAMMES

235. Universal Programmes include:

- programmes that are aimed at developing and sustaining community resilience;
- general responses that offer interventions that are based on the basic principles for promoting personal resilience and recovery.

236. As stated, there is no evidence that formal psychosocial interventions targeted at everybody involved in traumatic events are effective. However, immediate practical, social and emotional assistance is widely agreed as being important. Such support is likely to be primarily provided by families, friends and communities but all emergency responders should have the basic ability to:

- respond to traumatised people;
- promote resilience and recovery;
- provide immediate practical, social and emotional support; and
- identify people who require more specialised attention.

---

<sup>64</sup> IMPACT. Multidisciplinary Guideline: Guideline for Early psychosocial interventions after disasters, terrorism and other shocking events. Amsterdam: IMPACT; 2007.

237. **Basic Principles for Promoting Resilience and Recovery**

- a. Research and experience in the last decade has suggested better ways to promote people's resilience and recovery. They are represented by three levels of intervention:
  - individual persons;
  - families, and
  - communities including workplaces and schools.
- b. Depending on the nature of an incident, some of the sociological features of good healthcare practice may be sustained and accentuated while others may have to be modified or even curtailed. The Johns Hopkins model considers that resistance and resilience are facilitated by expectancy and experience and its four strategies are:
  - providing realistic preparation;
  - fostering group cohesion and social support;
  - fostering positive cognitions; and
  - building self-efficacy and hardiness.<sup>65</sup>
- c. The model anticipates that certain mechanisms may need to be put in place to enhance resilience. The measures that underpin the proposed model are:
  - providing credible and competent leadership that is perceived as such;
  - setting appropriate anticipatory guidance and expectations;
  - providing realistic training;
  - identifying common purposes;
  - identifying a higher ideal;
  - providing orientation to the impact and acute phase;
  - providing stress management training; and
  - providing family support.
- d. Following a disaster or major incident, the following steps are likely to be required:
  - assessment of need;
  - sustaining credible information flow;
  - providing comfort and immediate practical help;
  - reassurance for survivors and responders that their emotional reactions are understandable, given the abnormal experience they have endured;
  - listening to, and absorbing people's accounts of the incident as well as helping to piece together their experiences of the disaster;
  - giving information on how to deal with problems arising from the incident, for example family difficulties, travel fears, insomnia, work problems;
  - working with grief and emotional responses that are precipitated by the disaster; and
  - providing psychological triage to identify people who are at highest risk and assessing their needs for more formal interventions.

---

<sup>65</sup> Kaminsky M, McCabe OL, Langlieb AM, Everly GS. An evidence-informed model of human resistance, resilience and recovery: the Johns Hopkins outcome-driven paradigm for disaster mental health services. *Brief Treatment and Crisis Intervention Advance Access* originally published online on December 7, 2006. *Brief Treatment and Crisis Intervention* 2007 7(1):1-11; doi:10.1093/brief-treatment/mhl015

- e. The model proposed here is consistent with these recommendations, but it has the advantage of incorporating endeavours to promote resilience and rapid recovery into a stepped model of activities that does not identify anyone as having a problem until such a time as that is necessary and helpful.
- f. However, there is no evidence that providing formal interventions for everyone who is involved in traumatic events are effective at reducing initial distress or preventing the development of more serious conditions. Moreover, their introduction may impede the natural healing and recovery of persons, families and communities.

## SCREENING AND TRIAGE

### 238. Screening

- a. Screening is the term used when a specific investigation method is offered on a large scale to the population for tracing certain conditions at an early stage. Effective screening could promote more effective targeting of services though people who are responsible for planning services for communities or populations wish to avoid pathologising anticipated and transient distress and do not want to use scarce and expensive clinical resources for people who are likely to recover spontaneously or with minimal assistance. Thus, screening of people who have been affected by disasters and major incidents is an important consideration for planners of responses to disasters and major incidents. Annex E summarises the criteria set by the National Screening Committee of one Member Nation as an illustration of the criteria for appraising the viability, effectiveness, and appropriateness of a screening programme.<sup>66</sup>
- b. At present, it is the conclusion of this guidance that it is not appropriate to screen populations of people for symptoms in the immediate aftermath (days) of a disaster or traumatic event. This is because there is a lack of valid and reliable screening methods in the field of assessing the psychosocial needs of populations of people who are affected by disasters and major incidents. Also, research indicates that levels of experiences or symptoms that are assessed as present very soon after an event do not accurately predict the future course of disorder. This situation is of major concern.
- c. Despite the current situation, assessing people's functioning and pragmatic needs at this point is the basis for knowing how and when to provide assistance. The primary goals of screening in the first week and thereafter are to screen groups of people who have been directly exposed to traumatic events in order to identify:
  - the few people who may need emergency hospitalisation or immediate referral to a mental health service (less than one person in every 1,000 in the first week); and
  - people and groups of people who are at elevated risk for developing disorders over time.
- d. It is important to be sensitive to people's unique experiences so as to maximise the acceptability of screening and engagement for further follow-up. Additionally, developmental and cultural matters must be addressed in setting up screening protocols.

---

<sup>66</sup> National Screening Committee. First report of the National Screening Committee. London: Health Departments of the United Kingdom; 1998. [http://www.nsc.nhs.uk/pdfs/nsc\\_firstreport.pdf](http://www.nsc.nhs.uk/pdfs/nsc_firstreport.pdf) (accessed 14 January 2001).

- e. Earlier, this guidance has referred to the cultural specific (or relativist) and the cultural universality approaches to ascertaining the nature of people's problems including making diagnoses of mental disorders, when appropriate. Recent evidence has enhanced the weight that should be afforded to cultural factors and other platforms for understanding people's experiences after disastrous events. Therefore, the approach taken in this guidance recognises the importance of the relativist position, but also the utility of the universalist stance in ensuring that people who require them receive effective assistance and interventions.
- f. Canino and Alegria offer 10 recommendations to practitioners for assessing the extent to which cultural background and context affect the manifestation of symptoms and syndromes. They are appropriate to the model of care in this guidance and a version of them is provided in Figure 16.

**Figure 16: Recommendations to assist practitioners to assess the extent to which cultural and contextual factors affect how people manifest their experiences (after Canino & Alegria, 2008)<sup>67</sup>**

- Assess lifestyles, social norms, everyday practices and activities relevant for survival and adaptation
  - Determine if diagnostic criteria for specific disorders have face validity for the population that is being assessed
  - Capture sociolinguistic evidence of meanings, labels and interpretations when using a Western-based diagnostic paradigm in other cultures
  - Simplify the cognitive complexity of assessment questions to facilitate shared meaning between the people being assessed and their assessors
  - Evaluate the context of what appears as illness behaviour to judge whether or not the diagnostic criteria are likely to map onto Western constructs of illness
  - Exchanging information that influences social identities of the people being assessed with those of the assessors may be required
  - Each assessor should cross-validate their assumptions
  - Appraise the distress threshold of each person who is being assessed and the thresholds of the significant people in their lives
  - Each assessor should determine the extent to which they are generalising or individualising particular behaviours, feelings or experiences to reduce stereotyping
  - Retain a sceptical approach to the results of standardised tests
- g. All assessments should be practical, achievable, and implementable at the local level, and informed by an entire system of care. Therefore, it is best to put systems in place prior to an incident, with planning being coordinated at appropriate, international, national, regional and local levels. Brewin has published a review of screening instruments.<sup>68</sup>
- h. Research after several terrorist events, including 9/11, 2001, suggests that survivors who were directly involved insofar as they were at risk of loss of life or limb may have been underserved in respect of screening, triage, referral to specialist services and subsequent monitoring. Two goals emerge from the research; responding to people's immediate and short-term needs and responding to the needs of people who have persistent symptoms of psychopathology. The screen and treat model that was set up after the London bombings in 2005 focuses on the latter through identifying, following up and screening all trauma-exposed persons to determine who develops persistent psychopathology and, then,

<sup>67</sup> modified after Canino G, Alegria M. Psychiatric diagnosis: is it universal or relative to culture? *Journal of Child Psychology and Psychiatry* 2008; 49(3):237-250 and reproduced with permission..

<sup>68</sup> Brewin CR. Systematic review of screening instruments for adults at risk of PTSD. *Journal of Traumatic Stress* 2005; 18:53-62.

arranging evidence-based interventions. The London model involved establishing a central screen and treat programme to identify all of the people who were affected, screen them for mental disorders using validated measures, refer them for evidence-based treatment if appropriate, and monitor outcomes using standardised instruments.<sup>69</sup>

- i. In essence, the screen and treat model proposes that: (i) immediate intervention is restricted to providing information, psychosocial support, psychological first aid, and education rather than crisis counselling; and (ii) survivors should be followed up to detect people who have persistent symptoms who can be treated with empirically supported interventions. This approach is adopted in the model of care in this guidance.
- j. In the instance of a CBRN event, public health authorities must calculate the extent of the threat and release information through the media. Initially, the danger is not likely to be known and early information is likely to be incomplete, fragmented and even contradictory. Communication of health risk is essential and it is most useful to involve a consistent message delivered by knowledgeable and credible officials, who listen and respond to the concerns of the public. Statements should avoid the appearance of defensiveness or concealment. For example, experience from the US following 9/11, the anthrax attacks, and the sniper attacks in the Washington DC area, demonstrate the value of daily or twice daily scheduled briefings with the media and the public, even if there is no new information to disseminate.
- k. There are several psychosocial assessment programmes that can be provided by non-healthcare staff who have been trained to assess how people are dealing with their experiences at the time and for a month or so afterwards. Figures 17 and 18 are drawn from the Trauma Risk Management (TRiM) programme that is being adopted in the UK's armed services.<sup>70</sup> Reference to this programme is not included to suggest that all Member Nations should necessarily adopt a particular screening programme; it is an example of the feasibility of employing trained volunteers rather than healthcare staff.
- l. Paragraph 126 identified the international consensus that how people progress during the first month provides important information for predicting prognosis of the effects of traumatic events on particular people. This premise is the basis for the approach adopted by the UK's armed services' Trauma Risk Management (TRiM) programme. If distress is diminishing four weeks after exposure to a major incident, the people concerned are more likely to continue to recover. But if their distress is continuing, is increasing or is causing substantial problems for them or other people, a full assessment of their mental health needs is required.
- m. Figure 17 lists the 10 risk factors that are assessed by military personnel who are appointed as TRiM practitioners during small group or personal interviews three days after a single-event trauma. The personnel make comparative assessments by rechecking these risk factors after 28 days. In this way, they can monitor each person's trajectory of response. Those appointed as practitioners do not have to be members of the armed forces healthcare or psychological professional services, but are selected from within military units and provided with a three-day training course.

---

<sup>69</sup> Brewin CR, Scragg P, Robertson M, Thompson M, d'Ardenne P, Ehlers A. Promoting mental health following the London bombings: a screen and treat approach. *Journal of Traumatic Stress*, 2008; 21(1):3-8.

<sup>70</sup> Greenberg N, Cawkill P, March C, et al. How to TRiM away at post traumatic stress reactions: Traumatic risk management – now and the future. *J R Nav Med Serv* 2005; 91:26-31.

**Figure 17: Risk factors (From TRiM)**

(List in Figure 17 reproduced with permission from the authors of TRiM)

The person:

1. thought that they were out of control during the event
  2. thought that their life was threatened during the event
  3. blames others for some aspect(s) of the event
  4. expresses shame about their behaviour relating to the event
  5. experienced acute stress following the event
  6. has experienced substantial general stress since the event such as problems with work, home and health
  7. is having problems with day-to-day activities
  8. talks about problems relating to previous traumatic incidents
  9. has problems in gaining access to social support (from family, friends or at work)
  10. has been drinking excessively to cope with their distress
- n. TRiM practitioners assess distress (or acute stress which is item 6 in Figure 17) on the basis of the 10 items in Figure 18.
- o. Having more than transient problems with sleeping, significant use of alcohol and lack of access to or use of available supporting social relationships are indicators for concern and particularly so if those findings are recurrent.
- p. Differing situations and employment circumstances affect who should conduct these assessments. Often, it is better if a neutral person who is not engaged in managing the person is employed to conduct the assessments, but there are circumstances in which a manager may be the most appropriate assessor.

**Figure 18: Indicators of stress (From TRiM)**

(List in Figure 18 reproduced with permission from the authors of TRiM)

The person:

1. Has upsetting thoughts or memories about the event that come into mind against the person's will
2. Has upsetting dreams about the event
3. Acts or feels as though the event is happening again
4. Feels upset by reminders of the event
5. Has bodily reactions when reminded of the event
6. Has difficulty falling or staying asleep
7. Is irritable or has outbursts of anger
8. Has difficulty concentrating
9. Is overly aware of potential dangers to self or others
10. Is jumpy or is startled at something unexpected

**239. Triage**

- a. As well as providing information in the immediate aftermath and acute phases, rescuers, staff of the emergency services, trained volunteers, humanitarian aid and welfare workers, and healthcare staff have roles in psychosocial triage.
- b. This is, above all, a matter of identifying affected people who have mental disorders or serious clinical symptoms requiring diagnosis and/or treatment. Psychological triage, this must be based on the judgement of volunteers and professionals at preliminary, primary, secondary and tertiary level, and also on the judgement of the affected persons themselves. Thorough basic training of volunteers and

professionals is necessary for this. They need to know that most of the people who are affected display distress.

- c. Psychosocial triage should also take place at a later phase when, for example, a person who has been affected consults a care giver.
- d. Psychosocial triage should distinguish the following groups of people.
  - Affected people who do not have mental disorders or serious clinical symptoms. This is likely to be the largest group of affected.
  - Affected people whose experiences and symptoms are thought as possibly indicating that they have serious clinical symptoms that might amount to mental disorder. Information and advice should be given to people in this group. In addition, care givers should arrange follow-up meetings with the people affected.
  - Affected people who have mental disorders or serious clinical symptoms, for whom appropriate diagnosis and treatment should be offered straightaway.

## SELECTIVE OR TARGETED PROGRAMMES

240. Selective or Targeted Programmes include:

- psychological first aid; and
- peer support.

### 241. Psychological First Aid

- a. Psychological First Aid (PFA) is an evidence-informed approach that is designed to reduce the initial distress caused by traumatic events and to foster short- and long-term adaptive functioning and coping. The principles and techniques of PFA meet four basic standards. They should be:
  - consistent with research evidence on risk and resilience following trauma;
  - applicable and practical in field settings;
  - appropriate for developmental levels across the lifespan; and
  - culturally informed and delivered in a flexible manner.
- b. PFA does not assume that all survivors develop mental health problems, more serious disorders, or long-term difficulties in recovery. Instead, it is based on an understanding that survivors of disasters, and other people who are affected by major incidents, experience a broad range of early reactions (for example, physical, psychological, behavioural, and spiritual). Some of these reactions cause enough distress to interfere with adaptive coping, and people's recovery may be helped by support from compassionate and caring responders.
- c. PFA for children is manualised.<sup>71</sup> This approach is suitable for children and adolescents, adults, older adults, survivors who have disabilities, families and also for responders and other staff. According to the manual, the basic objectives of PFA are to:

---

<sup>71</sup> Brymer M, Jacobs A, Layne C, Pynoos R, Ruzek J, Steinberg A, Vernberg E, Watson P. Psychological first aid: field operations guide 2<sup>nd</sup> edition. National Child Traumatic Stress Network and National Center for PTSD; 2006. Also at: [www.nctsn.org](http://www.nctsn.org) and [www.ncptsd.va.gov](http://www.ncptsd.va.gov).

- establish a human connection in a non-intrusive, compassionate manner;
  - enhance immediate and ongoing safety, and provide physical and emotional comfort;
  - calm and orientate emotionally overwhelming or distraught survivors;
  - help survivors to tell others specifically about their immediate needs and concerns and gather information as appropriate;
  - offer practical assistance and information to help survivors to address their immediate needs and concerns;
  - connect as soon as possible survivors to social support networks including family members, friends, neighbours and community resources;
  - support adaptive coping, acknowledge coping efforts and strengths, and empower survivors;
  - encourage adults, children and families to take an active role in their recovery;
  - provide information that may help survivors to cope effectively with the psychosocial impacts of disasters; and
  - be clear about the availability of responders who are able to help and, when appropriate, link survivors with disaster response teams, local recovery systems, mental healthcare services, other public-sector services and other relevant organisations.
- d. Thus, the key effects of PFA are:
- providing comfort and consolation;
  - protecting people from further threat and distress;
  - providing immediate physical care;
  - encouraging goal orientated and purposeful behaviour;
  - helping people to reunite with loved ones;
  - enabling voluntary sharing of experiences;
  - linking survivors with sources of support;
  - facilitating a sense of being in control; and
  - identifying people who need further help (triage).
- e. Ørner R & Schnyder U (2003) summarise an approach to holistic responses to people after incidents and this also contains within this the main components of PFA.<sup>72</sup> It is reproduced in Figure 19.

---

<sup>72</sup> reproduced with permission from pages 269-270 in Ørner R & Schnyder U. Reconstructing early intervention after trauma: innovations in the care of survivors. Oxford: Oxford University Press; 2003.

Figure 19: Innovations in early interventions in caring for survivors of trauma<sup>73</sup>

**First attend to basic needs**

- Safety, security and survival
- Food and shelter
- Orientation
- Communication with family, friends and community
- Assess the environment for ongoing threats

**First level of reconstructed early intervention**

- Protect survivors from further harm
- Reduce physiological arousal
- Mobilize support for those in greatest distress
- Keep families together, facilitate reunion with chosen friends and loved ones
- Provide information, encourage communication and education
- Use effective risk communication techniques

**Needs assessment and screening**

- Assess current status.
- Are immediate needs being addressed?
- Improve immediate recovery environment.
- Consider if additional interventions are needed for whole groups or communities, particular sub-populations or individual survivors.

**Monitor the rescue and recovery environment**

- Observe, listen to and consult with those most affected.
- Monitor the environment for additional threats and stressors.
- Monitor past and ongoing threats.
- Monitor services being provided.
- Monitor media coverage and rumours.

**Outreach and information dissemination**

- Use established community structures, information leaflets for general distribution, set up new websites, prepare and distribute media releases, participate in media interviews and public information programmes.

**Technical assistance, consultation and training**

- Improve capacity of organizations and caregivers to provide what is needed to re-establish community structures, support family recovery to foster cohesion plus resilience and safeguard community infrastructures.
- Technical assistance, consultation and training should be prioritized for relevant organizations involved in trauma and disaster response; professional responder groups, other caregivers and volunteers; leaders and incident commanders.

**Foster resilience, coping and recovery**

- Facilitate social interaction at family, group and community levels.
- Offer structured modules for coping skills awareness training and ways of conducting risk assessments.
- Provide education about stress response, traumatic reminders, ways of reducing impact of recent trauma, differentiating normal and abnormal functioning, draw attention to risk factors, inform survivors of available services and how to access these. They may comprise of:
  - individual, group and family interventions
  - fostering natural social support
  - looking after the bereaved.
- Restore organizations to operational readiness through staff support

**Assessing different levels of immediate need: triage**

- Clinical assessment by professional health care staff.
- Referral when indicated.
- Identify vulnerable, high-risk individuals and groups.
- Arrange emergency hospitalization if necessary.

**Treatment**

- Reduce or ameliorate symptoms to improve functioning using individual, family and group psychotherapies.
- Consider pharmacotherapy.
- Offer and provide spiritual support.
- Short-or long-term hospitalization.

<sup>73</sup>reproduced with permission from pages 269-270 in Ørner R & Schnyder U. Reconstructing early intervention after trauma: innovations in the care of survivors. Oxford: Oxford University Press; 2003.

- f. Figure 19 also illustrates the impossibility and inadvisability of separating psychosocial care and interventions from all other responses, at least in the immediate response phase, because the concepts that underpin them are intertwined. By inference, this also implies that first responders and rescuers are also the people who provide the initial psychosocial responses that are vital in the immediate aftermath of major incidents. They, therefore, require awareness raising, basic training and supervision in order to recognise and discharge their wider roles.

#### 242. Debriefing and Peer Support

- a. An important question is whether or not survivors and responders should be offered routinely Critical Incident Stress Debriefing (CISD).<sup>74</sup> This intervention became particularly popular in the 1980s and 1990s. Initially, it was intended as a group intervention (but not a treatment) for emergency service personnel. The aim of its originators was to reduce distress and to provide prophylaxis against longer-term mental disorders. Since then, however, evidence has called its psychoprophylactic value into question. Moreover, according to the NICE Guideline for PTSD, one-off debriefings that focus on people's emotional experiences are contra-indicated. Proponents of CISD have challenged the legitimacy of some of the evidence that has been used to question the value of CISD.
- b. The position taken by this guidance in respect of routine practice is that it is not advisable to provide a single-session intervention that focuses on people's emotional reactions to the event. This is because forcing people to revisit their experiences in memory, when they are not ready so to do, risks re-traumatising them and it may obstruct the benefits to them of receiving social support from other persons.
- c. However, it is important to be clear that this statement does not mean that voluntary and less formal discussion should not take place within the context of families, peers, schools, workplaces and community facilities and groups. In this regard, peer support does imply a level of awareness, training and expertise in people who provide it. The people who offer this form of peer support must also be aware of, and able to intervene in response to the incipient or actual mental health problems that go beyond anticipated reactions or those which represent anticipated reactions that do not resolve. These facilities are important and some sources, perhaps confusingly, refer to them as 'natural debriefing' rather than peer support.
- d. Furthermore, the caution about CISD expressed here does not mean that responders and other rescue services staff should not engage in reviewing, auditing and learning from how their services performed. This type of review might be termed technical, operational or managerial debriefing and its adoption is good practice.

#### INDICATED PROGRAMMES

243. Indicated Programmes include interventions that are provided:

- within three months;
- beyond three months;

---

<sup>74</sup> Mitchell JT, Everly GS. Critical incident stress debriefing: CISD. Ellicott City: Chevron Publishing; 1995.

- psychological treatments; and
- psychopharmaceutical treatments.

244. Three fundamental concepts should be addressed in interventions that are provided to assist recovery:

- establishing a sense of control;
- deconditioning fear; and
- re-establishing personal integrity.

245. **Within Three Months**

a. There is evidence that people who continue to experience significant symptoms for a month or more following a traumatic event or who develop particularly severe symptoms that do not resolve within one month should be assessed and provided with interventions according to their needs. The assessment should include:

- clinical presentation;
- background history including experience of and responses to previous traumatic events and past abuse;
- mental state examination;
- attachment capacity, past evidence of ability to form new relationships, and quality of pre-event relationships with other people;
- risk assessment;
- social factors, including current availability of social support, networks of relationships; and
- information from other sources including relatives.

b. It is important to remember that a variety of social problems and mental disorders may arise following disasters and major incidents. Therefore, a variety of interventions is likely to be required which should be conducted in an appropriate order, or concurrently, in line with best care programme and case management practice.

c. Interventions may include use of trauma-focused cognitive behavioural therapy (TFCBT) delivered at a time appropriate to the stepped model of care, eye movement desensitisation and reprocessing (EMDR), and supportive counselling. However, there is insufficient evidence to recommend EMDR for people who have acute stress disorders.

d. There is insufficient good evidence to justify the routine use of other psychological or pharmacological treatments within three months of a traumatic event. Despite this, pharmacological management of symptoms in the acute phase, for example using hypnotics or antidepressants for marked insomnia, has been recommended by some sources.

246. **Beyond Three Months** - People who continue to suffer from significant symptoms three months after a traumatic event should be reassessed. This should lead to personal plans for intervention which may include specific treatments for mental disorder and are also likely to include broader psychosocial interventions.

#### 247. Psychological Therapies and Treatments

- a. Psychological interventions include trauma focused therapies, such as TFEBT and EMDR, and non-trauma focused therapies such as stress management, supportive therapy/non-directive counselling and psychodynamic therapy. Group work using trauma focused and non-trauma focused techniques are used. Use of these therapies should be guided by the evidence where it is available and the guideline on post-traumatic stress disorder from the National Institute for Health and Clinical Excellence for England and Wales (NICE) surveys the evidence as it existed in 2005.<sup>75</sup>
- b. There is strong evidence that trauma-focused psychological interventions are helpful in treating PTSD and they are recommended for first-line use with additional time and sessions possibly being needed where there is co-morbidity, multiple trauma or traumatic bereavement. The National Institute for Health and Clinical Excellence (NICE) in England and Wales has guidelines for diagnosing and managing anxiety and depression.<sup>76</sup> Although they are not trauma-related, these guidelines are helpful to clinicians in designing services for people who develop mental disorders after disasters and major incidents.

#### 248. Psychopharmacological Treatments

- a. Pharmacological treatments have a less convincing evidence base than does TFEBT and EMDR. However, there is some evidence for the effectiveness of certain drugs. There have been several randomised controlled trials of pharmacological treatments for PTSD, but the results have only been weakly positive overall. This has led to the guidelines produce by NICE recommending their use as a second-line intervention after trauma-focused psychological therapy. Paroxetine and mirtazapine were recommended for general use and amitriptyline and phenelzine for use under specialist supervision with adults.
- b. NICE has not precluded using psychopharmacological treatments as the first treatment of choice in certain circumstances. They may be used when psychological interventions and competent practitioners are unavailable or when people's emotional distress precludes their involvement in a psychological therapy.

### INTEGRATING SERVICES

#### 249. General Principles of Multi-agency Interfaces

- a. The hallmark of integrated services for people affected by disaster and traumatic events are that they are well coordinated within and across administrative and geographical boundaries. These boundaries should not be allowed to become faultlines in the provision of services. Where possible, services should be:
  - based on longer-term plans and sustained relationships involving all potential agencies;
  - considered from the perspectives of their users;
  - commissioned by the responsible authorities on a coordinated basis to avoid duplication and gaps;

---

<sup>75</sup> National Institute for Health and Clinical Excellence;2005. <http://www.nice.org.uk/usingguidance/commissioningguides/cognitivebehaviouraltherapyservice/specifying/SummaryCBTinterventions.jsp>

<sup>76</sup> National Institute for Health and Clinical Excellence; 2005. <http://www.nice.org.uk/CG26>

- based on awareness of the requirement of many people who are affected by disasters and major incidents for their needs to be dealt with by a number of different agencies concurrently or sequentially, and according to agreed plans, timetables and distributions of responsibility across the agencies and sectors of care; and
  - linked by good communication, care and case planning, and information sharing protocols that are underpinned by less formal means of encouraging professional contacts and staff relationships.
- b. This approach requires all the relevant providers of care and agencies within them to work to jointly agreed models for sharing their assessments, when and where appropriate, so as to avoid duplication, gaps and lack of clarity about their mutual responsibilities. Integration and coordination equally require agencies to subscribe to agreed models of care and case management.

**250. Referral and Integrated Care Pathways**

- a. In order to cater appropriately for the needs of people who are involved in disaster and conflict it is important that all input is provided according to the assessed needs of the people who are involved tempered by the realities of their circumstances. Different communities and situations require different levels and kinds of input. Preplanning, followed by an accurate early assessment of the specific characteristics of a given situation, is required to provide an optimal response.
- b. Assessments should be multi-factorial and multi-disciplinary and lead to the designation of professionals, each responsible for particular areas of work. Once the overall response has been determined, the response for particular people should also be determined using a similar approach.
- c. In line with the principles of the model of care in this guidance a stepped care pathway should be adopted. The six main levels of the strategic stepped model of care are a device for planning and commissioning and not necessarily for putting services into communities, as that must depend on the prevailing needs, circumstances and resources.
- d. The care pathway should rely, initially, on family, community, rescue, emergency, social and healthcare services and voluntary agencies initially. Screening, assessment and intervention procedures should take account of local circumstances.
- e. Each NATO Member or Partner Nation should consider adopting the strategic stepped model of care presented in this guidance by mapping its strategic concepts onto the services and resources in its own jurisdiction.

**251. Actual and Virtual Teams**

- a. Members of some teams work together regularly. In the event of a major incident or disaster, flexibility is required, and it may not be possible for teams to work face-to-face. The effectiveness and reach of modern communications allow people to work in teams in which the members seldom meet in the same room. These are virtual teams.
- b. Virtual teams or organisations may have professional and managerial members who are employed by a variety of agencies. They work together, as if they were a

team, on specific projects and in times of crisis to deliver care programmes for particular people or groups of people. Secondment and virtual or networked teams can be extremely useful in the context of responding to major incidents though regular and effective communications must not be overlooked or taken for granted. Recent research on creating and sustaining virtual organisations that are able to respond to complex care requirements suggests there are factors that increase their likelihood of success. These can be learned and built into their design.

**252. Lead Agency and Lead Practitioner**

- a. In the aftermath of a disaster or traumatic event, coordination of service delivery by agencies and professionals may well be difficult. Nonetheless, the principles underpinning delivery of care are the integration and coordination of agencies delivering mutually agreed models of care and/or case management, particularly when inter-agency planning is required. This guidance proposes that, where there is more than a single agency involved, they should agree among them which is the lead agency for each component of service. This promotes clarity, particularly for first responders who are involved in a disaster or major incident, about which agency to approach first if things go wrong or if plans do not work as anticipated.
- b. The lead practitioner is the person from the lead agency who is responsible for managing each case and coordinating delivery of the care that each person requires. This lead role might pass in a negotiated way over time between the agencies to reflect changes in circumstances.
- c. Agencies that are responsible for delivering care to people who are involved in a disaster or major incident should come together to agree mechanisms for care or case management.

**253. General Principles of Case and Care Management**

- a. Inherent in this framework is better management of the services that are provided for people who need them, particularly when several agencies are required to work together to conduct effective assessments and intervention. Such an approach is particularly important if people have multiple or complex needs that should be reflected in coordinated multi-agency plans.
- b. Care planning and case management activities should:
  - promote coordination of service components that may be required from various sectors and agencies working together to meet the spectrum of needs of people who have been involved in a disaster or major incident; and
  - promote effective handling of transitions between service components and sectors of care.
- c. The agencies and people within them who are responsible for planning and for case and care management should:
  - develop and agree cross-agency assessment processes;
  - arrange meetings to discuss, for example, specific cases or to improve peer relationships;
  - achieve an agreed and common approach to inter-agency assessment and case management;

- identify needs as early as possible;
  - avoid duplication and gaps among agencies;
  - agree between them how affected people are to be provided with to appropriate sources of information, advice, assessment and intervention; and
  - appoint a lead practitioner to be accountable for service delivery for each affected person.
- d. The following principles are important in this process.
- The preferences of patients and their carers should be heard; they should be fully engaged in agreeing their programmes of care.
  - It is necessary to assess and respond to the full range of people's needs. Problems that appear peripheral and are not dealt with may maintain people's core psychosocial problems and mental disorders. This can result in their unresponsiveness to primary interventions.
  - The importance of bringing sectors of care and agencies within them together to deliver comprehensive packages of care.
  - Developing and maintaining effective relationships with third sector and non-governmental organisations.
  - Ensuring that interfaces between different services do not result in discontinuities of care.
  - Planning for people's transitions to other services when that is indicated.

#### 254. Confidentiality, Information Sharing and Record-Keeping

- a. Delivering the integrated services that are necessary to support affected people requires attention to information sharing. Some of this, for instance about service plans, roles, availability and accessibility is non-controversial but still requires continuing attention. Other matters such as sharing information about identifiable people presents more demanding challenges. Nonetheless, sharing information in a timely way is the cornerstone of agencies working together effectively.
- b. Appropriate information sharing is a core principle to ensure that all services are able to work to the best advantage of people affected by disaster and other traumatic events. This requires agencies in each area that provide services to negotiate effective protocols for how they might share information where this is appropriate. Negotiations should take place while planning and well before disastrous events.
- c. An European Union policy paper, proposes that the needs of all people affected and the general public interest are the prime criteria for information management.<sup>77</sup> It recommends that collection, registration, processing, assessment, verification, storage and communication of data must observe rules of professional and medical confidentiality, and respect for privacy, democratic rights and liberties should govern the whole process of information handling. Here, the principle of informed consent can be a general guidance. This has to be

---

<sup>77</sup> European Union. Concerning different aspects of psycho-social support for people involved in major accidents and disasters: psycho-social support in situations of mass emergency; 2001. <http://ec.europa.eu/environment/civil/pdfdocs/cpact03h-en.pdf>

balanced against the legitimate demand for information in order to allow adequate management of the incident response, and the interests of the public and media.

- d. The EU policy paper considers the needs and rights of the people affected with regard to information management. It proposes that providing affected people with accurate, factual information on the incident itself is essential in helping them to come to terms with what has happened. For example, people need access to updates on recovery of people who are affected directly, on their identification, and the disposition of personal effects. Ideally, this information should be communicated to relevant people before it is released to the media. Protection of personal privacy needs to be considered and should be part of a code of professional ethics for psychosocial workers that complements existing legal regulations.
- e. The EU values and principles governing the psychosocial response and the use of information proposed in the document are at Annex F.
- f. Commissioners of services are encouraged to take advantage of local initiatives as well as those relating to national policy.

**Summary box 6: Programmes of care**

**Key points: programmes of care**

The programmes of care that are required are categorised as:

- universal programmes;
- selective or targeted programmes; and
- indicated programmes.

Universal Programmes include:

- programmes that are aimed at developing and sustaining community resilience;
- general responses that offer interventions that are based on the basic principles for promoting personal resilience and recovery.

Selective or Targeted Programmes include:

- psychological first aid; and
- peer support.

Indicated Programmes include interventions that are provided:

- within three months;
- beyond three months;
- psychological treatments; and
- psychopharmaceutical treatments.

Three fundamental concepts should be addressed in interventions that are provided to assist recovery:

- establishing a sense of control;
- deconditioning fear; and
- re-establishing personal integrity.

## QUALITY, CORPORATE GOVERNANCE AND CLINICAL GOVERNANCE

255. Following a disaster or traumatic event, the task of providing services presents many challenges. It should be the aim of all agencies that provide social and healthcare services and manage these systems and their infrastructure to achieve a collaborative approach and to express a commitment to quality and accountability. Establishing a plan for this in advance is likely to improve the quality of services and the accountability of governments and humanitarian agencies to their constituents and the affected populations.
256. In this context, reference to the Sphere Project is useful. The Project was launched in 1997 by a group of humanitarian NGOs, and the Red Cross and Red Crescent movements. The Sphere Project is based on two core beliefs: first, that all possible steps should be taken to alleviate human suffering arising out of calamity and conflict, and second, that people who are affected by disaster have a right to life with dignity and therefore a right to assistance. Sphere is three things: a handbook, a broad process of collaboration and an expression of commitment to quality and accountability. The project has developed several tools, the key one being the handbook<sup>78</sup>.

### MANAGING THE STRATEGIC STEPPED MODEL OF CARE

257. Managing the proposed stepped model of care requires the following components:
- providing effective command, control and coordination during and following an incident;
  - fully integrating the psychosocial and mental health responses at the strategic, operational and tactical levels of command by appointing trained advisers;
  - commissioners, incident response commanders, services and practitioners adopting an ethical framework for planning and delivering services;
  - commissioners, incident response commanders, services and practitioners adopting a framework for good decision-making;
  - ensuring that appropriate services are made available in each phase of recovery and this requires services that offer:
    - long-term and persistent follow-through; and
    - care for responders;
  - commissioners, incident response commanders, services and practitioners adopting frameworks for:
    - corporate governance; and
    - clinical governance.

This section describes these components.

258. All of these matters in the paragraph above should be subject to review and evaluation. This means that major incident plans should include setting and applying explicit standards, quality indicators and key performance indicators for evaluating and managing the planning and performance of all aspects of the services that contribute directly and indirectly to the psychosocial and mental health services that are delivered prior to, during and after disasters, major incidents and emergencies.

---

<sup>78</sup> [http://www.sphereproject.org/component/option,com\\_frontpage/Itemid,200/lang,English/](http://www.sphereproject.org/component/option,com_frontpage/Itemid,200/lang,English/)

259. Further information of matters that should be applied when managing programmes of psychosocial and mental healthcare responses to disasters and major incidents is provided by Williams et al.<sup>79</sup> The 20 recommendations in that paper were formulated at a NATO advanced research workshop on evaluating community-based psychosocial programmes in areas affected by war and terrorism in 2007 and they are grouped under four core principles. A fifth theme that came out of the workshop concerns five key recommendations about the methods of evaluation that are used. The four principles are:
- the importance of agreeing common, international definitions and terminology and of an agreed approach to designing evaluations;
  - employing a clear focus on human rights within effective schemes for evaluation;
  - ensuring that all parties to an evaluation gain the advantages from it; and
  - ensuring that positive outcomes are promoted by effective and well-conducted evaluation.
260. Many of the recommendations that were agreed by the workshop highlight the connectedness, networks and partnerships that should involve evaluators and programme providers. They also identify the importance of evaluators understanding in depth the programmes that they review and of them taking an overt position on recognising and promoting human rights through their work. A strong practical recommendation that is intended to ensure that evaluations and programmes are complementary is that evaluations should neither be seen as nor conducted as additional to planning and executing psychosocial programmes; the process of evaluation should start when each programme is designed.
261. Another tool that is helpful not only to policymakers and people who design services, but also to people who are responsible for evaluating and managing the performance of services in respect of the values that they represent is the Madrid Framework. That framework is summarised in Annex A.

#### **COMMAND, CONTROL, COORDINATION AND COMMUNICATIONS DURING AND FOLLOWING AN INCIDENT**

262. It is essential that there is good communication among the emergency rescue and social and healthcare services in order to ensure that responses are structured and cohesive and reflect the needs of the population and that this is set within the context of appropriate strategic command and coordination arrangements. This is likely to enhance the ability of the social and healthcare systems and people who contribute to it to:
- respond to a disaster or major incident and
  - manage recovery whether the disaster or traumatic event has effects locally, regionally, or nationally.
263. Generally, incident response is handled at three levels:
- **Strategic** –In this document the term strategic refers to the people who are in overall executive command of an incident and who have responsibility for formulating the strategy for the response to the incident. Each strategic commander (sometimes called Gold) has overall command of the resources of their own

---

<sup>79</sup> Williams R, Mikuš Kos A, Ajduković D, van der Veer G, Feldman M. Recommendations on evaluating community-based psychosocial programmes. *Intervention* 2008; 6(1):12-21.

organisation, but delegates tactical decisions to their respective tactical commanders (sometimes known as Silver commanders). Strategic commanders have a key role in strategic monitoring of the response to an incident.

- **Operational**—In this document the term operational refers to those people who provide the main operational response to an incident, that is the people who are closest to the scene, and control the resources of their respective service within a specific area of the incident. They implement the tactics that are defined by the tactical command.
- **Tactical** —In this document the term tactical refers to those people who attend the scene of an incident in order to take charge and be responsible for formulating the tactical plan that is to be adopted by their service to achieve the strategic direction. Tactical commanders should oversee, but not be directly involved in, providing any operational response (sometimes referred to as Bronze) in the incident(s).

### **INTEGRATING PSYCHOSOCIAL AND MENTAL HEALTHCARE INTO RESCUE AND RECOVERY PLANS AND WITH PLANS FOR CONTINUING EVERYDAY SERVICES**

264. Four matters are of key importance in ensuring that adequate psychosocial and mental healthcare responses and services are delivered in response to disasters and major incidents of all kinds. They are: (a) integrating planning for preparing communities, training staff, providing psychosocial responses and mental healthcare in all phases into the generality of all emergency planning processes and structures; (b) rehearsing the psychosocial and mental healthcare components alongside all other components of emergency response plans; (c) providing first responders, staff of the rescue and emergency services, and healthcare staff with adequate training; and (d) ensuring that psychosocial and mental healthcare advisers are appointed to each of the strategic, operational and tactical levels of command.
265. This means that each emergency, disaster and major incident planning team should include a senior representative of the agencies designated to deliver psychosocial and mental healthcare responses. This person should chair a psychosocial and mental healthcare expert advisory subcommittee that is appointed to advise the emergency planning committee.
266. Incident response commanders at all levels (strategic, tactical and operational) should also be tasked with ensuring the agencies that deliver the psychosocial and mental healthcare services to assist people's psychosocial recovery after major incidents are available and fully integrated into their plans. Professional managerial advice is required to ensure that they use psychosocial and mental healthcare services appropriately and integrate them fully into their plans.
267. These recommendations underline the importance of including plans for psychosocial recovery and mental healthcare in rehearsals.

### **ADVICE TO INCIDENT RESPONSE COMMANDERS ON PSYCHOSOCIAL AND MENTAL HEALTHCARE**

268. Another vital role for the strategic stepped model recommended here includes senior staff of the social and mental healthcare agencies being appointed to act as advisers to commanders and managers at the strategic, tactical and operational levels. This role requires not only clinical skill and training in disaster psychosocial care, but also awareness of the concepts and practice of strategic leadership and management training in decision-making, consultation and supervision.

**AN ETHICAL FRAMEWORK FOR COMMISSIONERS, SERVICES AND PRACTITIONERS  
AND A FRAMEWORK FOR GOOD DECISION-MAKING**

269. The ethical framework for commissioners, services and practitioners, devised by the UK group CEAPI has been summarised. It contains the principles of good decision-making.

**CORPORATE GOVERNANCE**

**270. Strategic Leadership and Management**

- a. All of the considerations in this document imply that good planning and the quality of management of disasters and major incidents lie at the core of an effective psychological support and intervention system.
- b. There is also substantial evidence to show that appropriate planning, leadership, management and training represent a potent force for sustaining services, promoting teamwork and for preventing (or at least reducing) inappropriate stress reactions and psychopathology. Indeed, effective planning, rehearsal and communication underpin the six level system described herein.
- c. The system of corporate governance has a number of prerequisites. These are as follows.
  - Foresight: because it begins with developing effective systems, protocols and training well in advance of any incident.
  - Simplicity: it must be straightforward to understand and to implement.
  - Flexibility: it must be applicable to a range of incidents.
  - Economy: it must not divert a disproportionate level of resource away from the primary response to a disaster or major incident.
  - Integration and co-operation: so that all response systems are coordinated with each other and fully integrated into the major incident services.
  - Realism: to ensure that all services are robust, sustainable over time and capable of addressing the real tasks and risks.
- d. In summary, good planning of services for responding to major incidents should be based on as much clarity as can be mustered about expectations and strategic stepped models of care that accommodate the values, ethics and evidence that must be considered.

**271. Tactical Leadership, Service Management and Setting Standards for Practice**

- a. Translating plans into action requires excellent tactical management. While few major incidents are likely to have a very high level of fidelity with the detail of previous predictions and plans, this does not invalidate strategic and operational planning and rehearsal. Indeed, the flexibility required to respond effectively in the face of emerging situations depends on having previous opportunities to develop confidence in the system and in the general principles. Plans should be templates that are used to initiate services and later be adjusted to fit better with events as they unfold. This requires good intelligence, leadership and review.
- b. Models of care at strategic level must also be translated well before events into realistic models of practice. This involves:

- being clear about the competencies required of practitioners, managers and others;
- providing training to reduce gaps between the skills available and those required;
- producing a system for effective triage and resource allocation;
- being clear with staff about the changed ethical position that may arise and agreeing changes in expectations with the regulatory agencies as an aspect of the strategic plans; and
- resolving foreseeable clinical governance challenges.

**272. Tactical Service Leadership, Management Practice and Clinical Governance**

- a. Good governance at all levels requires that appropriate steps are taken to sustain the resilience of staff and to provide services for them. In many jurisdictions, employers owe their staff a duty of care in law. There is abundant evidence showing that good management of staff at the time of an incident protects their psychosocial and mental health and that of others. Their work should be monitored so that they have access to clinical supervision; this is likely to become more vital in stressful situations when critical and sometimes controversial decisions may have to be made.
- b. Whenever possible, staff (particularly senior staff with substantial responsibilities) must be enabled to take rest and work to realistic rotas to avoid becoming overtired and 'burned out'.
- c. If staff are to be effective in responding to emergencies, active steps must be taken to ensure that there is a culture in which they are able to perform to their best notwithstanding the challenges of very pressured circumstances. Also, staff are vulnerable to the direct effects of events and to communicated concerns and indirect risks. Later, this document provides guidance on meeting the needs of staff. A key topic for governance at all levels is that appropriate steps are taken to sustain the resilience of staff and to provide services for them.
- d. Each of these matters must be considered in the strategic, operational and tactical plans because sustaining staff is vital to discharging plans at all levels. The following section provides more detailed guidance on meeting the needs of staff.

**Summary box 7: Quality, corporate governance and clinical governance**

**Key points: quality, corporate governance and clinical governance**

This section provides a summary of the important aspects of strategic leadership, management and workforce development that should be covered when planning effective responses to communities' and people's psychosocial and mental health needs after disasters of all kinds and major incidents.

The guidance recommends that:

- plans for mounting psychosocial and mental healthcare services are fully integrated into all major incident and humanitarian aid plans;
- psychosocial and mental health expert advisory committees are appointed to advise on the psychosocial and mental healthcare plans that should be a part of each major incident plan; and
- expert advisers are trained and appointed to advise the commanders of major incident responses at the strategic, tactical and operational levels.

## WORKFORCE AND ORGANISATIONAL DEVELOPMENT

273. Developing the workforce is the single most important factor in creating successful and effective services in times of emergency. Rapidly deployed and capable services rely on the skills and knowledge of staff to meet demand and the right attitude to the work. The right attitude includes the way staff deal with people affected by a disaster, keeping them informed and involving them in planning and delivering services.

### BUILDING SERVICE CAPACITY AND CAPABILITY

274. Every jurisdiction should have a disaster and major incident plan that is appropriate to its national, regional and local governance structures that makes provision for a fully coordinated and integrated psychosocial response.

275. The psychosocial and mental health major incident plan should include, at least, components of each of the three following elements.

- Its development should be undertaken and monitored by a multi-agency psychosocial expert advisory committee that should include mental health professionals.
- All rescuers, responders and other staff involved should have clear roles and responsibilities that are agreed in advance and they should be provided with appropriate training and supervision to undertake their roles.
- All appropriate agencies should provide a lead on the early stages of the response to a disaster as well as planning and delivering psychosocial care interventions in the aftermath of a disaster or traumatic event.

276. While it is not possible to plan and train for every eventuality, the general principles of good psychosocial care and service organisation can be stated, planned into service contingencies, trained and rehearsed. There is a particular requirement to increase public awareness, including that of the media, of the spectrum of psychosocial responses to traumatic events. Key facts to communicate widely are that routine intervention is not required for everybody, that a minority of people needs more specialised services and that there are effective treatments available. Training is highly advised, in advance of events and major incidents, for key groups of staff such as those of the emergency and rescue services. It should be conducted realistically and tested through exercising the psychosocial and mental health service components required to be included in all major incident plans.

277. Many of the staff who provide the services required by people involved in a disaster or major incident may not be from the area and may not have a full understanding of local cultural issues and/or of the local health system infrastructure. Thus, coordinating delivery of the contributions from various components of the workforce becomes a skill in itself. Moreover, there is considerable education and training required by many professionals within current services to build the attitudes and capabilities required to play their full part in the provision of services described in this guidance.

278. Responsibilities for these matters fall upon general and professional managers, corporate and clinical governance managers, human resources departments, training departments, occupational health services and public relations staff. Discharging these responsibilities requires each organisation to develop a plan to coordinate their actions.

279. In particular, all mental health professionals should have a good understanding of the emerging discipline of disaster mental healthcare so as to contribute appropriately to

the development of systems to cope with people following major incidents, disasters, terrorism, and conflict.

## **DEVELOPING THE WORKFORCE**

280. This guidance considers it essential that planners and agencies that are responsible for delivering services adopt as fundamental the principle that all staff who deliver services for people who have been involved in a disaster or traumatic event should have training and education that is appropriate to the jobs that they are asked to undertake.

### **281. The Essential Shared Capabilities**

a. In 2004, the National Institute for Mental Health in England developed the Ten Essential Shared Capabilities for all staff of mental health services. These are also the capabilities that are required of staff in services for people who have been involved in a disaster or traumatic event. They are:

1. working in partnership;
2. respecting diversity;
3. practising ethically;
4. challenging inequality;
5. promoting recovery;
6. identifying people's needs and strengths;
7. providing service user-centred care;
8. making a difference;
9. promoting safety and positive risk taking; and
10. personal development and learning.

b. In order to achieve these capabilities, staff require effective systems of education, mentoring and reflective supervision if they are to cope well, learn from their experiences and assist their patients maximally. The work involved in delivering the services portrayed in this framework is stressful and demanding on the inner personal resources of the staff. It is not sufficient to create a plan to develop services. Workforce development strategies should be developed that deal with recruitment and retention of staff and their education, training, mentoring and supervision. This also requires attention to creating the most appropriate cultures within organisations and provision of persons, facilities and resources to enable staff support and care to be offered.

### **282. Developing the Attitudes, Knowledge and Skills of the Workforce**

a. Staff who deal with people affected by disaster or traumatic events require a common core of skills and knowledge. This includes:

- the procedures and steps necessary for staff to protect their own health, safety and wellbeing and that of their team and the community;
- understanding about the impact of an event on their own mental health and that of their family, team and others;
- their roles as regards communication and processes concerning response partners, media, the general public and others;
- the ability to follow procedures for assignment, activation, reporting, and deactivation;
- limits to the skills, knowledge, and abilities as they pertain to the role of their organisation;
- understanding of how to support transitions;

- their role in multi-agency working; and
  - their role in sharing information.
- b. All of the people who work in psychosocial and mental health and related services have a potential role to play in supporting people who have been involved in a disaster or traumatic event. Many staff have the necessary competencies as part of their current role. Others need specific training to contribute appropriately, for example by gaining competence in PFA. Education and training commissioners and providers should consider how this might most appropriately be achieved.
- c. The APA Task Force on Multicultural Training has drawn attention to the aftermath of Hurricane Katrina.<sup>80</sup> That hurricane left whole communities particularly vulnerable to psychological disorders, not only because of continuing stress and upheaval from the storm but also because of the challenging circumstances that many storm victims lived with before Katrina. This pointed particularly to the adequacy of those mental health agencies to respond with culturally appropriate services.
- d. Katrina highlighted the importance of training staff in the cultural knowledge to be effective in this particular community. This requires an understanding of the affected communities' histories, psychosocial stressors, languages, communication styles, traditions, values and artistic expressions, help-seeking behaviours, informal helping supports and natural healing processes.

## A FRAMEWORK FOR EDUCATION AND TRAINING

283. Staff of agencies that provide mental health services require familiarity with public mental health and psychosocial health interventions and their roles in supporting their application. The lessons learned from the Severe Acute Respiratory Syndrome (SARS) near-pandemic in 2002-2003 suggest that the following are key elements.

- Consultation with and involvement of each community in achieving collective preparedness.
- Planning the contributions of the health and social care systems to disaster responses and major incident plans.
- The education and school systems, employers and welfare organisations in each area are involved in achieving preparedness.
- Consultation and advice on managing the psychosocial consequences is provided by trained and appropriately qualified people for:
  - leaders at all levels;
  - first responders;
  - health and social care providers;
  - people who are required to manage the behavioural and psychosocial responses of groups of people to health interventions for populations; and
  - staff who brief and work with the media and other communication systems.

---

<sup>80</sup> American Psychiatric Association Taskforce on Hurricane Katrina. <http://www.planning.org/katrina/>

- Attention is directed to developing screening so that it can be validly and reliably incorporated in the model of care as it is developed, tested and evidence of its effectiveness becomes available.
- Triage is conducted of the people who are affected so that appropriate and needed services can be provided.
- Groups of people who are at high-risk are identified for surveillance and intervention according to their needs.
- People who develop acute and longer-term psychosocial sequelae are offered assessment to determine their needs and intervention to meet those needs.

284. This guidance proposes that NATO Members and Partner Nations should consider organising the curricula and the training required by incident response commanders, managers and professional staffs according to a four tier model. The levels are:

Tier 1: General training in core knowledge, attitudes and skills (required by all responders and professionals who work in the context of disasters and major incidents).

Tier 2: More advanced training for those who deliver psychological first aid, basic psychological therapies and assessment of people who may require more specialised mental healthcare.

Tier 3: Specialist training required by staff who deliver the functions of Levels 3 and 4 in the Model of Care in which a personal approach to particular people's needs is based on assessment of their needs. This includes training to supervise staff whose work includes delivering psychosocial care at Levels 1 and 2 in the strategic stepped model recommended by this guidance.

Tier 4: Advanced specialist training for professionals who are appointed to provide advice to major incident response commanders at strategic, operational and tactical levels. These appointments require not only disaster-related training in psychosocial and mental healthcare but also training in major incident management, consultative skills and selected aspects of strategic leadership and management.

## **ATTENDING TO THE NEEDS OF RESCUERS, FIRST RESPONDERS, HUMANITARIAN AID AND WELFARE WORKERS, HEALTHCARE STAFF AND PERSONNEL OF THE ARMED SERVICES**

### **285. The Challenge of Responding to Major Events and Disasters**

- a. Work in disasters places enormous pressures on responders and carers and it is essential that the needs of people in these groups are not overlooked in the desire to satisfy the demand for psychosocial care.
- b. Work in rescuing people from major incidents or with survivors to meet their psychosocial and mental health needs or with people who have suffered abuse or recurrent traumatic events or relationships is challenging and stressful. There are stressors for all responders inherent in their work, including:
  - exposure to gruesome sights, smells and events;
  - exposure to on-site dangers and interpersonal violence;
  - exposure to survivors' stories; and

- powerlessness - inability to provide help at the level needed.

Events in which people die, and children are involved, and when violence is directed towards uninvolved people tend to produce most distress for responders.

c. Non-inherent stressors include:

- lack of skills or training needed to do the job;
- lack of materials (supplies, equipment) needed to do the job;
- poor role definitions and unclear expectations;
- poor organisation of work;
- unnecessarily bureaucratic agency policies and practices;
- unnecessarily poor living conditions;
- poor scheduling of work (long hours, few breaks, lack of leave time);
- lack of opportunities for recreation;
- arbitrary leadership/management practices;
- conflict and mistrust within the team; and
- poor communications (within teams, agencies, and families)

d. Depending on the nature of an incident, some of the sociological features of good healthcare practice may be sustained and accentuated while others may have to be modified or even curtailed. It is predicted that working environments, and the nature of practice and the interactions involved therein, are likely to, and should change in the face of major incidents. This does not necessarily mean reducing quality of care unless a disaster is huge and beyond the resources of existing systems. Sometimes, big incidents are less challenging to responders than smaller and more sustained emergencies when irregular shift patterns, living in an ever-changing reality and not knowing what is ahead may be experienced as eroding. These changes in patterns of relating and decision-making must be anticipated if staff are to be prepared and the people who manage them are to be ready to sustain their workforces.

e. The kinds of situations envisaged here might have a spectrum of effects on responders, humanitarian and welfare workers and healthcare staff. In the short term, challenging situations often weld teams together and produce cohesive and effective service responses through 'esprit de corps'. Some emergencies, particularly the more extended, may not appear so demanding on the surface but demands cumulate and exhaust the coping resources of the staff involved. Even if there is a 'honeymoon' phase in the immediate aftermath of a disaster, the risk of compromised healthcare services is well established.

## 286. Staff Requirements

a. Systematic plans to develop and sustain the resilience and recovery of all staff who respond to major incidents should be a core part of the workforce development plan that is required within all major incident response plans. Staff of all services require positive support to continue working effectively. In most instances, this first-line support should come from other team members, colleagues and managers and rarely from experts or mental health professionals. In this regard, staff responses mirror those recommended in this guidance for survivors. The same model of care applies to staff and should be implemented as part of the emergency plans.

- b. Hardiness and Sense of Coherence (SoC) are concepts that describe some of the elements of resilience (see Annex C). SoC requires that events are felt by staff to be comprehensible, manageable and meaningful and the characteristics of hardiness are commitment, feeling in control and seeing events as a challenge to which each person can rise. Therefore, the staff resilience plan should aim to bolster staff's experiences of:
- feeling in control of themselves and, where reasonable, their work;
  - rising to the challenge;
  - belonging to and cohesion with a group or team of others;
  - good communications;
  - contributing meaningfully to positive activities;
  - commitment to people, their colleagues and their work;
  - understanding what has happened and their own reactions;
  - comfort;
  - closure; and
  - commemoration.
- c. All of these experiences and feelings create needs for rescuers, responders, humanitarian aid and welfare workers, healthcare staff and also for the staff who provide responses to the psychosocial and mental health needs of survivors.
- d. During the planning phase, staff may be selected for particular roles. During the response it is vital to involve sufficient numbers of staff when possible to enable regular rotation to ensure that staff do not work for excessive periods. People who manage the psychosocial response should use their professional judgement to determine what is reasonable. The arrangement of adequate supervision for all personnel is key. At times of pressure, these needs rise. All practitioners are subject to the usual clinical governance procedures. Therefore, it is important to conduct rapid debriefs of technical and operational matters at the close of each shift or phase.
- e. It is clear from the literature that two other matters are vitally important to staff. The first is how the close relatives are faring and the second is having confidence in their equipment and protective clothing and their ability to work in it with minimal impedance. This means that staff should be familiar with the equipment and have opportunities to become familiar with working in it. Staff should be encouraged to maintain regular contacts with family members so as to maintain around them a community of support. In some situations, it is appropriate for managers to arrange child care so that they are able to offer reassurance to staff about the care that family members receive. They should also be enabled to discuss their experiences, anxieties and uncertainties with each other if they wish. However formal debriefing should not be forced upon them.
- f. It is important to understand that supporting services are required by responders who are involved directly, but also by responders who are involved indirectly. This includes laboratory staff, staff who maintain the continuity of services for people who are not involved in an incident, and staff who work in emergency call centres, for example. Staff who are involved in providing psychosocial and mental health responses to healthcare and other staff and to the people affected, their families and their communities are also vulnerable to the psychosocial impact of major events. Staff are also more vulnerable as a result of their professional commitment and dedication.

- g. Sometimes a dilemma for rescuers, responders, aid workers and healthcare staff is how to conduct their responsibilities for communities alongside their responsibilities to their families. Staff may be absent from work particularly in situations where they are exposed to risk by coming to work. There are many opportunities for staff to experience guilt about the choices they make as well as guilt about other aspects of their behaviour and their professional performance.
- h. Some of these requirements are personal while others are interactional and require attention to teams and groups of staff. The first-line response immediately after an event consists of structured conversations. Staff should not be treated as patients in these situations; the dynamic for providing staff support is more about the exchange of experience and assimilation.
- i. Responses to all of these needs require effective leadership and provision of good examples by managers. Staff must have confidence in the plans that are made, and this requires that they are fully informed about them and their anticipated roles. The feeling of being ill informed is a factor that can most erode psychological resilience. Conversely, if staff are well-informed, consulted and involved, their confidence in the plans and their equipment is enhanced, their uncertainties are reduced and their psychological resilience is augmented.
- j. Work to sustain staff should start well before any untoward event and it requires preparation, practice and rehearsal.

#### 287. **Effective Staff Management: A Systemic Approach**

- a. The leadership and management required do not consist only of responses to a challenging event after the event. It includes preparatory responses and training that are intended to build resilience and prevent longer-term consequences.
- b. Risk reduction requires interventions at each phase of an emergency, including training, support during the acute or immediate response phase, end-of-event and transitional support, and follow-up support.
- c. Therefore, leaders and managers should analyse what has happened and plan responses with respect to four dimensions and three temporal domains<sup>81</sup>. The dimensions are:
  - particular staff members (e.g. each worker or staff member is encouraged to maintain their own fitness);
  - teams (e.g. building teams to develop trust and to address intra-team conflict);
  - agencies (e.g. each agency selects managers based on their ability to maintain team cohesion and trains managers with respect to monitoring worker's stress and to provide support, as needed); and
  - larger communities (e.g. agencies educate worker's families about possible re-entry problems and provide post-deployment support).
- d. The three temporal domains are:
  - preparation and planning before any event;
  - actions taken during an event;

---

<sup>81</sup> See Antares Foundation for more details of a scheme that has informed the approach recommended here on: <http://www.antaresfoundation.org>

- actions taken to promote transition back to ordinary circumstances and to promote recovery after events have occurred.
- e. Figure 20 provides a schematic representation of this systemic approach to sustaining staff.<sup>82</sup> It shows how good planning, preparation and rehearsal, good leadership and management, and attention to defining expectations and standards and providing enhanced rather than reduced supervision and mentoring are all parts of a planned approach to developing and sustaining the resilience of staff.
- f. The systemic model described here has been tested in adverse situations and it has been shown not only to benefit the staff but also to increase their willingness to attend workplaces in risky situations.

## 288. The Role of Occupational Health Services

- a. In addition to the systemic approach described here, this guidance has identified roles in sustaining staff of a variety of departments that usually exist within larger organisations.
- b. Occupational health services in large organisations should play central roles. They should be able to:
  - provide executive directors with strategic advice;
  - provide advice about health practices in workplaces;
  - advise on staff management policies;
  - advise on sustaining collective and personal resilience;
  - assist in identifying people at risk;
  - provide managers with advice about monitoring the exposure of staff to traumatic situations;
  - train managers to recognise distress;
  - contribute to employees' professional development;
  - provide a skilled team that can provide intervention services for staff; and
  - advise and monitor staff who are returning to work after their exposure to debilitating distress and dysfunction.

---

<sup>82</sup> Reproduced with permission from Williams R, Alexander DA. Psychosocial resilience and distress in the face of adversity, conflict, terrorism or catastrophe. In Mahoney PF, Hawley A, Burris DG, Hopperus-Buma A, Ryan J, (editors). Conflict and catastrophe medicine: a practical guide. 2nd ed. Guildford: Springer-Verlag; in press 2009.

**Summary box 8: Workforce and organisational development**

**Key points: workforce and organisational development**

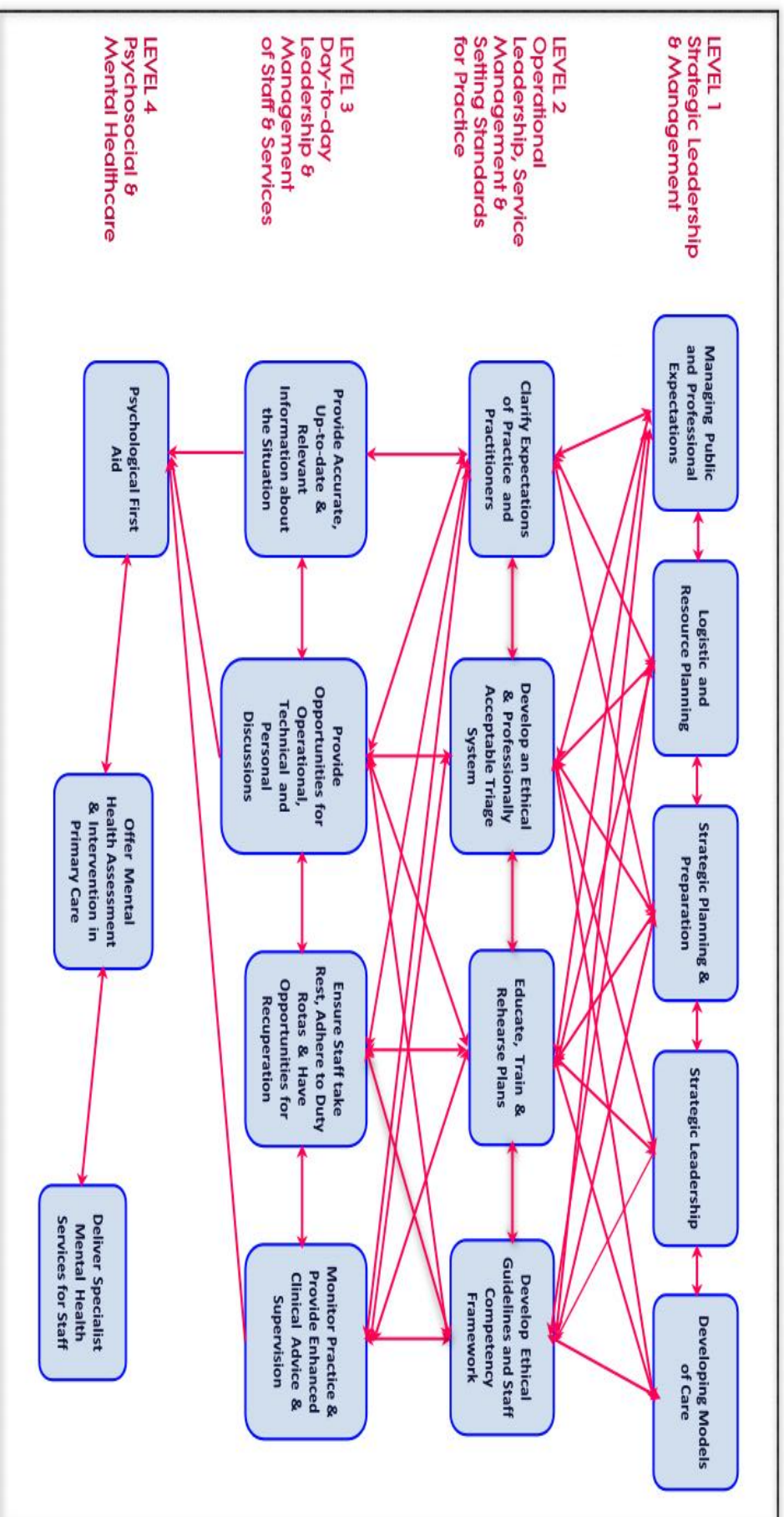
This section provides a summary of the important strategic aspects of workforce development that should be covered when planning effective responses to people's psychosocial and mental health needs after disasters of all kinds and major incidents.

It recommends a four tier framework for curriculum design and planning and delivering training for staff in the psychosocial and mental health aspects of disasters and major incidents according to the roles that they play.

This guidance also provides a rationale and a framework (see Annex G) for preparing, training, managing and responding to the needs of staff with a view to:

- mitigating the risks of psychosocial distress and mental disorders that they run on account of their work in disasters and major incidents;
- providing psychosocial support for responders and staff of the agencies that are involved in providing emergency care, rescuing other people and responding to their needs; and
- sustaining services at as high a quality as is achievable in the circumstances.

Figure 20: A framework for promoting the psychosocial and mental health of responders and staff (reproduced with permission from Williams and Alexander, in press<sup>83</sup>)



<sup>83</sup> Reproduced with permission from Williams R, Alexander DA. Psychosocial resilience and distress in the face of adversity, conflict, terrorism or catastrophe. In Mahoney PF, Hawley A, Burris DG, Hopperus-Burna A, Ryan J, (editors). Conflict and catastrophe medicine: a practical guide. 2nd ed. Guildford: Springer-Verlag; in press 2009.

## ANNEX A TO: DESIGNING, DELIVERING AND MANAGING PSYCHOSOCIAL SERVICES FOR PEOPLE INVOLVED IN MAJOR INCIDENTS, CONFLICT, DISASTERS AND TERRORISM

### THE MADRID FRAMEWORK<sup>84</sup>

|    |                      |   |
|----|----------------------|---|
| 1  | Health and wellbeing | The protection of health is the <i>raison d'être</i> of all health policy, the ultimate goal of which is to enhance the capabilities of citizens to live a full life.   |
| 2  | Equity and fairness  | Inequalities in health, in the probabilities of disease, and in the quality of, and access to services are found within and between all societies. They are largely determined by social factors, income, age, ethnicity, education, housing and so on, such that pursuit of health and social justice become inextricably entwined.  |
| 3  | Choice               | What is deemed best for a population is only randomly best for its sub-groups or for individual people. Choice and equity constitute one of the fundamental political fault lines in the landscape of health policy.  |
| 4  | Democracy            | In order to engender confidence in health policies, all stakeholders, and, especially, citizens and patients, need to be actively engaged. Health policies succeed in relation to the sense of solidarity and shared values that they foster.   |
| 5  | Stewardship          | Health is a vital public resource requiring investment by government. Traditionally, governments have been deemed to have three key duties: the defence of the realm; law and order; and the stability of the currency. In the twenty-first century, a fourth duty, to protect and enhance health, emerges as of at least similar importance.   |
| 6  | Evidence             | Successful policies require good data that is comparable over time and locations. All data are socially constructed. It is, therefore, important to consider not only statistical, but also the ethical and political values that are embedded in evidence.   |
| 7  | Efficiency           | Governments have dual accountabilities: to protect and improve health; and to ensure the optimal use of the public resources entrusted to it. Allocative efficiency is concerned both with the effectiveness of interventions and the priority afforded to them. Operational efficiency is concerned with the optimal use of resources to obtain the maximum benefit at the level of management. Efficiency in health policy is, thus, a matter of sound finance, sound science and sound ethics. |
| 8  | Synergy              | Health policy and governance require cooperation between governmental agencies and a wide variety of other elements of civil society. When they interact so as to produce new ways of working, new functioning networks can be created, intractable problems can be redefined, and unanticipated solutions found.   |
| 9  | Sustainability       | Since most health policies are long-term exercises, provisions must be made to sustain political. Organisational and individual motivations over the course of time, and of successive governments.   |
| 10 | Interdependence      | Policy and services at both global and local levels must take account of concerns that transcend national boundaries such as workforce mobility, the environment, and international agreements. At every level, there are biological, social and political interdependencies.   |
| 11 | Creativity           | Health policy and governance are not securely predictable and linear exercises. Successful policies and implementation require imagination, experimentation, innovation and flexibility.  |

<sup>84</sup> this table was created from the text on pages 2-5, and is reproduced with permission, from Marinker M (editor). *Constructive conversations in health: about policy and values*. Oxford: Radcliffe Publishing; 2006.

## ANNEX B TO: DESIGNING, DELIVERING AND MANAGING PSYCHOSOCIAL SERVICES FOR PEOPLE INVOLVED IN MAJOR INCIDENTS, CONFLICT, DISASTERS AND TERRORISM

### TYPICAL MYTHS AND MISCONCEPTIONS ABOUT DISASTERS<sup>85</sup>

1. **Myth:** *Disasters are truly exceptional events*  
**Reality:** They are normal part of daily life and in very many cases are repetitive events
2. **Myth:** *Disasters kill people without respect for social class or economic status*  
**Reality:** The poor and marginalized are more at risk of death than are the rich people or the middle classes
3. **Myth:** *Earthquakes are commonly responsible for very high death tolls*  
**Reality:** Collapsing buildings are responsible for the majority of deaths in seismic disasters. Whereas, it is not possible to stop earthquakes, it is possible to construct anti-seismic buildings and to organise human activities in such a way as to minimize the risk of death. In addition, the majority of earthquakes do not cause high death tolls.
4. **Myth:** *People can survive for many days when trapped under the rubble of a collapsed building.*  
**Reality:** The vast majority of people brought out alive from the rubble are saved within 24 or perhaps even 12 hours of impact.
5. **Myth:** *When disaster strikes panic is a common reaction*  
**Reality:** Most people behave rationally in disaster. While panic is not to be ruled out entirely, it is of such limited importance that some leading disaster experts regard it as insignificant or unlikely.
6. **Myth:** *People will flee in large numbers from a disaster area.*  
**Reality:** Usually, there is a "convergence reaction" and the area fills up with people. Few of the survivors will leave and even obligatory evacuations will be short lived.
7. **Myth:** *After disaster has struck, survivors tend to be dazed and apathetic.*  
**Reality:** Survivors rapidly start reconstruction. Activism is much more common than fatalism (this is the so-called "therapeutic community") Even in the worst scenarios, only 15-30% of victims show passive or dazed reactions
8. **Myth:** *Looting is common and a serious problem after disaster.*  
**Reality:** Looting is rare and limited in scope. It mainly occurs when there are strong preconditions, as when a community already is deeply divided.
9. **Myth:** *Disease epidemics are an almost inevitable result of the disruption and poor health caused by major disasters.*  
**Reality:** Generally, the level of epidemiological surveillance and healthcare in the disaster area is sufficient to stop any possible disease epidemic from occurring. However, the rate of diagnosis of diseases may increase as a result of improved health care.
10. **Myth:** *Disasters cause a great deal of chaos and cannot possibly be managed systematically.*  
**Reality:** There are excellent theoretical models of how disasters function and how to manage them. After >75 years of research in the field, the general elements of disaster are well known, and they tend to repeat themselves from one disaster to the next.
11. **Myth:** *Any kind of aid and relief is useful after disaster providing it is supplied quickly enough.*  
**Reality:** Hasty and ill-considered relief initiatives tend to create chaos. Only certain types of assistance, goods and services will be required. Not all useful resources that existed in the area before the disaster will be destroyed. Donation of unusable materials or manpower consumes resources of organisation and accommodation that could more profitably be used to reduce the toll of the disaster.
12. **Myth:** *In order to manage a disaster well it is necessary to accept all forms of aid that are offered.*  
**Reality:** It is better to limit acceptance of donations to goods and services that are actually needed in the disaster area.
13. **Myth:** *Unburied dead bodies constitute a health hazard*  
**Reality:** Not even advanced decomposition causes a significant health hazard. Hasty burial demoralises survivors and upsets arrangements for death certification or funeral rites and, where needed, autopsy.
14. **Myth:** *Disasters usually give rise to widespread, spontaneous manifestations or antisocial behaviour.*  
**Reality:** Generally, they are characterized by great social solidarity, generosity and self sacrifice, perhaps even heroism.
15. **Myth:** *One should donate used clothes to the victims of disasters.*  
**Reality:** This often leads to accumulations of huge quantities of useless garments that victims cannot or will not wear.
16. **Myth:** *Great quantities and assortments of medicines should be sent to disaster areas.*  
**Reality:** The only medicines that are needed are those used to treat specific pathologies, have not reached their sell by date, can be properly conserved in the disaster area, and can be properly identified in terms of their pharmacological constituents. Any other medicines are, not only useless, but potentially dangerous.
17. **Myth:** *Companies, corporations, associations and governments are always very generous when invited to send aid and relief to disaster areas.*  
**Reality:** They may be, but in the past disaster areas have been used as dumping grounds for outdated medicine, obsolete equipment, and unusable goods, all under the cloak of apparent generosity.
18. **Myth:** *Technology will save the world from disaster.*  
**Reality:** The problem of disasters is largely a social one. Technological resources are poorly distributed and often ineffectively used. In addition, technology is a potential source of vulnerability as well as a means of reducing it.
19. **Myth:** *There is usually a shortage of resources when disaster occurs and this prevents them from being managed effectively.*  
**Reality:** The shortage, if it occurs, is almost always very temporary. There is more of a problem in deploying the resources well and using them effectively than in acquiring them. Often, there is also a problem of coping with a superabundance of certain types of resource.

<sup>85</sup> reproduced with permission from Alexander AE. Misconception as a barrier to teaching about disaster. Prehosp Disast Med 2007;22(2):95-103.

## **ANNEX C TO: DESIGNING, DELIVERING AND MANAGING PSYCHOSOCIAL SERVICES FOR PEOPLE INVOLVED IN MAJOR INCIDENTS, CONFLICT, DISASTERS AND TERRORISM**

### **CORE CONCEPTS AND DEFINITIONS**

1. This annex gives a more extensive version of the core concepts and definitions that are outlined in the earlier part of the guidance and that recur in this text.

#### **CULTURAL DIVERSITY**

2. The requirement for planners and responders to mount services that are culturally sensitive so that they are able to respond to people whatever their cultural backgrounds, preferred language or religion is described in the literature. There is tension between:

*Cultural specificity:* where advocates argue that the significance of experiences and symptoms should be understood in relationship to the culture from which people come; and,

*Cross cultural universality:* advocates of this approach argue that syndromes hold true across cultures. They tend to recommend full application of screening, assessment, diagnostic and intervention techniques that have been developed in Western approaches to mental healthcare.

A culturally sensitive approach requires an understanding of cultural norms and practices and local knowledge of the community to allow for culturally sensitive assessment and treatment. When mental health intervention is made in non-Western settings, symptoms of trauma and associated impairment need to be treated in the context of culturally sensitive diagnostic approaches.

#### **EMERGENCY**

3. As defined in the UK Civil Contingencies Act (CCA) 2004, an emergency means:
  - An event or situation which threatens serious damage to human welfare in the United Kingdom;
  - An event or situation which threatens serious damage to the environment of the United Kingdom; or
  - War, or terrorism, which threatens serious damage to the security of the United Kingdom.

#### **MAJOR INCIDENT**

4. A major incident is any emergency that requires the implementation of special arrangements by one or more of the emergency services, the commissioners and providers of health services, and / or a local, regional or national government.

#### **DISASTER**

5. The literature offers many ideas for defining a disaster while agreeing that it is almost impossible to find an acceptable one. The various definitions include descriptions of scale, cause or source and some relate it to the threat to the social system and social vulnerability, the political impact, the environmental impact and the effect on people who are involved and describes situations or events that overwhelm local capacity and which necessitate requests to be made at national or international level for assistance to supplement local responses. In this guidance disaster is used as a general term that describes the impact of a natural or human-made hazard that negatively affects society or the environment
6. Examples of definitions include:

*“any natural catastrophe (including hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought) or, regardless of cause, any fire, flood, or explosion, ... which ... causes damage of sufficient severity*

*and magnitude to warrant major disaster assistance ... to supplement the efforts and available resources of states, local governments, and disaster relief organisations in alleviating the damage, loss, hardship, or suffering caused thereby”.*<sup>86</sup>

*“An event or situation which threatens serious damage to human welfare in a place in the UK, the environment of a place in the UK, or war or terrorism which threatens serious damage to the security of the UK”.*<sup>87</sup>

## TERRORISM

7. On 17 March 2005, a United Nations (UN) panel described terrorism as any act *“intended to cause death or serious bodily harm to civilians on non-combatants with the purpose of intimidating a population or compelling a government or an international organisation to do or abstain from doing any action, depending on whether intimidation, coercion, or propaganda is primarily”*.<sup>88</sup>
8. The United Kingdom defined terrorism in the Terrorism Act 2000<sup>89</sup> as meaning the use or threat of action where it involves:
  - a. serious violence against a person;
  - b. serious damage to property;
  - c. endangering a person’s life, other than that of the person committing the action;
  - d. creates a serious risk to the health or safety of the public or a section of the public; or
  - e. is designed seriously to interfere with or seriously to disrupt an electronic system; and
  - f. use or threat with the intention of influencing the government or to intimidate the public or a section of the public and is made for the purpose of advancing a political, religious or ideological cause.
9. The European Union (EU) employs a definition of terrorism for legal/official purposes that is set out in Article 1 of the Framework Decision on Combating Terrorism (2002).<sup>90</sup> This states that terrorist offences are certain criminal offences set out in a list comprised largely of serious offences against persons and property which “given their nature or context, may seriously damage a country or an international organisation where committed with the aim of: seriously intimidating a population; unduly compelling a Government or international organisation to perform or abstain from performing any act; or seriously destabilising or destroying the fundamental political, constitutional, economic or social structures of a country or international organisation”

## VIOLENCE

10. Violence is defined by the WHO as the intentional use of physical force or power, threatened or actual, against oneself, another person or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation.<sup>91</sup> This guidance is concerned mainly with the collective forms of violence, armed conflict and terrorism and disasters though it recognises that the many interpersonal forms also cause psychosocial reactions that are similar to those described here.

## HOW PEOPLE RESPOND PSYCHOSOCIALLY TO TRAUMATIC EVENTS

### Stress

11. There is a challenge in agreeing definitions and terminology to describe how people respond psychosocially on and after exposure to untoward events and situations. Some sources, for example, use the word stress in a general way to describe unpleasant and disadvantageous

<sup>86</sup> Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, and Related Authorities as of June 2007: Section 102. <http://www.fema.gov/about/stafact.shtm>

<sup>87</sup> Civil Contingencies Act 2004, London 2004. <http://www.ukresilience.info/ccact/index.htm>.

<sup>88</sup> United Nations. [http://web.archive.org/web/20070129121539/http://www.unodc.org/unodc/terrorism\\_definitions.html](http://web.archive.org/web/20070129121539/http://www.unodc.org/unodc/terrorism_definitions.html)

<sup>89</sup> United Kingdom Government. The Terrorism Act 2000. <http://www.homeoffice.gov.uk/security/terrorism-and-the-law/terrorism-act/>

<sup>90</sup> European Union. [http://eur-lex.europa.eu/pri/en/oj/dat/2002/l\\_164/l\\_16420020622en00030007.pdf](http://eur-lex.europa.eu/pri/en/oj/dat/2002/l_164/l_16420020622en00030007.pdf)

<sup>91</sup> World Health Organization. World report on violence and health. Accessed August 2008 [http://www.who.int/violence\\_injury\\_prevention/violence/world\\_report/en/index.html](http://www.who.int/violence_injury_prevention/violence/world_report/en/index.html)

responses to events, circumstances and relationships, thereby equating stress with undesirable responses. Others point out that stress is a term that describes a syndrome of human psychological, physical and behavioural responses to external and internal challenge and strain. In most cases, that syndrome is adaptive. Followers of the former approach talk of post-traumatic stress while adherents to the latter challenge that terminology.

12. Thus, stress is a term that is widely used and often misused. It is certainly used inconsistently. For some authorities, it refers to the pressures or strain which is imposed upon people. The pressure or strain may be positive, in the sense of serving as a motivating factor, or it may be negative in terms of inducing adverse psychological or physiological change. For others, the word stress refers exclusively to the people's responses, particularly in terms of physiological and biochemical changes, which may prove to be ultimately deleterious to the individual. In other words, sometimes the word is used to refer to a stimulus and sometimes to a response. Finally, for other authorities, stress is itself identified as a syndrome occasioned by the person's ability to cope with being overwhelmed.
13. It has been generally accepted however that within the field of occupational health a thorough understanding of 'stress' requires knowledge of three factors: a) the working environment, b) the individual's view of his working environment, and c) his reactions to it. This implies that, whilst it may be possible to describe features of an environment which are generally regarded as 'stressors', what is stressful to one worker may not be so to another. Many factors may contribute to differences in the perception of and reactions to potential sources of stress. These factors include differences in past experience in similar settings, methods of coping, reactivity of the autonomic nervous system and attitudes.<sup>92</sup>
14. Thus, some sources talk of:
  - acute stress reactions to describe the, usually, brief stunned responses of many people after untoward events;
  - acute stress disorder to describe a syndrome of longer duration that occurs in the within four weeks of a single potentially traumatic event; and
  - post-traumatic stress disorder to describe a syndrome of longer duration that occurs in the medium to long terms and at least four weeks after a single traumatic event.
15. Notwithstanding the criticisms of using the word stress in this way, there are other limitations of the approach. First, there is a risk of pathologising responses that may be consistent with resistance or resilience and emotions that may be experienced ordinarily by many people in the face of challenge and adversity. Second, this approach risks implying that there is continuity between these three syndromes. Research shows that there are similarities between these three types of response, but their prognostic significance turns on their severity and their timing and on the narrative of people's recovery or otherwise. Also, there is continuity between people's experiences over time, but less continuity between these diagnostic groups.
16. This guidance adopts the approach described here which includes:
  - common, immediate responses to exposure to events that are termed anticipated responses in this guidance;
  - distress and dysfunctions that may be temporary within the first month of an event; and
  - distress and dysfunction and mental disorders that may occur beyond the first month.

This also requires distinction between distress, dysfunction and mental disorder.

### **Distress**

17. The term distress describes the experiences and feelings of people after external events that challenge their tolerance and adaptation. It is initiated and maintained directly by primary and secondary stressors and subsides if the stressors disappear or as people adapt to the changed

---

<sup>92</sup> paragraph reproduced from page 1 of the introduction in Alexander DA, Walker LG, Innes G, Irving B. Police stress at work. London: The Police Foundation; 1993.

circumstances. Distress is an anticipated human emotion, not a disorder, when it and any associated psychosocial dysfunction emerges and persists in proportion to external stressful situations. Differentiation between distress and disorder is evaluative because it is not defined by objective standards and differences are open to cultural considerations and differing personal perceptions and values.

### **Dysfunction**

18. Dysfunction means any impairment or abnormality, however caused, of function in the social, emotional, physical and/or cognitive domains.

### **Mental disorder**

19. Usually, the notion of mental disorder is based on a variety of features in people's repertoires of thinking, feeling, behaving and interacting with others. Many disorders are not diagnosed on the basis of determined pathology, but because people have a sufficient constellation of features that fit syndromes that are defined internationally. Usually, the notion of disorder is used when the symptoms and signs that a person exhibits in response to external circumstances and stressful situations are not expected and culturally sanctioned responses to a particular event, for example, the death of a loved one, and last a significant length of time and impose significant functional impairment. Thereby, mental disorders imply internal psychological dysfunction(s) that may reflect, be mediated by or result from neurochemical disorder.

### **Post traumatic stress disorder (PTSD)**

20. There are two definitions of PTSD that are in common use. The first is included in DSM-IV and refers to posttraumatic stress disorder.<sup>93</sup> The second is found in ICD-10 and describes post-traumatic stress disorder.<sup>94</sup> These definitions are reproduced in full in this annex.

21. The usual definition of PTSD describes a common anxiety disorder that develops after exposure to a terrifying event or ordeal in which grave physical harm occurred or was threatened. Family members of victims can also develop the disorder. PTSD can occur in people of any age, including children and adolescents. More than twice as many women as men experience PTSD following exposure to trauma. Frequently, depression, alcohol or other substance abuse, or other anxiety disorders co-occur with PTSD.

22. The diagnosis of PTSD requires that a major traumatic event or series of events has occurred and that one or more symptoms from each of the following categories be present at least a month after for at least a month after the event(s) and that the symptom or symptoms must seriously interfere with leading a normal life.

- Reliving the event through upsetting thoughts, nightmares or flashbacks, or having very strong mental and physical reactions if something reminds the person of the event.
- Avoiding activities, thoughts, feelings or conversations that remind the person of the event; feeling numb to one's surroundings; or being unable to remember details of the event.
- Having a loss of interest in important activities, feeling all alone, being unable to have normal emotions or feeling that there is nothing to look forward to in the future.

23. Traumatic events that may trigger PTSD include violent personal assaults, natural or human-caused disasters, accidents, or military combat.

24. Physical symptoms such as headaches, gastrointestinal distress, immune system problems, dizziness, chest pain, or discomfort in other parts of the body are common in people with PTSD. Often, these symptoms may be treated without the recognition that they stem from an anxiety disorder.

---

<sup>93</sup> American Psychiatric Association; 1994.

<sup>94</sup> World Health Organization; 1992.

**Figure 1: DSM-IV: Diagnostic criteria for 309.81 posttraumatic stress disorder (DSM-IV, p427-429)<sup>95</sup>**

- A. The person has been exposed to a traumatic event in which both of the following were present:
- (1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others
  - (2) the person's response involved intense fear, helplessness, or horror.  
Note: In children, this may be expressed instead by disorganized or agitated behavior
- B. The traumatic event is persistently reexperienced in one (or more) of the following ways:
- (1) recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. Note: In young children, repetitive play may occur in which themes or aspects of the trauma are expressed.
  - (2) recurrent distressing dreams of the event. Note: In children, there may be frightening dreams without recognizable content.
  - (3) acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated). Note: In young children, trauma-specific reenactment may occur.
  - (4) intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
  - (5) physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
- C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:
- (1) efforts to avoid thoughts, feelings, or conversations associated with the trauma
  - (2) efforts to avoid activities, places, or people that arouse recollections of the trauma
  - (3) inability to recall an important aspect of the trauma
  - (4) markedly diminished interest or participation in significant activities
  - (5) feeling of detachment or estrangement from others
  - (6) restricted range of affect (e.g., unable to have loving feelings)
  - (7) sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)
- D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:
- (1) difficulty falling or staying asleep
  - (2) irritability or outbursts of anger
  - (3) difficulty concentrating
  - (4) hypervigilance
  - (5) exaggerated startle response
- E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.
- F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

*Specify if:*

Acute: if duration of symptoms is less than 3 months

Chronic: if duration of symptoms is 3 months or more

*Specify if:*

With Delayed Onset: if onset of symptoms is at least 6 months after the stressor

---

<sup>95</sup> American Psychiatric Association; 1994.

**Figure 2: ICD-10: F43.1 post-traumatic stress disorder (ICD-10, p147-149)<sup>96</sup>**

**Post-traumatic stress disorder**

This arises as a delayed and/or protracted response to a stressful event or situation (either short- or long-lasting) of an exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone (e.g., natural or man-made disaster, combat, serious accident, witnessing the violent death of others, or being the victim of torture, terrorism, rape, or other crime).

Predisposing factors such as personality traits (e.g., compulsive, asthenic) or previous history of neurotic illness may lower the threshold for the development of the syndrome or aggravate its course, but they are neither necessary nor sufficient to explain its occurrence.

Typical symptoms include episodes of repeated reliving of the trauma in intrusive memories (“flashbacks”) or dreams, occurring against the persisting background of a sense of “numbness” and emotional blunting, detachment from other people, unresponsiveness to surroundings, anhedonia, and avoidance of activities and situations reminiscent of the trauma. Commonly there is fear and avoidance of cues that remind the sufferer of the original trauma. Rarely, there may be dramatic, acute bursts of fear, panic or aggression, triggered by stimuli arousing a sudden recollection and/or re-enactment of the trauma or of the original reaction to it.

There is usually a state of autonomic hyperarousal with hypervigilance, an enhanced startle reaction, and insomnia. Anxiety and depression are commonly associated with the above symptoms and signs, and suicidal ideation is not infrequent. Excessive use of alcohol or drugs may be a complicating factor.

The onset follows the trauma with a latency period which may range from a few weeks to months (but rarely exceeds 6 months). The course is fluctuating but recovery can be expected in the majority of cases. In a small proportion of patients the condition may show a chronic course over many years and a transition to an enduring personality change (see F62.0).

**Diagnostic guidelines**

This disorder should not generally be diagnosed unless there is evidence that it arose within 6 months of a traumatic event of exceptional severity. A “probable” diagnosis might still be possible if the delay between the event and the onset was longer than 6 months, provided that the clinical manifestations are typical and no alternative identification of the disorder (e.g., as an anxiety or obsessive-compulsive disorder or depressive episode) is plausible. In addition to evidence of trauma, there must be a repetitive, intrusive recollection or re-enactment of the event in memories, daytime imagery, or dreams. Conspicuous emotional detachment, numbing of feeling, and avoidance of stimuli that might arouse recollection of the trauma are often present but are not essential for the diagnosis. The autonomic disturbances, mood disorder, and behavioural abnormalities all contribute to the diagnosis but are not of prime importance.

The late chronic sequelae of devastating stress, i.e. those manifest decades after the stressful experience, should be classified under F62.0.

*Includes:* traumatic neurosis

25. However, the concept of PTSD is not without its critics.<sup>97</sup> Recent research has shown that many patients suffering from severe depression have symptoms that are similar to those that are part of the PTSD syndrome regardless of whether or not they have experienced trauma. Furthermore, and particularly importantly, many people experience some of the symptoms that constitute the syndrome within a month of a traumatic event and they occur in ordinarily resilient people for whom the diagnosis is not appropriate. Some critics have opined that, on at least some occasions, PTSD is an amalgam of other disorders. While PTSD remains a useful concept, this guidance suggests that it is applied advisedly as a diagnosis (i.e. care be taken in using and applying the term so that the needs of people are fully assessed and the full range of interventions to respond to them are made available).

**PSYCHOLOGICAL TRAUMA**

26. Psychological trauma is a type of damage to the psyche that occurs as a result of a traumatic event. Major incidents challenge our beliefs about ourselves, our families and close friends and the world. Ordinarily, people make three fundamental assumptions:

<sup>96</sup> World Health Organization; 1992.

<sup>97</sup> for example: Weathers FW, Keane TM, Davidson JRT. Clinician-administered PTSD scale: A review of the first ten years of research. *Depression and Anxiety* 2001; (3):132-156.

- the world is essentially a good place;
- life and events have meaning and purpose;
- one's own person is valuable and worthy.

27. Psychological trauma occurs when events and/or circumstances challenge these assumptions and take a person beyond their tolerance. In other words, a traumatic event is one that involves a singular experience or enduring event or events that completely overwhelm or threaten to overwhelm a person's ability to cope or integrate the ideas and emotions involved with that experience. It is the meaning of event not the events themselves that determines whether something is traumatising to a person. Occasionally, events or relationships are so hurtful to us that we question and alter our fundamental worldviews, "Traumatic events affect great damage not so much because of the immediate harm they cause but also because of the lingering need to re-evaluate one's view of oneself and the world"<sup>98</sup>. While some people appear from the outside to be relatively unaffected or resistant to the potential psychosocial impact of the events or circumstances that they face, many other humans become at least temporarily distressed until the circumstances improve or they:

- are able to adapt;
- alter their perceptions of events and people around them;
- change their beliefs about themselves, their relationships and/or the world; or
- become more substantially psychosocially impaired or mentally disordered in the medium or longer-terms.

The second, third and fourth of these responses are seen more frequently after repeated traumatic events.

28. Trauma can be caused by a wide variety of events, but there are a few common aspects. Usually, it involves a complete feeling of helplessness in the face of a real or subjective threat to life, bodily integrity, or sanity. There is frequently a violation of the person's familiar ideas about the world; putting the person in a state of extreme confusion and insecurity. This is often seen when people or institutions depended on for survival violate or betray the person in some unforeseen way.

29. The literature and experience show that:

- emotional reactions to trauma are extremely common;
- it is difficult to predict who will be affected most, but certain risk factors are known;
- the profile of psycho-social responses varies with time and the circumstances;
- socio-economic disadvantage and inter-personal problems that may follow may predict long-term problems and enter victims into a cycle of disadvantage and poor health; and
- good management at the time of the event with effective follow through and broad care planning may lessen the longer-term impacts.

## COMPLEX TRAUMA

30. The notion of complex psychological trauma stems from the differentiation that may be made between two patterns of events and how people respond to them. The first relates to the psychosocial impact caused by single incident epiphanies that lead to 'shock', full and detailed memories and misperceptions. The second pattern is that in which responses are provoked by long-standing or repeated ordeals that result in anticipation, massive denial, dissociation, self-anaesthesia, identification with the aggressor and rage. Several researchers have distinguished patterns of response on the basis of the nature and patterning of the traumatic events. There are also crossover patterns identified between the two types.

---

<sup>98</sup> Condlly SJ. Resilience in children: a review of literature with implications for education. *Urban Education* 2006; 41(3):211-236.

## THE PSYCHOSOCIAL APPROACH

31. Psychosocial refers to personal psychological development in the context of a social environment. It is a specific term that is used to describe the unique internal processes that occur within people. It is usually used in the context of 'psychosocial intervention', a term that is commonly used alongside psycho-education or psychopharmacological interventions.
32. Thus, the psychosocial approach espoused herein is based on commitment to a broad range of eclectic approaches to planning and responding to major incidents of all kinds. It includes non-healthcare, non-medical as well as healthcare responses to mental disorder.
33. The effects that are usually seen immediately after a single event that overwhelms people include:
  - stunning and numbness;
  - anxiety and fear;
  - horror and disgust;
  - anger;
  - loss of trust;
  - demoralisation, hopelessness and helplessness; and
  - survivor and performance guilt.

## RESISTANCE, RESILIENCE AND RECOVERY

34. Figure 5 provides a graphical representation of the various ways in which people respond psychosocially to threats and shows some of the features that distinguish resistance, resilience and recovery.

### Resistance

35. Concerns the capacity of materials to respond to strain without changing shape. Evidently, some materials are resistant up to a limit, but not resilient while others are highly resilient but not necessarily resistant. Translated into situations faced by human beings, resistance describes their abilities to maintain adaptive functioning in demanding circumstances, whereas resilience describes their plasticity and adaptability and capacity to recover quickly once the pressure of events is relieved.
36. Thus, resistance is a concept that describes the ability of people to respond to stressors with only very minor or no change. It is related to resilience, but the two are not identical, and should not be used interchangeably. Research, for example, has shown that people who are empathic and who experience temporary upset after engaging with others who are in difficulties may not be as resistant as are people who do not get upset, but most of them are just as resilient.

### Resilience, hardiness and sense of coherence

37. Resilience has become a colloquial term in emergency planning. However, it should be distinguished from psychological or emotional well-being, the existence of protective factors, absence of distress, resistance, hardiness and recovery from a disorder. Often, all of these responses are implied by policymakers', planners' and practitioners' use of the word, but inexact use of terms is of no assistance to evidence-based service design and practice.<sup>99</sup>

### *Resilience*

38. The concept of resilience stems from technology. It concerns the capacity of a material to return to its original shape after a force is removed or changed that had caused deformation that did not exceed the elastic limits of the material. Just as materials deform and return to their previous shape, so do humans in the face of challenge, threat and adversity. Provided circumstances do

---

<sup>99</sup> Layne CM, Warren JS, Watson PJ, Shalev AY. Risk, vulnerabilities, resistance and resilience: towards integrated conceptualization of posttraumatic adaptation. P 497-520 in Friedman MJ, Keane TM, Watson PA (editors). Handbook of PTSD, Science and Practice. New York: Guilford Press; 2007.

not take them beyond their limits of tolerance for too long, many people respond by either showing few emotional reactions or by becoming temporarily distressed before returning to more ordinary functioning and relationships once the source of people's concerns is modified, removed or adjusted to. This is resilience. Resilience is not about avoiding short-term distress or deleterious responses, but about how people adapt to and recover from them and about the resources, including their social and personal capital, which sustain them in adversity.

39. Psychosocial resilience is "a person's capacity for adapting psychologically, emotionally and physically reasonably well and without lasting detriment to self, relationships or personal development in the face of adversity, threat or challenge".<sup>100</sup> "Resilience can be thought of as an enduring characteristic of the person, a situational or temporal interaction between the person and the context, or a unitary or multifaceted construct, and it can be applied to social, academic or other settings".<sup>101</sup> An important feature of resilience is that it involves a dynamic array of interacting experiences, relationships and personal characteristics and, at least some, are amenable to change or development.
40. So far, resilience is presented as relating to individual people. However, resilience is used to describe the capabilities of groups of people, communities, workplaces, services, and societies to recover, adapt and return to their previous circumstances and relationships after incidents, events or circumstances that produce challenge, distress and dislocation. The former is termed *personal resilience* while the second is *collective resilience*.
41. Recent research on the London bombings of 7 July 2005, for example, has explored the oft-reported observation that groups of survivors and witnesses panic or put their own safety first.<sup>102</sup> This work has shown that widespread panic in the face of catastrophic events is substantially a myth. Only a tiny number of people trapped in the tube tunnels on 7 July reported seeing anyone who engaged in selfish behaviours or panicking. There were much more frequent reports of mutual helping, cooperation with strangers and of people delaying their release from entrapment to make sure that others were looked after or accompanied. Sometimes, those behaviours raised the risks to the people who stayed behind. The research group has argued that the people involved redefined their notion of self to create a temporary common identity (i.e. moving from 'me' to a shared identity of 'us') in the immediate aftermath and that this is evidence of collective resilience. If this is the case, collective resilience has features in common with what good leaders try to do in creating and sustaining teams and with morale and *esprit de corps*.

#### *Hardiness and Sense of Coherence*

42. Hardiness is a term that comes from horticulture. It describes the ability of plants to survive adverse growing conditions. Thus, it is related to resilience and resistance. It consists of three components. *Commitment* implies that hardy people view potentially stressful events as meaningful and interesting, *control* means that people see themselves as able to change events and *challenge* means seeing change as normal and as providing opportunities.<sup>103</sup> Ambulance staff who are rated as hardy on a rating scale that measures commitment, control and response to challenge were less likely to have general psychopathology, burnout and post-traumatic symptoms.<sup>104</sup> Also, commitment is the component of hardiness that moderates the relationship between stress and depression.<sup>105</sup> Hardiness, therefore describes some of the features of personal resilience.

<sup>100</sup> Williams R. The psychosocial consequences for children of mass violence, terrorism and disasters. *International Review of Psychiatry* 2007; 19(3): 263-277.

<sup>101</sup> Condly SJ. Resilience in children: a review of literature with implications for education. *Urban Education* 2006; 41(3):211-236.

<sup>102</sup> Drury J, Cocking C: 2007. Drury J, Cocking C; 2007. [www.sussex.ac.uk/affiliates/panic/Disasters%20and%20emergency%20and%20evacuations%20\(2007\).pdf](http://www.sussex.ac.uk/affiliates/panic/Disasters%20and%20emergency%20and%20evacuations%20(2007).pdf) and <http://www.london.gov.uk/assembly/resilience/2006/77reviewnov22/04u-univ-sussex.pdf>

<sup>103</sup> Maddi SR, Kobasa SC. *The hardy executive: health under stress*. Homewood IL: Dow Jones-Irwin; 1984.

<sup>104</sup> Alexander DA & Klein S 2003. Biochemical terrorism: too awful to contemplate. *British Journal of Psychiatry* 2003; 183:491-497.

<sup>105</sup> Pengilly JW, Dowd ET. Hardiness and social support as moderators of stress. *Journal of Clinical Psychology* 2000; 56(6):813-820.

43. These concepts are similar to and overlap with the notion of 'sense of coherence' (SOC). SOC describes a perception that events are comprehensible, manageable and meaningful. A strong SOC in adults has been shown to be a stable protective factor for health that is independent of known risk factors and inversely related to distress.<sup>106</sup> It is also a potential marker of people's capacity to adapt to social stress.<sup>107</sup> There is support from research for SOC having a role both in mediating and buffering the impact of adverse experiences on psychological well-being in adulthood. There is also evidence that adversity and stress might not affect well-being directly.<sup>108</sup>

*The origins and nature of personal resilience*

44. The components that make up human resilience relate to particular people's inherent characteristics, their experiences in life and their relationships with family members, peers, and schools and workplace colleagues.

45. Personal resilience is a developmental concept. There is much research on the impact on children's development and their responses to chronic stressors that are associated with persisting poverty, poor familial relationships and, increasingly on the effects of acute and potentially overwhelming single incidents. The two patterns interweave through particular people's narratives of life, but it remains a moot point as to how far the research on developmental psychopathology is translatable into acute scenarios and vice versa. Research on 9/11 2001 and other scenarios suggests that there are crossovers. Recently, it has examined why "... the long-term impact of the attack [on the World Trade Center on September 11 2001] was less pervasive than anticipated for most survivors".<sup>109</sup> The findings point to attachment capacity as an important factor; "... securely attached individuals exhibited fewer symptoms of PTSD and depression than insecurely attached individuals ...". This points to resilience having dynamic, developmental and relational characteristics.

46. Additionally, it is possible to distinguish between comparatively static *attributes* in people and their social and physical environments and dynamic *mechanisms, processes* and *pathways* of influence that, together influence resilience. More is known about the attributes and relatively less about the last three features. A summary is provided by Figures 3 and 4.

**Figure 3: Resilience factors (reproduced from Williams, 2008)<sup>110</sup>**

Personal skills:

- The capacity to receive social support;
- Good cognitive skills
- Good communication skills
- Active problem-solving skills
- Flexibility - the ability to adapt to change
- Ability to cope with stress (seeing stress as a challenge)

Personal beliefs and attitudes:

- Self-efficacy (general expectation of competence)
- Self-esteem
- Hope
- A sense of purpose
- Religion or the feeling of belonging somewhere
- Positive emotion and humour
- The belief that stress can have a strengthening affect
- Acceptance of negative feelings

<sup>106</sup> Breslin FC, Hepburn CG, Ibrahim S, Cole D. Understanding stability and change in psychological distress and sense of coherence: a four year prospective study. *Journal of Applied Social Psychology* 2006; 36(1):1-21.

<sup>107</sup> Surtees PG, Wainwright NWJ, Khaw K. Resilience, misfortune, and mortality: evidence that sense of coherence is a marker of social stress adaptive capacity. *Journal of Psychosomatic Research* 2006; 61:221-227.

<sup>108</sup> Gana K. Is sense of coherence a mediator between adversity and psychological well-being in adults? *Stress and Health* 2001; 17(2):77-83.

<sup>109</sup> Fraley RC, Fazzari DA, Bonanno GA, Dekel S. Attachment and psychological adaptation in high exposure survivors of the September 11<sup>th</sup> attack at the World Trade Centre. *Personality and Social Psychology Bulletin* 2006; 32:538.

<sup>110</sup> reproduced with permission from pages 112-113 of Williams R. Resilience and risk in children and young people. In Jackson C, Hill K, Lavis P, editors. *Child and adolescent mental health: a handbook*. Brighton: Pavilion Publishing; 2008. p. 107-118.

Interactive skills, relationships and achievements:

- Good relationships with other people
- Contributions to community life
- Talents or accomplishments that one values oneself or which are appreciated by others
- Access to and use of protective processes
- Adaptive ways of coping that suit the situation and the person
- Growth through negative experiences

47. A recent literature review of the factors that influence children’s development in the face of chronic, and often, repeated challenges is summarised in Figure 5.

**Figure 4: The Nature of Resilience (based on Condly, 2006 and reproduced in modified form from Williams, 2008<sup>111</sup>)**

**Resilience is:**

|  |   |   |
|--|---|---|
| <b>Dynamic</b>                             |   | Resilience changes over time and may be of differing strength in differing situations   |
| <b>Developmental</b>                       |   | Resilience is affected profoundly by a person’s experience in childhood and beyond  |
| <b>Interactive</b>                         | Passive - increasing a person’s ability to withstand trauma | Resilience may be thought of as related to each person’s ability to withstand trauma. So, one approach is to help people to develop their ability to cope well when faced with trauma.  |
|  | Active - shaping the environment to minimise trauma         | A second approach to developing resilience is based on the observation that more resilient people express agency in doing what they can to organise the world around them to minimise the risks of being exposed to trauma. At the same time, most people also wish to experience some risks and each on of us has own setting on our ‘risk thermostat’. Coping well may, therefore, be related to knowing one’s own comfort with risk. |
| <b>Gender related</b>                      |   | Generally, women are more resilient than men though they are also more likely to develop longer-term psychiatric disorders too.   |
| <b>Related to personal characteristics</b> |   | Intelligence and temperament and, particularly, a combination of the two<br><br>The quality of each person’s family relationships<br><br>The level of social support that is available to teach person from their family available support from people outside each person’s family including that provided by other persons and institutions including employers and work places.  |
| <b>Related to attachment capabilities</b>  |   | Research has shown strong relationships between people’s capacities for secure attachments and their resilience.  |

48. In all probability, different people’s responses to challenging events are determined by a variety of interlocking genetic, biological, neurochemical, psychological, developmental, social, and circumstantial factors though less is known about how environmental factors interact with the biological influences.<sup>112 113</sup>

<sup>111</sup> reproduced with permission from pages 113-114 of Williams R. Resilience and risk in children and young people. In Jackson C, Hill K, Lavis P, editors. Child and adolescent mental health: a handbook. Brighton: Pavilion Publishing; 2008. p. 107-118.

<sup>112</sup> Cicchetti D, Blender JA. A multiple-levels-of-analysis perspective on resilience: implications for the developing brain, neural plasticity, and preventive interventions. Annals of the New York Academy of Science 2006;1094:259-262

49. There is evidence in the literature that the kinds of action taken by others may undermine resilience. These include:

- dramatising events;
- pathologising people's reactions;
- catastrophising about the effects;
- creating negative expectations;
- blurring boundaries (for example, between disorder & response);
- hiding, misleading, misinforming or otherwise manipulating information;
- overemphasising the role of experts; and
- ignoring people's feelings or showing emotional distance or indifference.

### Recovery

50. Bonanno distinguishes recovery from resilience<sup>114</sup>. He states, "... recovery connotes a trajectory in which normal functioning temporarily gives way to threshold or subthreshold psychopathology (e.g. symptoms of depression or posttraumatic stress disorder [PTSD]), usually for a period of at least several months, and then gradually returns to pre-event levels. Full recovery may be relatively rapid or may take as long as one or two years.

51. In psychosocial care, the term recovery is used to describe dynamic and continuing interactional processes that involve each person's strengths and vulnerabilities, the resources that are available to them and the positive aspects and constraints of the environment around them. As this guidance shows, these matters shape the journeys taken by each person towards restoration of their capacities to enjoy and be enriched by life and to contribute meaningfully and well to families and communities despite them experiencing psychosocial challenges, mental health problems or mental disorders for short or longer periods of time.

52. Framed in this way, the process of recovery is optimistic, instils hope and turns on restoring self-efficacy and the effectiveness of communities. It involves learning to approach each day's challenges, to overcome disabilities, to live independently and to contribute to society and is supported by a foundation that is based on belief, personal power, respect, connections and self-determination.

53. This approach to recovery recognises the challenges and problems that are faced by each person including any accrued psychosocial disabilities. It involves the active involvement of each person and group of people in managing their own psychosocial problems and mental disorders and reclaiming, gaining and maintaining a positive sense of self, roles and life beyond the healthcare systems. This paradigm for recovery is supported by the empirical evidence that is summarised in paragraph 38.

54. This guidance uses a combination of both definitions. This first is used to describe the nature of people's experiences and the second to describe the process by which they are restored to health.

### How people respond to disaster

55. Figure 5 provides a graphical representation of the various ways in which people respond psychosocially to threat. It summarises important features in this guidance. First, it is a common finding that resilient people experience short-term adverse reactions to traumatic events followed by rapid recovery; brief human perturbation after traumatising events does not imply that they are not resilient. Indeed, most resilient people have temporary and, sometimes, strong reactions to traumatic events or processes, but they are able to return to their work with only a brief period for

---

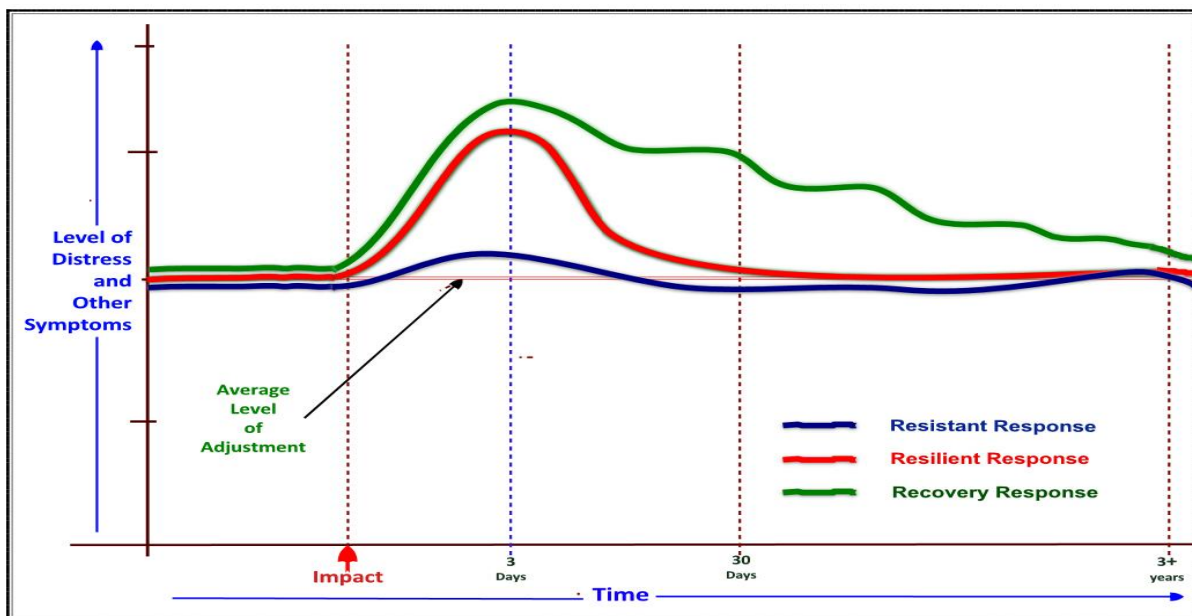
<sup>113</sup> Cicchetti D, Curtis WJ (editors). Special issue: a multilevel approach to resilience. *Development and Psychopathology* 2007; 19(3).

<sup>114</sup> Bonanno GA. Loss, trauma, and human resilience. Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist* 2004; 59:20-28.

recovery given sufficient inner resources augmented by external support from family members, colleagues and friends.

56. Second, Figure 5 distinguishes resistance and resilience from recovery from longer-lasting distress that amounts to an acute stress disorder. The concept of recovery implies a short to medium-term response to trauma that may well have compromised a person's ability to cope.
57. Third, most people who are exposed to situations that have the potential to evoke distress do not develop substantial psychopathology. Nonetheless, distress provoked by exposure to disaster may precipitate a minority of people into developing a mental disorder or exacerbate a pre-existing condition such that it continues after the traumatising circumstances have been resolved or been, otherwise, dealt with.

Figure 5: Distinguishing resilience from resistance and recovery<sup>115</sup>



58. Thus, several patterns of human reaction to adversity, threat or catastrophe can be distinguished in which distress is a feature of all of them. They include:

- Low levels of very mild and transient immediate distress that do not interfere with people's actions, but which are consistent with resistance;
- Immediate and short-term distress that is only temporarily debilitating, but consistent with resilience;
- Short- and medium-term distress that may amount to an acute stress disorder and which is followed by more gradual and protracted recovery to positive adaptation;
- Severe persisting longer-term or chronic distress that is associated with incomplete recovery and more severely compromised functioning in the medium to longer-terms and which may give way to a mental disorder.

One research study of Israeli adolescents who had experienced terrorist incidents reported that around 40% had post traumatic symptoms, but, conversely, that 75% also reported feelings of emotional growth.<sup>116</sup> This raises the possibility of challenges that are well handled being

<sup>115</sup> diagram constructed by Williams r and Kemp V after ideas contained in Layne CM, Warren JS, Watson PJ, Shalev AY. Risk, vulnerabilities, resistance and resilience: towards integrated conceptualization of posttraumatic adaptation. P 497-520 in Friedman MJ, Keand TM, Watson PA (editors). Handbook of PTSD, Science and Practice. New York: Guilford Press; 2007. This diagram is produced with permission from Guilford Press.

<sup>116</sup> Laufer A, Solomon Z. Posttraumatic symptoms and posttraumatic growth among Israeli youth exposed to terror incidents. Journal of Social and Clinical Psychology 2006; 25(4):429-447.

associated with positive as well as negative psychosocial outcomes. A theoretical paper on this topic has been published by Pat-Horenczyk and Brom.<sup>117</sup>

59. Arguably, people require from responders to emergencies, conflict and catastrophes a balance of resistance, hardiness and resilience such that they are able to cope while remaining effective, but are also able to empathise with the impact and burdens borne by people who are directly and indirectly involved. There is some evidence that hospital staff who are more empathic are also more likely to be emotionally distressed.<sup>118 119 120</sup> This implies that empathic people may not appear to be as resistant as others though, of course, this does not imply that they have any lack of resilience. Empathy is a highly desirable capability that enables people to carry out their roles sensitively and compassionately, but it may also require good support facilities to in place to support the resilience of the responders. If these inferences are reasonable, they could inform how we select and support personnel for humanitarian interventions; arguably, teams of responders might be composed of people with differing styles to achieve a range of capacities.

---

<sup>117</sup> Pat-Horenczyk R, Brom D. The multiple faces of post-traumatic growth. *Applied Psychology: An International Review* 2007; 56(3):379-385.

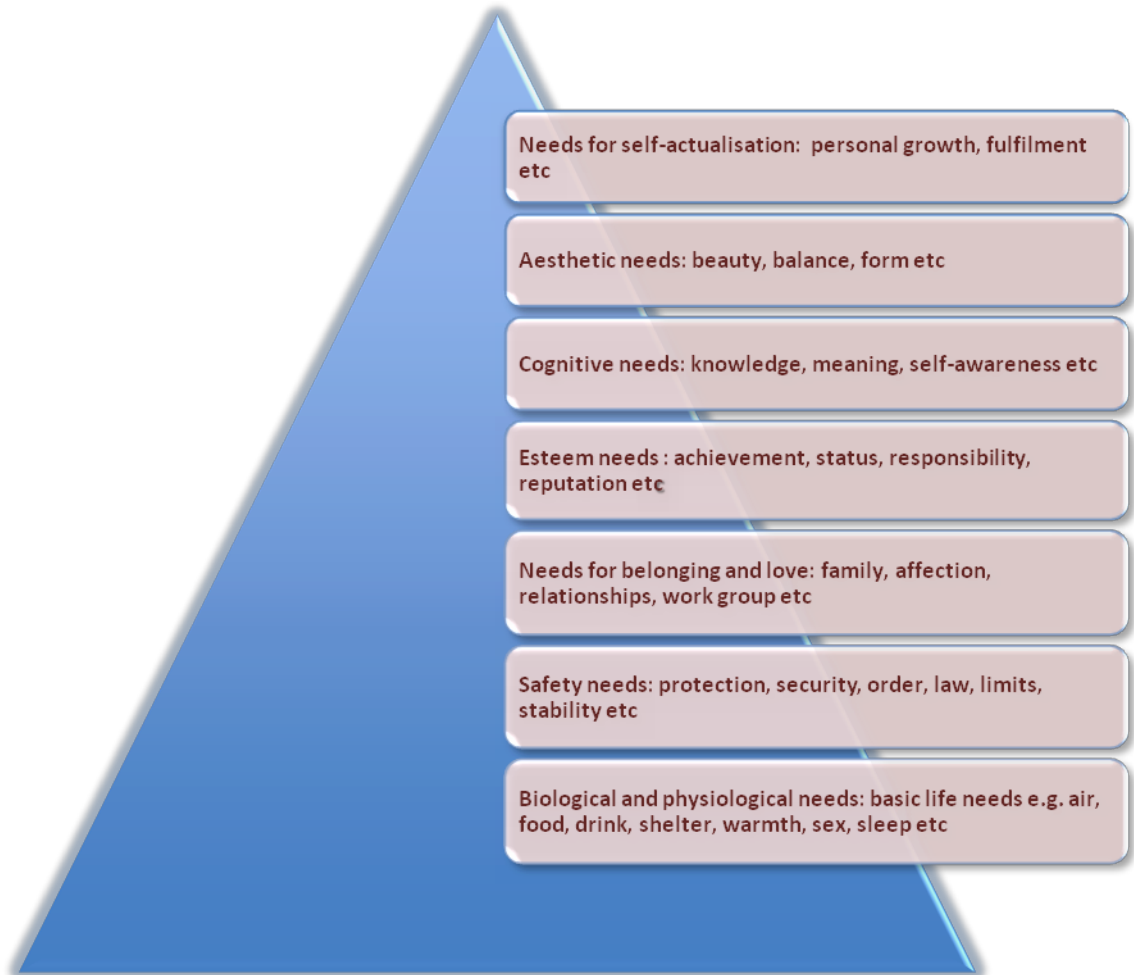
<sup>118</sup> Firth-Cozens J. Emotional distress in junior house officers. *British Medical Journal* 1987; 295:533-536.

<sup>119</sup> Regehr C, Goldberg G, Hughes J. Exposure to human tragedy, empathy and trauma in ambulance paramedics. *American Journal of Orthopsychiatry* 2002; 72(4):505-513.

<sup>120</sup> Thomas MR, Dyrbye LN, Huntington JL, Lawson KL, Novotny PJ, Sloan JA, Shanafelt TD. How do distress and well-being relate to medical student empathy? A multicenter study. *Journal of the Society of General Internal Medicine* 2007; 22:177-183.

**ANNEX D TO: DESIGNING, DELIVERING AND MANAGING PSYCHOSOCIAL SERVICES FOR PEOPLE INVOLVED IN MAJOR INCIDENTS, CONFLICT, DISASTERS AND TERRORISM**

**MASLOW'S HIERARCHY OF NEEDS<sup>121</sup>**



<sup>121</sup> Maslow A. Motivation and personality. New York: Harper; 1954.

## **ANNEX E TO: DESIGNING, DELIVERING AND MANAGING PSYCHOSOCIAL SERVICES FOR PEOPLE INVOLVED IN MAJOR INCIDENTS, CONFLICT, DISASTERS AND TERRORISM**

### **NATIONAL SCREENING COMMITTEE'S CRITERIA FOR APPRAISING THE VIABILITY, EFFECTIVENESS, AND APPROPRIATENESS OF A SCREENING PROGRAMME<sup>122</sup>**

#### **THE CONDITION**

- The condition should be an important health problem
- The epidemiology and natural history of the condition, including development from latent to declared disease, should be adequately understood and there should be a detectable risk factor, disease marker, latent period, or early symptomatic stage
- All the cost effective primary prevention interventions should have been implemented as far as practicable

#### **THE TEST**

- There should be a simple, safe, precise, and validated screening test
- The distribution of test values in the target population should be known and a suitable cut off level defined and agreed
- The test should be acceptable to the population
- There should be an agreed policy on the further diagnostic investigation of individuals with a positive test result and on the choices available to those individuals

#### **THE TREATMENT**

- There should be an effective treatment or intervention for patients identified through early detection, with evidence of early treatment leading to better outcomes than late treatment
- There should be agreed evidence based policies covering which individuals should be offered treatment and the appropriate treatment to be offered
- Clinical management of the condition and patient outcomes should be optimised by all health care providers prior to participation in a screening programme

#### **THE SCREENING PROGRAMME**

- There should be evidence from high quality randomised controlled trials that the screening programme is effective in reducing mortality or morbidity
- There should be evidence that the complete screening programme (test, diagnostic procedures, treatment/intervention) is clinically, socially, and ethically acceptable to health professionals and the public
- The benefit from the screening programme should outweigh the physical and psychological harm caused by the test, diagnostic procedures, and treatment
- The opportunity cost of the screening programme (including testing, diagnosis, and treatment) should be economically balanced in relation to expenditure on medical care as a whole
- There should be a plan for managing and monitoring the screening programme and an agreed set of quality assurance standards
- Adequate staffing and facilities for testing, diagnosis, treatment, and programme management should be available prior to the commencement of the screening programme
- All other options for managing the condition should have been considered (e.g., improving treatment, providing other services)

---

<sup>122</sup> National Screening Committee. First report of the National Screening Committee. London: Health Departments of the United Kingdom; 1998. [www.nsc.nhs.uk/pdfs/nsc\\_firstreport.pdf](http://www.nsc.nhs.uk/pdfs/nsc_firstreport.pdf) (accessed 14 January 2001).

## **ANNEX F TO: DESIGNING, DELIVERING AND MANAGING PSYCHOSOCIAL SERVICES FOR PEOPLE INVOLVED IN MAJOR INCIDENTS, CONFLICT, DISASTERS AND TERRORISM**

### **THE VALUES AND PRINCIPLES GOVERNING THE PSYCHOSOCIAL RESPONSE AND THE USE OF INFORMATION**

1. The values and principles proposed by the European Union are contained in a policy paper, concerning different aspects of psycho-social support for people involved in major accidents and disasters - Psycho-Social Support in Situations of Mass Emergency.
2. They are:
  - The unalienable right of those people affected to confidentiality and privacy with a strict separation of the handling of information in the context of psychosocial assistance, from that of judicial, and legal responsibilities.
  - Affected people must be protected from intrusion or interference with their private life (i.e. from unwanted assistance, abuse of authority, undesired inquiries). People should have the opportunity, at any time, to express the desire not to be contacted by the press, by family members or even by (well-meaning) psychosocial workers, without having to demonstrate a need or even a reason for such a request.
  - Collection and processing of data regarding a disaster or traumatic event during triage and medical processes in healthcare and welfare settings should whenever possible be governed by strict procedures, standardised protocols, clearly established hierarchies and responsibilities. A number of principles on information practice, establishing conditions for handling/disclosure of personally identifiable information should be included in the planning process for a psychosocial response.
  - Any communication of data, within the medical and psychosocial structures must whenever possible follow formal, pre-established rules, indicating clear responsibilities. Obtaining, registering, and communicating information should be restricted to what is relevant and proven to be useful for an adequate medical and psychosocial response. Agencies should specify their authority and purpose for collecting personally identifiable information from people.
  - People affected should whenever possible be provided with a clear explanation about the use and reason for collection of information and about how access to it and the procedure for amendment.
  - Contacting relatives and loved ones, and informing them of the condition of the person affected can only be done after informed consent. Agencies should obtain verifiable parental consent prior to collecting, using, and disseminating personal information about children under a specified age (minors).
  - Medical good practice should govern the access of parents to their children's personal information and its further use. Gathering evidence and information from the family should be done in a sensitive manner.
  - Information from medical records or other private information of people affected wherever it is held should only be communicated to non-medical or non- psychosocial agencies and authorities, if it is expressly authorised (after informed consent) by the individual person about whom the record is maintained (or eventually of his/her legal representative).
  - However, anonymised data, for example, the number of people affected and the categorisation of the severity of their injuries can be considered a matter of general interest.
  - Lists with the names of dead, injured, missing and other affected people, containing a general notice on the gravity of their health situations (for example life in danger or not) should be

handled with utmost care. Only persons or agencies authorised within the psychosocial plan should collect, review, or create any aggregate list. This information should be used strictly for purposes of disaster victim identification or when required for adequate medical and psychosocial care (triage, appropriate care and services).

- The way of communicating information to people involved in mass emergency should take into account the psychosocial impact. This is one of the reasons why the whole process of managing information concerning the identity and status of victims, as well as organising the notification and communication should be an integral part of the specific functional discipline that is psychosocial support.

**ANNEX G TO: DESIGNING, DELIVERING AND MANAGING PSYCHOSOCIAL SERVICES FOR PEOPLE INVOLVED IN MAJOR INCIDENTS, CONFLICT, DISASTERS AND TERRORISM**

**THE EXPERT ADVISORY GROUPS**

**The Guidance Development Advisory Group**

The members of the Guidance Development Advisory Group were:

|                     |   |
|---------------------|---|
| Penny Bevan         | Director, Emergency Preparedness Division,<br>Department of Health, England<br>Civilian Representative of the UK on the Joint Medical Committee, NATO<br>Chair of the Guidance Development Advisory Group   |
| Richard Williams    | Professor of Mental Health Strategy, University of Glamorgan<br>Consultant Child and Adolescent Psychiatrist, Gwent Healthcare NHS Trust<br>Scientific Adviser on Psychosocial and Mental Health to the Department of Health<br>Expert Adviser to the Guidance Development Advisory Group |
| Verity Kemp         | Project Manager, Review of NHS Emergency Planning Guidance,<br>Emergency Preparedness Division, Department of Health, England<br>Project management support to the Guidance Development Advisory Group  |
| David Alexander     | Director of the Aberdeen Centre for Trauma Research, at the Robert<br>Gordon University, Aberdeen<br>Consultant-in-charge of the Traumatic Stress Clinic, Royal Cornhill Hospital,<br>Aberdeen  |
| Jamie Hacker Hughes | Head of Defence Clinical Psychology, Ministry of Defence, UK<br>Honorary Senior Lecturer in Military Psychology, King's College London  |
| Carmen Amela Heras  | Ministerio de Sanidad y Consumo, Spain  |
| Susan Klein         | Reader, The Aberdeen Centre for Trauma Research, at the Robert Gordon<br>University, Aberdeen   |
| Anica Kos           | Director of the WHO Collaborative Center for Child Mental Health at the<br>Slovene Foundation in Ljubljana, Slovenia  |
| Frank McManus       | Group Captain RAF<br>Defence Consultant Adviser in Psychiatry<br>Ministry of Defence, UK<br>February-April 2007   |
| Ann Norwood         | Senior Analyst<br>Office of Preparedness and Emergency Operations (OPEO)<br>Office of the Assistant Secretary for Preparedness and Response (OASPR)<br>Department of Health and Human Services  |
| Geoff Reid          | Group Captain, RAF<br>Defence Consultant Adviser in Psychiatry, Ministry of Defence, UK   |
| Magda Rooze         | Director of the Impact Foundation, the Dutch Knowledge and Advice Centre<br>for Postdisaster Psychosocial Care in Amsterdam, the Netherlands  |
| Edita Stok          | Counsellor to the Government at the Ministry Of Health, Ljubljana, Slovenia<br>Chair, Joint Medical Committee, NATO   |

**The Guidance Development Editorial Group**

The members of the Guidance Development Editorial Group that reviewed the text were:

- |                     |   |
|---------------------|---|
| Penny Bevan         | Director, Emergency Preparedness Division,<br>Department of Health, England<br>Civilian Representative of the UK on the Joint Medical Committee, NATO<br>Chair of the Guidance Development Advisory Group   |
| Richard Williams    | Professor of Mental Health Strategy, University of Glamorgan<br>Consultant Child and Adolescent Psychiatrist, Gwent Healthcare NHS Trust<br>Scientific Adviser on Psychosocial and Mental Health to the Department of Health<br>Expert Adviser to the Guidance Development Advisory Group |
| Verity Kemp         | Project Manager, Review of NHS Emergency Planning Guidance,<br>Emergency Preparedness Division, Department of Health, England<br>Project management support to the Guidance Development Advisory Group  |
| David Alexander     | Director of the Aberdeen Centre for Trauma Research, at the Robert<br>Gordon University, Aberdeen<br>Consultant-in-charge of the Traumatic Stress Clinic, Royal Cornhill Hospital,<br>Aberdeen  |
| Jamie Hacker Hughes | Head of Defence Clinical Psychology, Ministry of Defence, UK<br>Honorary Senior Lecturer in Military Psychology, King's College London  |
| Magda Rooze         | Director of the Impact Foundation, the Dutch Knowledge and Advice Centre<br>for Postdisaster Psychosocial Care in Amsterdam, the Netherlands  |

## **ANNEX H TO: DESIGNING, DELIVERING AND MANAGING PSYCHOSOCIAL SERVICES FOR PEOPLE INVOLVED IN MAJOR INCIDENTS, CONFLICT, DISASTERS AND TERRORISM**

### **THE RESEARCH ASSESSMENT TEAM COMMISSIONED FROM THE ABERDEEN CENTRE FOR TRAUMA RESEARCH**

Professor David A Alexander MA(Hons), CPsychol, PhD, FBPS, FRSM, (Hon)FRCPsych  
Director, The Aberdeen Centre for Trauma Research

Dr Susan Klein MA(Hons), PhD, Cert COSCA  
Reader, The Aberdeen Centre for Trauma Research

Mrs Denise Bolsover BSc(Hons)  
Research Fellow, The Aberdeen Centre for Trauma Research

Mrs Fiona Bakke  
Research Secretary, The Aberdeen Centre for Trauma Research

### **THE METHOD OF WORK OF THE RESEARCH ASSESSMENT TEAM**

#### **Phase 1**

The team searched the literature through CINAHL (including MEDLINE), OVID, PILOTS and SCOPUS. The keywords used included the following: adjust\*, bereave\*, biochemical, bioterrorism, CBRN, children, communication, community, competenc\*, crisis, debrief\*, disaster planning, disaster, disorder\*, distress, elder\*, emergency, famil\*, flooding, geriatric, ger\*, health, influenza, leadership, major disaster, major incident, management, mass casualty, media, mental, military, morale, old\*, pandemic, planning, post-deployment, post-traumatic, preparedness, psycho\*, psychological, psychosocial, PTSD, public, public health, resilience, resource\*, SARS, social, stress, surge capacity, terror\*, terrorism, training, trauma, united kingdom, and young.

#### **Phase 2**

Phase 1 left the Research Assessment Team with the clear opinion that the disaster field has generated evidence of very variable quality for legitimate reasons. Also, the world literature is now very extensive indeed.

Therefore, the team adopted the following criteria to choose the papers and other sources for further assessment:

- The papers and articles appear in peer-reviewed journals;
- The papers and articles are written by recognised authorities in the field (including clinicians, researchers, other academics, and administrators); or
- The sources are existing guidelines, models of disaster response, and related documents that are in the public domain.

#### **Phase 3**

In Phase 3, the team prepared summaries of key material for the strategy team, consisting of the Project Leader and Project Manager, who used them to inform the guidance that was written by them.

#### **Phase 4**

The project assembled to consider the first draft of this guidance during which some key questions emerged. In Phase 4, the Research Assessment Team sought the personal opinions of the eminent professionals, who are listed below, in order to illuminate interpretation of the evidence and to benchmark matters relating to best strategic and operational practice. In summary, therefore, the material on which this guidance is based is evidence-informed and eminence-based.

NATO/EAPC UNCLASSIFIED

