FOURTH EDITION

MAJOR INCIDENT MEDICAL MANAGEMENT AND SUPPORT

THE PRACTICAL APPROACH AT THE SCENE

WILEY Blackwell

Major Incident Medical Management and Support

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Advanced Life Support Group

EDITED BY

Tony Gleeson

Kevin Mackway-Jones

WILEY Blackwell

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Foreword to fourth edition

When the MIMMS course was developed in the early 1990s, the aim was to produce a course for healthcare professionals which used a simple structured system to respond to major incidents, to improve the quality of the health response at incidents and to integrate with the responses provided by other emergency services such as the fire and rescue service and the police. Indeed, concepts which were introduced in those early days have been adapted and used by the other services, METHANE as an acronym for declaring a major incident being a good example. Other countries were quick to recognise the importance of a structured health response at the scene and adapted the MIMMS generic concepts for use in their jurisdictions. Australia, Japan, Lithuania, the Republic of Ireland, Sweden and Switzerland have all adapted the principles and integrated them into their major incident responses. The MIMMs principles are in use in 15 countries and have been taught to over 22 150 candidates.

That structured system has remained an important part of major incident planning and response over the last 25 years, being used in many different responses including the 7/7 London Bombings (2005), the London Bridge Attack (2017) and the Manchester Arena Bombing (2017) to name but a few. Indeed, as I write we are still responding to the Covid-19 pandemic which, as a protracted major incident, uses many of the skills taught to candidates.

The principles have also been further developed and expanded by various organisations such as the Joint Emergency Services Interoperability Programme to produce the JESIP principles, joint decision model, logging, IIMARCH template and shared situational awareness amongst responding agencies and the National Ambulance Resilience Unit who developed command education and tabletop exercise writing and facilitation.

The fourth edition of the *Major Incident Medical Management and Support* (MIMMS) pre-hospital manual is still true to its origins, providing a succinct, easily readable text which conveys the key major incident messages for healthcare professionals. It provides an update on triage, a greater focus on the operational response and chapters on specialist areas such as planning for mass gatherings and firearms incidents. It is designed to provide the knowledge needed for a healthcare professional to understand and respond to an incident. The manual is the textbook for the MIMMS course.

I would commend the course and this manual to you.

Stephen Groves OBE
Director of EPRR
NHS England and NHS Improvement

Preface to fourth edition

'To fail to plan is to plan to fail'

Benjamin Franklin

When the authors of the first edition of this manual sat down 25 years ago, they had a vision to improve the knowledge and training of healthcare professionals in responding to major incidents in the pre-hospital environment.

They developed a manual and a course to train healthcare responders to respond to incidents in a professional way which would complement the other emergency services and work 'hand-in-glove' with them to improve the outcome for those casualties who were affected.

That their vision would provide a basis for a change that is still in use today, that has been used at some of the most difficult of emergency responses worldwide, is testament to the importance of that initial work they did to develop that MIMMS course.

The fourth edition of this manual seeks to expand on their seminal work and to bring it up to date. The manual can be used as a stand-alone text but is designed to complement a MIMMS course which has online learning components and face-to-face teaching and learning, to provide a comprehensive underpinning of the core knowledge needed to respond to an incident appropriately.

Tony Gleeson
Manchester 2022

Preface to first edition

'*It couldn't happen to us*' is not an acceptable excuse for being ill-prepared to deal with a major incident. A major incident may occur at anytime, anywhere.

Guidelines exist for the health services response to a major incident and these cover both the hospital and the scene. Each hospital must have its own Major Incident Plan and this should be regularly exercised. How well do we teach the principles of the major incident response to our medical and nursing staff? How much do we learn from our exercises? Are mistakes being repeated?

It is no longer acceptable to approach the scene of a major incident as an enthusiastic amateur. The transition from working in the emergency department to working at the scene does not simply involve putting on a reflective jacket and a pair of Wellington boots. The medical service must, like the police, fire and ambulance services, be skilled in command and communications, and have experience of the pre-hospital environment. This is in addition to coping with the enormous strain that mass casualties will place on the medical resources. To do this requires knowledge and training.

This manual, although a stand-alone text, has been prepared to accompany a course structured to teach the principles of management and support at a major incident to health service staff. This course will prepare both the Incident Officers, and other members of the scene medical response, for their duties in the event of a major incident.

T. J. Hodgetts
K. Mackway-Jones
Editorial Board
Manchester 1994

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The authors continue to be grateful for the input of Mary Harrison and Helen Carruthers for their excellent line diagrams that accompany the text and would also like to acknowledge the input of Gareth Davis, Fiona Jewkes, Ian Maconochie, Graeme Spencer, Simon Swallow, Alison Walker and Ian Wilkinson to previous editions of the manual. The authors are grateful that their excellence provided a firm foundation to allow the text and diagrams to be developed further and expanded on, in this fourth edition.

The authors would like to especially thank Kirsten Baxter, Kate Denning and Julie Oliver of ALSG and the staff of Wiley-Blackwell for their on-going support and invaluable assistance in the production of this text.

Finally, we would like to express our deepest gratitude to Dr Kevin Mackway-Jones, who has decided to step down as chair of the working group. His contribution and dedication to the development of MIMMS from its inception to the current day has been remarkable and will continue to have influence in the years to come. We wish him the best of luck in his future endeavours.

Tony Gleeson
Chair, MIMMS Working Group

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Clinicians practising in tropical and under-resourced healthcare systems are advised to read *International Maternal and Child Health Care – A Practical Manual for Hospitals Worldwide* (www.mcai.org.uk) which gives details of additional relevant illnesses not included in this text.

Updates

The material contained within this book is updated on a 5-yearly cycle. However, practice may change in the interim period. We will post any changes on the ALSG website, so we advise that you visit the website regularly to check for updates (www.alsg.org/uk/MIMMS). The website will provide you with a new page to download.

References

All references are available on the ALSG website www.alsg.org/uk/MIMMS.

Online feedback

It is important to ALSG that the contact with our providers continues after a course is completed. We now contact everyone 6 months after their course has taken place asking for online feedback on the course. This information is then used whenever the course is updated to ensure that the course provides optimum training to its participants.

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PART I
Introduction

CHAPTER 1

Introduction

Learning outcomes

After reading this chapter you will be able to:

- Describe what defines a major incident
- Discuss the classifications of a major incident

1.1 What is a major incident?

In health service terms a major incident can be defined as any incident where the location, number, severity or type of live casualties requires extraordinary resources. The *number of casualties* alone does not determine a major incident for the health services. Thirty minor injuries that self-evacuate from the scene may be managed effectively by one hospital without the requirement for additional pre-hospital or hospital resources. The same number of *severely injured* casualties will almost certainly require extraordinary resources. Certain *medical resources* may be very scarce (for example, intensive care beds) or regionalised (for example, burns surgery), and small incidents with relatively few casualties can therefore require early involvement of regional or national resources. Where there are *large numbers of dead with few or no survivors*, there is often no major incident for the health services. An *incident in a remote or difficult* to access location may also demand greater resources to effect the rescue of casualties.

Factors that influence the declaration of a major incident for the health service

- Number of casualties
- Severity of injury
- Numbers of medical responders
- Access to medical resources
- Location (urban vs rural)

In a similar vein, *a major incident for one emergency service may not be a major incident for all other services*. Where fire or chemical spillage is the predominant issue, without risk to life, a major incident response will be required from the fire and rescue service without the same level of response from other services. Where public disorder is the predominant problem, the principal response will be from the police. The following examples illustrate this point:

On 2 September 1666 a fire started in a baker's shop on Pudding Lane; it lasted 4 days and left 80% of London's buildings in ruins. A disaster on such a scale is hard to imagine and would certainly overwhelm the resources of the modern fire and rescue service. In fact, only a handful of people died in this, the Great Fire of London.

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