# Contents

### Introduction

# Abbreviations and acronyms

#### Contributors

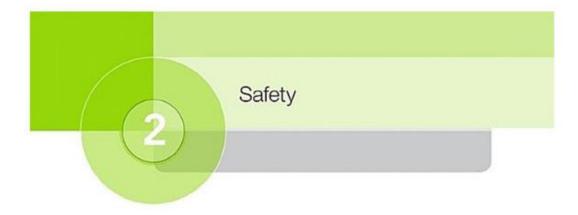
- 1 Trauma: A global perspective
- 2 Safety
- 3 The incident scene
- 4 Communication in pre-hospital care
- 5 Mechanism of injury
- 6 The primary survey
- 7 Catastrophic haemorrhage
- 8 Airway management
- 9 Chest injuries
- 10 Shock
- 11 Entrapment and extrication
- 12 Head injury
- 13 Spinal injuries
- 14 Musculoskeletal trauma
- 15 Analgesia, sedation and emergency anaesthesia
- 16 The injured child

- 17 Trauma in pregnancy
- 18 Trauma in the elderly
- 19 Burns
- 20 Firearms, ballistics and gunshot wounds
- 21 Blast injuries
- 22 Trauma management in the austere pre-hospital environment
- 23 Mass casualty situations
- 24 Retrieval and transport
- 25 Handover and documentation
- 26 Law and ethics in pre-hospital care
- 27 Research and audit in pre-hospital care
- 28 Training in pre-hospital emergency medicine (PHEM)
- 29 Trauma systems

Annex A: Practical procedures in thoracic trauma

Annex B: Traumatic cardiac arrest

Index



#### **OBJECTIVES**

After completing this chapter the reader will

- Be aware of the full range of hazards associated with responding to an incident
- Understand the simple steps which will reduce the hazards associated with an incident scene
- Be aware of the importance of honest and open review of adverse events and the need to continuously update practices in the light of lessons learnt

# INTRODUCTION

The aim of pre-hospital emergency care is to deliver prompt clinical care to patients within a robust and safe framework. A robust clinical governance framework ultimately keeps everyone safe. Much is made of the need for clinical safety in today's modern healthcare system and this is entirely correct. However, some aspects of safety can be overlooked by the pre-hospital practitioner, particularly

when they are faced with the multiple challenges of a critically ill patient. Nevertheless, the pre-hospital environment is challenging and some degree of risk must be considered acceptable: an obsessively safe culture has to be avoided and clinical effectiveness maintained.

It is all too easy to be drawn on arrival into dealing with the clinical aspects of the situation with the result that the pre-hospital practitioner becomes too patient centred too soon: complete focus on dealing with the patient can make the practitioner unsafe as scene safety issues develop around them unnoticed. It is therefore essential that the practitioner has a structure for dealing with these aspects of safety whilst working.

#### GETTING TO THE SCENE SAFELY

No emergency call is so urgent as to justify an accident. Emergency care providers must comply with the appropriate road traffic acts and avoid putting themselves, other road users and pedestrians at risk. Wherever possible the location of the incident and route to it should be established before responding. Every responder should drive within their capabilities and must take account of road, weather and ground conditions. Response driver training is mandatory. However tempting the alternative might be, it is essential to focus on the journey not the scene, making steady progress without delay, and using headlights and warning lights where permitted.

#### PRACTICE POINT

Get to the scene safely – do not take risks, do not become a casualty!

When close to the scene, it should be approached slowly, with awareness of possible debris or patients on the roadway. Police instructions should be followed and access or egress must not be obstructed by either vehicle or equipment. Arrival should be notified to control, noting the time. If first on scene, warning lights should

be left on; if the other emergency services are present, the warning lights can be switched off and the vehicle parked beyond the incident. Wherever the vehicle is parked, it must be secured. Theft from emergency services vehicle is far from unknown. Having arrived, it is essential to identify the resource leaders and to make oneself known to them. Appropriate personal protective equipment must be worn and it is vital to look out for hazards including moving traffic.

## THE SAFETY 123

There are three facets of safety (see Box 2.1).

This is known commonly as *safety 123*. This 123 approach implies a linear progression, starting from the point of arrival at the scene (Figure 2.1). However, attention to safety actually starts well before the practitioner even begins work and continues throughout the care offered, beyond pre-hospital care and into the hospital handover phase.

# BOX 2.1: Facets of Safety

- Safety of the practitioner
- Safety of the scene
- Safety of the patient

#### PRACTICE POINT

Hazards can change over time.