

Guidelines for Multiple Burn Casualties

March 2015

Introduction

The Guideline for Multiple Burn Casualties should be read in conjunction with the State Health Emergency Response Plan (SHERP 2013), which provides overarching direction to the entire Victorian health sector, the Department of Health and Human Services and other government sectors in the event of a health-related emergency.

The Guideline for Multiple Burn Casualties outlines the response strategies required for an incident resulting in multiple burn casualties in Victoria. In particular, it describes the means by which the State's two burn services will support and respond to an incident involving multiple burn casualties.

This Guideline will be implemented when a coordinated response is required to manage a large number of severe burn patients in Victoria, and also in response to activation of the AUSTRUMAPLAN Severe Burn Injury Annex or OSMASSCASPLAN when a multiple burn casualty incident in another state, territory or overseas may require transfer of burn injured patients to Victoria for specialist burn care.

Background

Victoria has two specialist burn services co-located with two of the state's Major Trauma Services (MTS) at The Alfred Hospital (adults) and The Royal Children's Hospital (paediatrics).

Optimal care for severe burn injuries is best delivered in specialist burn services. In the event of an incident involving multiple burn casualties the underlying principle of SHERP is that severe burns patients will be stabilised and promptly transferred to specialist burn services for definitive care as soon as practicable. This is standard practice within the Victorian State Trauma System.

Burn care is extremely resource intensive. Existing capacity to treat patients with major burn injuries is exceeded when relatively small numbers of patients with severe burn injury require admission. An incident causing five or more severe burn casualties is likely to require coordination of additional resources within the burn services.

Pre-hospital multiple casualty burn care

Multiple casualty burns patients require triage, resuscitation and transfer to the most appropriate hospital. All patients who meet the Victorian Burn Service Referral Criteria (Appendix 1), will be treated in Victoria's two specialist burn centres, and transferred in accordance with the State Trauma Guidelines (available from <http://www.health.vic.gov.au/trauma>).

Triage will follow standard major incident procedure as outlined in Major Incident Medical Management System (MIMMS) training, recognising that patients with severe burns may initially appear quite well. Care is required to ensure that such casualties are not triaged as 'walking wounded', leading to delayed treatment. Airway obstruction and breathing problems associated with inhalation may have delayed onset.

At least one member of any in-field medical response to a multiple casualty burns incident should be experienced in assessment and early management of patients with severe burn injuries. The Health Commander or Field Emergency Medical Coordinator (FEMC) will liaise with the on call MTS Burns Consultant as required for clinical advice and to determine the timely and appropriate transfer of the burn injured as outlined in SHERP.

In major incidents where transfer to a specialist burn service is delayed and involves significant numbers of burn injuries, the State Health Coordinator can request expert burn assistance at the scene using the activation protocol for Victorian Medical Assistance Teams (VMAT). This request should be made to the MTS Hospital Commander, who will liaise with the on call Burns Consultant of the MTS.

State-wide hospital care

All hospital Code Brown plans, as described in Australian Standard AS 4083-2010, should consider the management of multiple burn casualties. The initial assessment and stabilisation of burns patients should follow the Victorian State Burns Clinical Practice Guidelines (<http://www.vicburns.org.au>) in consultation with the on-call Burns Consultant at the MTS.

Major trauma burn service response

Activation of Code Brown response

Once notified of an incident, the MTS will activate their Hospital Commander who will oversee all aspects of the health service's response to the incident and act as the primary contact point for all incoming and outgoing communications.

Burns assessment team

The State Health Coordinator, in consultation with the MTS Hospital Commander and the on call Burns Consultant, may deploy a Burns Assessment Teams (BAT) to provide expert advice and early intervention:

- As part of a VMAT at the incident scene where transfer to the specialist burn service is delayed
- As a consultative service at another hospital temporarily managing burn patients until they can be transferred

The BAT composition will reflect the site and nature of the incident and include one burn surgeon and one senior burn nurse with the possibility of more members depending on the scale of the incident. In-field deployment of a BAT will occur following the procedures applicable to VMATs regarding pre-deployment training, activation, protective clothing, equipment, command and reporting arrangements in order to assure team members preparedness and safety.

Management of Walking Wounded

In a multiple casualty incident, some people are likely to be treated and released at the scene or in emergency departments on the day of the disaster. These patients require appropriate follow-up burn care, as burn injuries evolve.

Primary Health Care Clinics (General Practice, see www.health.vic.gov.au/sherp) are expected to have appropriate resources and equipment to manage burn injuries in the 'walking wounded'. Support for clinicians involved in ongoing management of minor burn injuries is available at the Victorian Clinical Practice Guidelines website at www.vicburns.org.au.

Referrals to Victoria's Burn Services for Outpatient Burn Care will continue as per normal processes outlined on the Victorian Clinical Practice Guidelines website at www.vicburns.org.au. Burn Service Code Brown response will incorporate an increased outpatient capacity to accommodate additional walking wounded patients.

Recovery phase

Recovery includes those processes that begin after the initial impact has been stabilised and extends until normal business has been restored. The MTS Burn Service response to the Recovery Phase is beyond the scope of this document.

Escalation Arrangements

Transfer to a 'non burn service hospital'

Where the Hospital Commander of the MTS burns service believes that the capacity of the hospital will be unlikely to meet the expected demand, the Hospital Commander (in consultation with the on call Burns Consultant) will advise the State Health Coordinator and determine revised transfer criteria. The State Health Coordinator will consult with the Hospital Commander of another MTS or the RTS closest to the incident and the MTS (burns) Hospital Commander to determine an appropriate distribution plan. The State Health Coordinator will provide this advice to the State Health Commander for communication to the Incident Health Commander.

Activation of the Severe Burn Injury Annexe of the AUSTRAMAPLAN

If the incident involves a significant number of severely burn injured patients requiring extensive resources in both the immediate, acute and recovery phase, consideration of the transfer of burn patients to interstate burn services may be indicated. Alternatively a request for human resource (burns medical or nursing) assistance from interstate may be made.

The decision to request activation of the AUSTRAMAPLAN will be made by the State Health and Medical Commander (SHMC) in liaison with the Emergency Management Commissioner (EMC), on the advice of the State Health Coordinator and the State Health Commander.

Should patients need to be transferred interstate, activation of the Severe Burn Injury Annexe of the AUSTRAMAPLAN is required. Authority to activate the Severe Burn Injury Annexe of the AUSTRAMAPLAN rests with the Chair of the Australian Health Protection Principal Committee (AHPPC) (or nominated delegate). The Chief Health Officer (CHO) would advise AHPPC, and the EMC would advise Emergency Management Australia (EMA).

Transfer of multiple burn injured patients to Victoria

Should patients need to be transferred to Victoria from another state, territory or overseas under AUSTRAMAPLAN Severe Burn Injury Annexe or OSMASSCASPLAN, a request would be made by the Chair of AHPPC to the Victorian CHO. The CHO would advise the SHMC and the State Health Coordinator. The State Health Coordinator would consult the MTS Hospital Commander (who would liaise with the on call Burns Consultant of the MTS), and the State Health Commander to determine an appropriate distribution plan.

Authorisation

This document is endorsed by the Victorian Department of Health and Human Services as the standard operating procedure to be followed in the event of such a disaster.

The Guideline for Multiple Burn Casualties has been developed as an Annex to the State Health Emergency Response Plan and details the procedures for managing a disaster involving multiple burn injuries.

Appendix 1

Victorian State Burns Service Referral Criteria

Victorian State Trauma System Major Trauma Transfer Criteria (time critical transfer):

- Burns greater than 20% total body surface area (TBSA)
- Inhalational injury
- Electrical burns > 1000 volts or lightning injury

People with the following injuries should be transferred to the states burn services (not time critical):

- Burns greater than 10% TBSA
- Full thickness burns greater than 5% TBSA
- Burns to special areas: face, ears, hands, major joints, feet and genitalia
- Electrical burns >240 volts or arc explosion
- Chemical burns
- Circumferential burns to limbs or chest
- Burns with associated trauma
- Burns in the very young or older people
- Burn injury in patients with pre-existing illness or disability that could adversely affect patient care and outcomes
- Suspected non accidental injury in children or older people
- Small surface area burns in people with social problems, including children at risk
- Burns occurring in pregnant women
- Burn injuries which are slow to heal or about which the referring unit is concerned