

# **Technical Note 10.40/01**

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## **Medical Support**

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# **IMAS**

International Mine Action Standards

### **Warning**

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## **Foreword**

Management practices and operational procedures for humanitarian mine action are constantly evolving. Improvements are made, and changes required, to enhance safety and productivity. Changes may come from the introduction of new technology, in response to a new mine or UXO threat, and from field experience and lessons learned in other mine action projects and programmes. This experience and lessons learned should be shared in a timely manner.

Technical Notes provide a forum to share experience and lessons learned by collecting, collating and publishing technical information on important, topical themes, particularly those relating to safety and productivity. Technical Notes complement the broader issues and principles addressed in International Mine Action Standards (IMAS).

Technical Notes are not formally staffed prior to publication. They draw on practical experience and publicly-available information. Over time, some Technical Notes may be 'promoted' to become full IMAS standards, while others may be withdrawn if no longer relevant or if superseded by more up-to-date information.

Technical Notes are neither legal documents nor IMAS. There is no legal requirement to accept the advice provided in a Technical Note. They are purely advisory and are designed solely to supplement technical knowledge or to provide further guidance on the application of IMAS.

Technical Notes are compiled by the Geneva International Centre for Humanitarian Demining (GICHD) at the request of the United Nations Mine Action Service (UNMAS) in support of the international mine action community. They are published on the IMAS website at ([www.mineactionstandards.org](http://www.mineactionstandards.org)).

## **Introduction**

IMAS 10.40 specifies the minimum requirements for medical emergency preparedness during mine action operations. However, the clinical content of IMAS 10.40 has not been revised since originally drafted in 2004, and the wording permits significant variance in terms of the clinical competencies displayed by medical staff.

As the mine action sector matures, operators are increasingly looking for more comprehensive, and context appropriate, guidance against which to assess and train their staff. There have also been clinical advances and doctrinal shifts in the pre-hospital management of explosive trauma since 2004 that should be incorporated into mine action medical practice and guidelines where appropriate and feasibly practicable.

This Technical Note aims to provide additional context specific guidance, informed by current pre-hospital trauma practice, on the provision of appropriate medical cover within the mine action context which can be used for assessment and standardisation of medical support to mine action programmes.

This Technical Note is informed heavily by the Committee for Tactical Emergency Casualty Care (C-TECC 2016) guidelines which are a “set of best practice treatment guidelines for trauma care in the high-threat prehospital environment. These guidelines are built upon critical medical lessons learned by US and allied military forces over the past 15 years of conflict. They are appropriately modified to address the specific needs of civilian populations and civilian EMS practice.”

## **1. Scope**

This document provides guidance on the recommended clinical competencies, scope of practice and sequence of care recommended for all staff involved in the accident response process. This document is designed to be read in conjunction with, and augment, the guidance contained in IMAS 10.40.

The use of this document should enable mine action operators to improve the efficacy of medical responses to traumatic injuries and provide a tool for assessing the personal development needs of staff.

## **2. References**

A list of normative references, to which reference is made in this Technical Note and which therefore form part of the provisions of this Technical Note, can be found in Annex A: (Normative) References.

Recommendations for each classification of care provider, to which this Technical Note makes reference, are tabulated in Annex B: (Informative) Clinical Competency by Provider Level, Annex C: (Informative) Equipment Familiarity by Provider Level, and Annex D: (Informative) Recommended Drugs List

Additional articles detailing the evolution of contemporary military medicine, that informs the C-TECC guidelines, can be found in Annex E: (Informative) References.

## **3. Terms, Definitions and Abbreviations**

The term 'CASEVAC Destination' refers to a medical facility with the capacity to appropriately stabilise the casualty's condition. E.g. trauma casualties will often require transport to a facility capable of relevant emergency surgical interventions, whereas a local clinic may suffice for casualties with more minor injuries. The chosen evacuation destination should be appropriately matched to the casualty's injuries and condition to meet the definition of an appropriate 'CASEVAC Destination.'

The term 'Care Provider' refers to personnel employed by mine action organisations that are authorised to deliver context appropriate medical care within their defined scope of practice. Care providers can be classified as 'Basic Care Providers,' (BCPs) 'Intermediate Care Providers,' (ICPs) or 'Extended Care Providers' (ECPs).

The term 'Clinical Competency' refers to a care provider's ability to perform a given medical intervention safely and effectively. Emphasis is placed on practical performance; therefore, demonstrable competency must be proven irrespective of prior existing certification.

The term 'Medical Professional' refers to personnel that have undergone formal medical training that is endorsed by a nationally or internationally recognised medical authority or

professional body. Only medical professionals are appropriately knowledgeable or experienced to fulfil the role of ECPs; examples include paramedics, nurses, doctors, etc.

The term 'Casualty Evacuation' (or 'CASEVAC') refers to all actions taken to move and treat the injured party from the point of injury until handover to CASEVAC destination.

The term 'Medical Treatment Area' refers to a designated location, or locations, within or in close proximity to a clearance task that has clear, safe, access and is sufficiently spacious to facilitate the safe, unhindered, provision of emergency medical care. The Medical Treatment Area may be referred to by different terms in organisational SOPs, however the sentiment, whether called a 'Medical Treatment Area,' 'Medic Point,' or otherwise, is the same.

## **4. Compliance**

In this Technical Note, the words 'should' and 'may' are used to convey the intended degree of compliance. This use is consistent with the language used in ISO standards and guides.

In IMAS, 'shall' is used to indicate requirements, methods or specifications that are to be applied in order to conform to the standard. The term 'shall' is not typically used within Technical Notes, however due to the subject of this Technical Note the term 'shall' is used in order not to understate the importance of certain recommendations.

'Should' is used to indicate the recommended requirements, methods or specifications. 'May' is used to indicate a possible method or course of action.

## **5. Clinical Oversight**

Mine action organisations should establish a framework for the formal provision of structured clinical oversight within their operational management structure.

The provision of structured clinical oversight will better enable mine action organisations to supervise and support their deployed care providers by providing an enhanced capability to:

- I. Perform medical needs assessments at both the programmatic and global level
- II. Liaise and coordinate with national health authorities
- III. Write and maintain informed internal clinical practice guidelines
- IV. Train and assess deployed care providers in accordance with both national laws and regulations and internal clinical practice guidelines
- V. Perform internal quality assurance of accident response planning and procedures
- VI. Collate and evaluate internal accident records to inform evidence-based practice

To achieve an appropriate level of clinical oversight, mine action organisations should engage medical professionals with relevant and appropriate training and experience on an employment or consultative basis.

## **6. Clinical Competencies**

The tables in Annexes B, C and D outline the clinical competency and equipment familiarity recommendations for the management of the foreseeable injuries sustained during mine action operations and provide mine action operators with a framework against which to assess the clinical capacity of their care providers and identify development and training requirements.

In order for certification as a basic, intermediate, or extended care provider, the training provided shall enable the recipient to perform all of the competencies marked “should” for the respective level of care provider as tabulated in Annexes B and C, be formally assessed, and (where appropriate) be verified by the local authorities.

Mine action organisations shall strive to certify their staff as care providers of the level relevant to their role and sufficient to meet organisational requirements.

### **6.1. Training and Assessment**

Mine action organisations will not typically have the capacity to deliver extensive formal medical training. However, mine action organisations should be able to perform practical training and assessment of all of the individual competencies marked “should,” where relevant to the level of care provider deployed, as tabulated in Annexes B, C and D. This training and assessment capacity would typically be provided by the same medical professionals providing clinical oversight, but may alternatively be provided by an external resource.

### **6.2. Maintenance of Clinical Competency**

Care providers supporting clearance operations may suffer from skill fade. In addition to refresher training and the conduct of regular CASEVAC drills containing casualty simulations with a bona fide clinical component, where practicable it is recommended that mine action organisations also seek to arrange appropriate clinical placements within healthcare facilities.

## **7. Care Provider Levels**

Mine action care providers may be classified as:

- I. Basic Care Providers (BCPs)
- II. Intermediate Care Providers (ICPs)
- III. Extended Care Providers (ECPs)

### **7.1. Basic Care Providers**

All field personnel involved in survey and clearance activities should be trained to the level of Basic Care Provider.



The clinical competencies recommended for BCPs are informed by the Committee for Tactical Emergency Casualty Care (C-TECC 2016) “Guidelines for First Care Providers” and the US Department of Homeland Security Stop the Bleed initiative (DHS 2018).

## **7.2. Intermediate Care Providers**

The designated person/s responsible for the initial formal emergency medical response should be trained to the level of Intermediate Care Provider. ICPs may act as dedicated standby medical personnel or fulfil a dual role in daily clearance operations.

All survey and clearance teams should have access to at least one ICP. In situations where there are multiple teams working in close proximity, one ICP may provide medical cover to more than one team. ICPs providing medical cover to multiple teams should be deployed in a dedicated standby role and be positioned in such a manner that they are able to respond to any of the teams under their jurisdiction within the normal time frame prescribed by the organisation’s SOP.

It should be understood that not all local medical professionals will automatically meet the recommended clinical competency criteria for ICPs.

It is recommended that members of clearance personnel with a supervisory capacity are also trained as ICPs.

In the event that there are no dedicated standby medical personnel and the ICPs are fulfilling a dual role in daily clearance, it is recommended that 1 in 4 members of clearance personnel are trained to the level of ICP and that there are at least 2 ICPs present on all tasks.

The clinical competencies encompassed by the ICP are informed by the Committee for Tactical Emergency Casualty Care (C-TECC 2016) “Guidelines for First Responders with a Duty to Act” and the World Health Organisation “Guidelines for essential trauma care” (WHO 2004) for Generalists.

## **7.3. Extended Care Providers**

The term Extended Care Provider refers to experienced medical professionals that have undergone formal and relevant medical training that is recognised by a national medical authority, and therefore have a much more comprehensive underpinning knowledge and associated scope of practice than ICPs.

The following guidance is provided regarding the deployment of ECPs:

- I. The provision of an ECP should be considered to support teams operating in circumstances where the provision of an ECP is likely to improve casualty outcomes
  - a. If an organisation determines the provision of an ECP is warranted following an internal assessment of the perceived foreseeable injuries and/or delayed complications, the organisation should strive to deploy an ECP in a manner that enables the ECP to rendezvous with the casualty en-route within a sensible time period

The clinical competencies encompassed by the ECP are informed by the Committee for Tactical Emergency Casualty Care (C-TECC 2017) “Guidelines for BLS/ALS Medical Providers,” the World Health Organisation “Guidelines for essential trauma care” (WHO 2004) for Specialists (where appropriate for the pre-hospital context), and the Clinical Practice Guidelines (JRCALC 2016) for Paramedics.

## **8. CASEVAC and Sequencing of Care**

The CASEVAC process is intended to maximise casualty survivability by ensuring effective and timely casualty extraction, treatment, and evacuation whilst managing associated contextual risks.

Due to the contextual changes throughout the various points on the CASEVAC timeline it is helpful to split the CASEVAC process into 3 distinct phases, each with its own specific casualty care requirements:

- I. Phase 1: Hazardous Area Extraction
- II. Phase 2: Care on Site
- III. Phase 3: Care in Transit

### **8.1. Phase 1: Hazardous Area Extraction**

Hazardous Area Extraction is the first phase of the CASEVAC process and covers all activities undertaken from the point of injury until the casualty is delivered to the Medical Treatment Area.

The priority in the Hazardous Area Extraction is for the trained rescue party to gain, or create, safe access to the casualty and then rapidly extract the casualty to the Medical Treatment Area.

Due to the limited safe space within clearance lanes, and the understanding that many casualties will require treatment beyond the scope of the BCP trained clearance personnel, non-time critical activities, e.g. bandaging and spinal immobilisation, should not be performed until the Care on Site phase when the casualty is under supervision of the receiving ICP/ECP care provider in an appropriately sized Medical Treatment Area.

In certain circumstances dictated by organisational SOPs, and where safe to do so, the receiving ICP/ECP may rendezvous with the rescue party before transfer to the Medical Treatment Area to delegate and/or otherwise assist with casualty care during the Hazardous Area Extraction phase.

The rescue party should aim to complete the Hazardous Area Extraction, within 5 minutes of initiation of the accident response.

It may not be possible to meet the 5-minute target in situations where extensive clearance is required to gain safe access to the casualty, and/or in situations with other hazards that need to be managed first, such as CBRN or tactical considerations.

The principles of hazardous area extraction should also be applied to accidents that occur outside of clearance tasks, e.g. vehicle collisions, where associated hazards such as fires or traffic may prohibit the safe provision of care at, or close to, the point of injury.

The scope of care during the Hazardous Area Extraction phase is informed by the scope of care during the “Direct Threat Care” phase within The Emergency Care Guidelines (C-TECC 2016).

## **8.2. Phase 2: Care on Site**

Care on Site is the second phase of the CASEVAC process and covers all activities undertaken from when the casualty is delivered to the Medical Treatment Area until they are loaded and ready for transport.

The attending care providers should aim to complete the Care on Site phase, performing holistic casualty assessment, time critical clinical interventions, and loading into the evacuation platform, within 15 minutes of receipt of the casualty at the Medical Treatment Area.

Trauma casualties will require treatment beyond the scope of the receiving on-site care providers, therefore time should not be wasted performing non-time critical clinical interventions that can be reasonably delayed and practicably performed in transit. This is especially important in time critical casualties and situations with short evacuation times.

Exceptions to this guidance include situations where the number of care providers enables non-time critical clinical interventions to be performed concurrently; the casualty's injuries and condition are such that it is not deemed a time critical medical emergency; and/or in circumstances where there are known bottlenecks in the CASEVAC chain (e.g. air evacuation platform response times mean that a prolonged Care on Site phase will not negatively affect arrival time to an appropriate CASEVAC destination.)

Failure to heed this advice will complicate, and delay, packaging and transport to a surgical facility which is needed to definitely manage traumatic injuries.

The scope of care during the Care on Site phase is informed by the scope of care during the “Indirect Threat Care” phase within The Emergency Care Guidelines (C-TECC 2016, 2017), the Clinical Practice Guidelines (JRCALC 2016) for Trauma Emergencies.

## **8.3. Phase 3: Care in Transit**

Care in Transit is the third and final phase of the CASEVAC process and covers all activities undertaken from when the casualty is loaded for transport until handover to an appropriate CASEVAC destination.

Clinical care should not stop during transport, the attendant care provider/s should deliver appropriate care in transit with an emphasis on continual monitoring and reassessment of the casualty's condition and the continued efficacy of previously performed interventions. The Care in Transit phase also provides the opportunity for the management of any remaining non-time critical conditions deferred during the Care on Scene phase.

The scope of care during the Care in Transit phase is informed by the scope of care during the "Evacuation Care" phase within The Emergency Care Guidelines (C-TECC 2016, 2017), the Clinical Practice Guidelines (JRCALC 2016) for Trauma Emergencies, and the Guidelines for essential trauma care (WHO 2004) for Generalists.

## Annex A: (Normative) References

- World Health Organisation (WHO) (2004), "Guidelines for essential trauma care," (accessed 30 November 2018) <[http://www.who.int/violence\\_injury\\_prevention/publications/services/en/guidelines\\_traumacare.pdf](http://www.who.int/violence_injury_prevention/publications/services/en/guidelines_traumacare.pdf)>
- Committee for Tactical Emergency Casualty Care (C-TECC) (2016) "Guidelines for First Care Providers," (accessed 30 November 2018) <<http://www.c-tecc.org/guidelines/civilian-first-care-provider>>
- Committee for Tactical Emergency Casualty Care (C-TECC) (2016) "Guidelines for First Responders with a Duty to Act," (accessed 30 November 2018) <<http://www.c-tecc.org/guidelines/first-responders-with-a-duty-to-act>>
- Committee for Tactical Emergency Casualty Care (C-TECC) (2017) "Guidelines for BLS/ALS Medical Providers," (accessed 30 November 2018) <<http://www.c-tecc.org/guidelines/als-bls>>
- United States Department of Defense Joint Trauma System (US DoD JTS) Committee on Tactical Combat Casualty Care (CoTCCC) (2018), "Tactical Combat Casualty Care Guidelines," (accessed 30 November 2018) <<https://www.deployedmedicine.com/market/11/category/43>>
- Joint Royal Colleges Ambulance Liaison Committee (JRCALC) (2016), "Clinical Practice Guidelines,"
- "Journal of Special Operations Medicine" (accessed 01 May 2018) <<https://www.jsomonline.org>>
- United States Department of Homeland Security (DHS) (2018) "Stop the Bleed" Initiative (accessed 01/10/2018) <<https://www.dhs.gov/stopthebleed>>

## Annex B: (Informative) Clinical Competency by Provider Level

Clinical Competency	Care Provider Level		
	BCP	ICP	ECP
<b>Safety</b>			
Scene Size-Up (Tactical/HAZMAT/Rescue/Enviro/Access/Traffic)	SHOULD	SHOULD	SHOULD
Personal Protective Equipment / Body Substance Isolation	SHOULD	SHOULD	SHOULD
CASEVAC procedures	SHOULD	SHOULD	SHOULD
<b>Diagnosis</b>			
Recognition of catastrophic bleeding	SHOULD	SHOULD	SHOULD
Mechanism of Injury (Mol) assessment (incl. HAZMAT/CBRN)	MAY	SHOULD	SHOULD
Triage	MAY	SHOULD	SHOULD
Primary survey (Rapid Trauma Survey)	MAY	SHOULD	SHOULD
C-Spine evaluation		SHOULD	SHOULD
Vital signs assessment	MAY	SHOULD	SHOULD
Secondary Survey	MAY	SHOULD	SHOULD
Handover	SHOULD	SHOULD	SHOULD
History taking		SHOULD	SHOULD
<b>Catastrophic Bleeding Control</b>			
Pressure application (direct and indirect)	SHOULD	SHOULD	SHOULD
Extremity tourniquet application	SHOULD	SHOULD	SHOULD
Wound packing	MAY	SHOULD	SHOULD
Pressure dressing application	SHOULD	SHOULD	SHOULD
Junctional tourniquet application	MAY	MAY	MAY
Tourniquet assessment/repositioning/conversion		SHOULD	SHOULD
Pelvic assessment and splinting		SHOULD	SHOULD
<b>Airway Management</b>			
Casualty positioning (lateral/lean forward/casualty preference)	SHOULD	SHOULD	SHOULD
Head-tilt/chin-lift (for use in conjunction with chest compressions)	MAY	SHOULD	SHOULD
Jaw thrust	MAY	SHOULD	SHOULD
Nasopharyngeal airways	MAY	MAY	SHOULD
Oropharyngeal airways	MAY	MAY	MAY
Supraglottic airway devices (e.g. i-Gel)		MAY	MAY
Manual suction		MAY	SHOULD
Bougie assisted surgical cricothyroidotomy		MAY	MAY
<b>Respiratory Management</b>			
Oxygen therapy		MAY	SHOULD
Manual ventilation	MAY	MAY	SHOULD
Rescue breaths (for use in conjunction with chest compressions)	MAY	MAY	MAY
Thoracic sealing, venting and maintenance	MAY	SHOULD	SHOULD
Needle thoracostomy		MAY	MAY
Surgical thoracostomy and blunt dissection			MAY
<b>Circulatory Management</b>			
Peripheral intravenous or intraosseous access		SHOULD	SHOULD
Chest compressions (de-emphasised in a trauma setting)	MAY	SHOULD	SHOULD
ACLS (including defibrillation equipment permitting)			SHOULD
Establishment of a chest drain			MAY
<b>Fracture Management</b>			
Splinting	MAY	SHOULD	SHOULD
Femoral traction		SHOULD	SHOULD

<b>Packaging and Transportation</b>			
Lifting and rolling	SHOULD	SHOULD	SHOULD
Stretcher transport	SHOULD	SHOULD	SHOULD
Spinal motion restriction	SHOULD	SHOULD	SHOULD
<b>Eye Injury Management</b>			
Irrigation	MAY	SHOULD	SHOULD
Eye dressing		SHOULD	SHOULD
<b>Burn Management</b>			
Burn dressing	MAY	SHOULD	SHOULD
Fluid replacement		SHOULD	SHOULD
<b>Miscellaneous Injuries</b>			
Bites and stings		SHOULD	SHOULD
<b>Wound Management</b>			
Wound cleaning	MAY	SHOULD	SHOULD
Wound closure (minor wounds only)		MAY	MAY
Dressing of non-haemorrhagic injuries	MAY	SHOULD	SHOULD
<b>Metabolic Homeostasis Management</b>			
Hypothermia/hyperthermia management techniques	MAY	SHOULD	SHOULD
<b>Equipment Familiarity</b>			
See Annex C	SHOULD	SHOULD	SHOULD
<b>Drug Therapy</b>			
See Annex D		SHOULD	SHOULD

## Annex C: (Informative) Equipment Familiarity by Provider Level

Equipment Familiarity	Care Provider Level		
	BCP	ICP	ECP
<b>Safety</b>			
Examination Gloves	SHOULD	SHOULD	SHOULD
Protective Eyewear	SHOULD	SHOULD	SHOULD
CPR Barrier Devices	MAY	MAY	MAY
<b>Diagnosis</b>			
Manual Sphygmomanometers		MAY	SHOULD
Stethoscopes		MAY	SHOULD
Pupil Torches		MAY	SHOULD
Thermometers		MAY	SHOULD
Pulse Oximeters		MAY	MAY
Patient Monitors			MAY
<b>Massive Haemorrhage Control</b>			
Extremity Windlass Arterial Tourniquets	SHOULD	SHOULD	SHOULD
Compressed Gauze	SHOULD	SHOULD	SHOULD
Topical Haemostatic Agents	MAY	MAY	MAY
Pressure Dressings	SHOULD	SHOULD	SHOULD
Junctional Tourniquets	MAY	MAY	MAY
<b>Airway Management</b>			
Nasopharyngeal airways		MAY	SHOULD
Supraglottic airway devices (OPA/LMA/i-Gel/etc.)			MAY
Manual Suction Units		MAY	SHOULD
Cricothyroidotomy Kits			MAY
<b>Respiratory Management</b>			
Oxygen Cylinders, Regulators and Masks		MAY	SHOULD
Bag Valve Masks (“ambu-bags”)		MAY	SHOULD
Chest Seals	MAY	SHOULD	SHOULD
Thoracostomy Needles		MAY	MAY
<b>Circulatory Management</b>			
Administration Sets		SHOULD	SHOULD
IV Cannulae		SHOULD	SHOULD
IO Cannulae		MAY	MAY
Defibrillators	MAY	MAY	MAY
Chest Tubes and Drains			MAY
Foley Catheter		MAY	MAY
<b>Fracture Management</b>			
Conformable Splints	MAY	SHOULD	SHOULD
Traction Splints		MAY	MAY
<b>Packaging and Transportation</b>			
Soft Stretchers	SHOULD	SHOULD	SHOULD
Spinal motion restriction equipment	MAY	MAY	MAY
<b>Burn Management</b>			
Burn Dressings	MAY	SHOULD	SHOULD
<b>Wound Management</b>			
Wound Closure Strips		SHOULD	SHOULD
Suture Kits		MAY	MAY
Bandages and Dressing Pads	SHOULD	SHOULD	SHOULD



<b>Metabolic Homeostasis Management</b>			
Blankets	SHOULD	SHOULD	SHOULD

## Annex D: (Informative) Recommended Drugs List by Provider Level

Reason for Administration, Drug Type and Route	Care Provider Level		
	BCP	ICP	ECP
<b>Fluid Resuscitation</b>			
0.9% NaCl / Ringers Lactate / Hartmann's Solution		SHOULD	SHOULD
Fresh Whole Blood		MAY	MAY
Freeze Dried Plasma		MAY	MAY
<b>Internal Haemorrhage</b>			
Tranexamic Acid		SHOULD	SHOULD
<b>Analgesia</b>			
Analgesic agent for management of mild-moderate pain		SHOULD	SHOULD
Analgesic agent for management of severe pain		SHOULD	SHOULD
IM/IV Naloxone (where relevant)		MAY	MAY
IV Antiemetic (where relevant)		MAY	MAY
<b>Infection Control</b>			
PO Antibiotic		SHOULD	SHOULD
IV/IO Antibiotic		SHOULD	SHOULD
Topical antiseptic		SHOULD	SHOULD
<b>Anaphylaxis</b>			
IM Adrenaline		MAY	MAY
IV/IO Adrenaline			MAY
<b>Resuscitation</b>			
Oxygen		MAY	MAY
IV/IO Adrenaline			MAY
<b>Nerve Agent Exposure</b>			
IM Atropine (where relevant)		SHOULD	SHOULD
IV/IO Atropine (where relevant)			SHOULD
<b>Cardiac</b>			
PO/SL Platelet Aggregation Inhibitors			MAY
SL Vasodilators			MAY
IV/IO ACLS Drugs			MAY
<b>Procedural Sedation / Seizure Arrest</b>			
Benzodiazepines			MAY
<b>Metabolic Homeostasis</b>			
PO Glucose/Dextrose			MAY
IV/IO Glucose/Dextrose			MAY
<b>Primary Health Care</b>			
PO Rehydration Salts		SHOULD	SHOULD
PO Antidiarrheal		SHOULD	SHOULD
PO Antihistamine		SHOULD	SHOULD
PO Antiemetic			MAY
Malaria test kit and appropriate PO treatment course		MAY	MAY
Topical insect repellent	SHOULD	SHOULD	SHOULD

## **Annex E: (Informative) References**

- Bulter, F. et al. (2017), "Management of Suspected Tension Pneumothorax in Tactical Combat Casualty Care: TCCC Guidelines Change 17-02" *Journal of Special Operations Medicine* Vol.18(2)
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- Richey, S.L. (2007), "Tourniquets for the control of traumatic hemorrhage: a review of the literature," *World Journal of Emergency Surgery* Vol.2(28)
- United States Department of Defense Joint Trauma System (US DoD JTS) Committee on Tactical Combat Casualty Care (CoTCCC) (2008-2017) "Meeting Minutes" (accessed 30 November 2018) <<https://www.jsomonline.org/TCCC.php>>

## **Amendment Record**

Technical Notes are subject to review on an 'as required' basis. As amendments are made to this Technical Note they will be given a number, and the date and general details of the amendment shown in the table below. The amendment will also be shown on the cover page of the TN by the inclusion under the version date of the phrase 'incorporating amendment number(s) 1 etc.'

As reviews of TN are made new versions may be issued. Amendments up to the date of the new version will be incorporated into the new version and the amendment record table cleared. Recording of amendments will then start again until a further version is produced.

The most recently amended TN will be the versions that are posted on the IMAS website at [www.mineactionstandards.org](http://www.mineactionstandards.org).

<b>Number</b>	<b>Date</b>	<b>Amendment Details</b>