

Australian College of Rural  
and Remote Medicine



FELLOWSHIP HANDBOOK

ADVANCED SPECIALISED TRAINING

**Emergency Medicine**

Australian College of Rural and Remote Medicine  
Level 1, 324 Queen Street  
GPO Box 2507  
Brisbane QLD 4000  
Ph: 07 3105 8200 Fax: 07 3105 8299  
Website: [www.acrrm.org.au](http://www.acrrm.org.au)  
ABN: 12 078 081 848

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*ACRRM acknowledges Australian Aboriginal People and Torres Strait Islander People as the first inhabitants of the nation. We respect the traditional owners of lands across Australia in which our members and staff work and live and pay respect to their elders past present and future.*

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## Introduction

Fellows of ACRRM receive specialist registration as a general practitioner with the Medical Board of Australia and can practise in any location throughout Australia.

ACRRM's standards and training also prepare doctors to be rural generalists.

A rural generalist is a general practitioner who has specific expertise in providing medical care for rural and remote communities. A rural generalist understands and responds to the diverse needs of Aboriginal, Torres Strait Islander and other rural communities; this includes applying a population approach, providing safe primary, secondary and emergency care as required and providing specialised medical care in at least one additional discipline.

Emergency Medicine is recognised as one of the additional disciplines in which a rural generalist may undertake Advanced Specialised Training (AST).

Advanced Specialised Training in Emergency Medicine is a training program that builds on ACRRM Core Generalist Training in Emergency Medicine.

## Rationale

Emergency Medicine is a key priority area due to the relative isolation in which rural or remote doctor's practise and, therefore, there is a need to manage a wide range of emergency situations with a high degree of autonomy.

This AST recognises that the practice of rural and remote emergency medicine covers a broad spectrum of contexts ranging from an isolated solo practice without a designated emergency department, to settings such as a moderate sized regional hospital emergency department with 24-hour on-site medical staff and availability of some specialty services. Emergency medical practitioners may be involved in patient care activities ranging from the pre-hospital environment to emergency department assessment and stabilisation, as well as ongoing management that may include safe transfer to the next level of medical care.

By its nature, the practice of emergency medicine has considerable overlap with several other specialist disciplines, particularly anaesthetics, surgery, orthopaedics, internal medicine and paediatrics. Acute aspects of most disciplines have relevance to the practice of emergency medicine.

## Credentials

A rural generalist who has completed the advanced specialised training program in Emergency Medicine can:

- work independently as a senior medical officer in a rural hospital
- work without local specialist emergency support
- work as part of an on-site team with other skilled medical, nursing and allied health practitioners
- provide definitive emergency medical care including emergency medicine procedural interventions for patients in Australian Triage Categories 3, 4 & 5
- provide definitive emergency medical care including emergency medicine procedural interventions for individual patients in Australian Triage Categories 1 and 2
- provide an emergency advisory resource to other rural generalists

- maximise the effectiveness of specialist outreach and telemedicine services in their communities
- assist in training other rural generalists
- assist in the development, provision and promotion of emergency services
- engage in, foster, and encourage research
- develop health policies and procedures for rural emergency services

## Eligibility

Prior to undertaking this training, candidates must meet the following criteria:

- satisfactory completion of 12 months Core Generalist Training component of ACRRM Fellowship training or
- have completed postgraduate year two for those doctors who are not in Fellowship Training.

Satisfactory completion of rotations in an anaesthetics / intensive care unit (ICU) and paediatrics is strongly desirable.

## Training

Advanced Specialised Training in Emergency Medicine requires a minimum 12 months full time (FTE) or equivalent part time training in an ACRRM accredited training post. If part-time, registrars must be employed no less than 0.5 FTE. The training may be undertaken in two or more blocks or concurrently with Core Generalist Training.

## Education

Registrars are expected to average a minimum of four hours per week engaged in educational activities related to the AST. A record of education must be kept by the registrar and discussed with the Supervisor and Medical Educator regularly throughout training.

Registrars participate in the ACEM registrar education program and education tailored to the AST curriculum.

Registrars must successfully complete or be a recognised instructor in one course from each of three categories below:

- Trauma:
  - Early Management of Severe Trauma (EMST), or
  - Emergency Trauma Management Course (ETM)
- Adult:
  - Rural Emergency Skills Training (REST), or
  - Adult Life Support Australian Resuscitation Council Level 2 (ALS2), or
  - Emergency Life Support (ELS), or
  - Advanced and Complex Medical Emergencies (ACME), or
  - Effective Management of Anaesthetics Crises (EMAC)
- Paediatrics:
  - Advanced Paediatrics Life Support (APLS) course, or
  - Advanced Paediatric Emergency Medicine course (APEM)

Other nationally or internationally recognised Emergency Medicine courses covering the same competencies may also be acceptable.

Ideally these courses should be completed prior to commencing training or alternatively early in training. As some of the courses have long waiting lists, it is expected that candidates will have enrolled in the above courses prior to commencing training.

An adult and a paediatrics course must have been undertaken in the five years prior to completing the AST.

Candidates are also recommended to undertake an emergency obstetric course such as Rural Emergency Obstetric Training (REOT) or Preparation in Maternity Safety (PIMS).

## Assessment

The assessments required for Advanced Specialised Training are additional to the assessments undertaken for Core Generalist Training.

Registrars must submit to their training organisation and ACRRM:

- AST Plan and Progress Report completed by registrar and supervisor every three months
- Five miniCEXs conducted by their supervisor (two miniCEXs may be replaced by Direct Observation of Procedural Skills (DOPS))
- Five Case Based Discussions conducted by their supervisor (strongly encouraged)
- AST EM Procedural Skills logbook

Registrars must gain a pass in AST EM StAMPS.

See the Fellowship Assessment Handbook for further information on assessment requirements.

## Training posts

Training for the AST year in emergency medicine must be undertaken in an urban or regional hospital, or hospital network accredited by ACRRM. Such posts must have the caseload and teaching capacity to provide training in a sufficient range of emergency conditions to meet the requirements of this curriculum.

Most of the training must be completed in a hospital or hospital network with the following features:

- a 24-hour medically staffed emergency department
- receiving a broad range of emergency presentations across all Australian Triage Categories
- a director of emergency medicine holding a Fellowship of ACEM, or other Fellowship with relevant qualifications and experience
- specialist or rural generalist inpatient services covering the core disciplines of general surgery, orthopaedics, internal medicine, paediatrics and psychiatry
- access to a simulation centre, either on site or away from the facility, for teaching of practical skills and scenarios
- access for trainees to support and supervision from experienced clinicians always.

A training post accredited for at least 12 months of ACEM training will generally be suitable but must also gain ACRRM accreditation for AST EM. Institutions with established educational links to other institutions and involvement with undergraduate teaching and other vocational training, would be highly desirable.

See [Supervisor and Training Post Standards](#) for further information.

The AST registrar must be employed as a Registrar or in an equivalent position.

## Supervision

Candidates undertaking AST in Emergency Medicine will require specific medical, professional and personal support and supervision arrangements.

This will include at least one:

- *Specialist supervisor* – a doctor holding a Fellowship of ACEM, or other Fellowship with relevant qualifications and experience who is overall responsible for the clinical and educational supervision of the registrar.

See [Supervisor and Training Post Standards](#) for further information.

## Competencies

Rural Generalist competencies are grouped under the eight domains of rural and remote practice. They describe the key competencies that are required in each context of practice.

These competencies are required to be met by all Rural Generalists prior to Fellowship, they are described in the [Rural Generalist Curriculum](#).

The table below describes the competencies and the standard required in Core Generalist and Advanced Specialised Training.

Competencies		Core Generalist	Advanced Specialised
4.1	Recognise severe, acute and life-threatening conditions and provide initial resuscitation and stabilisation	Recognises, provides and coordinates care for acutely ill patients within local community  Stabilises emergency presentations with support of an experienced colleague onsite or off site if required	Recognises, provides and coordinates care for acutely ill patients within local and regional networks  Stabilises critically ill patients and provides primary and secondary care for emergency conditions independently
4.2	Provide definitive emergency management across the lifespan in keeping with clinical need, own capabilities, local context and resources	Develops and implements appropriate diagnostic and therapeutic management plans for common acute conditions  Arranges appropriate transitions of care	Provides definitive emergency medical care including emergency medicine procedural interventions for individual patients across all presentations, of all age groups  Liaises with other specialty services for higher complexity conditions if necessary
4.3	Perform emergency diagnostic and therapeutic procedures	Institutes protection of the airway and adequate oxygenation when the airway and/or ventilation is compromised  Provides initial time critical management (with onsite or distant guidance if required) of shocked patients including alternate vascular access, timely fluid and/or transfusion management, relevant therapeutic measures, ancillary life support measures, interpretation of common investigations, timely admission or onward referral for definitive management	Institutes protection of the airway including advanced airway techniques and adequate oxygenation when the airway and/or ventilation is compromised including use of non-invasive and invasive mechanical ventilators  Provides initial time critical management of shocked patients including difficult vascular access, inotrope support, timely fluid and/or transfusion management, relevant therapeutic measures, ancillary life support measures.  Interprets complex investigations including Point

		Provides higher level management including simple procedural sedation and simple nerve blocks	of Care Ultrasound, timely admission or onward referral for definitive management Provides complex pain management including procedural sedation, continuous infusions, regional anaesthesia and nerve blocks
4.4	Interpret common pathology, imaging and other diagnostic modalities relevant to emergency management	Recognises important features of common injuries and pathological conditions on ECG, pathology, radiology Recognises the need for transfer for higher level care and diagnostics	Recognises important features of less common injuries and pathological conditions on ECG, pathology, radiology and sonography Arranges timely transfer for higher level care and complex diagnostics
4.5	Activate or support emergency patient retrieval, transport or evacuation when needed	Coordinates preparation of patients requiring transfer Communicates effectively with retrieval and higher-level medical services for timely transfer and ongoing care	Advises on clinical management and logistics of inward transfers Prepares patients for transfer. Undertakes invasive monitoring and other procedures necessary for transfer Assists with inward and outward transfers if required
4.6	Provide inter-professional team leadership in emergency care that includes a quality assurance, risk management assessment, team debriefing and self-care	Leads an inter-professional team to implement advanced life support for children and adults	Provides leadership and management for a rural emergency department Establishes and maintains appropriate emergency department systems and procedures
4.7	Utilise assistance and/or guidance from other specialist practitioners and services as required	Effectively evaluates the role of colleague support in managing patient outcomes Has awareness of own skills/knowledge limitations and local resources	Knows when and how to seek advice and assistance Has an established network of colleagues and other specialist practitioners to provide timely guidance and advice on complex patient management. Has detailed knowledge of local skills and resources limitations

# Syllabus

The Core Generalist Training knowledge and skills for emergency medicine required by all rural generalists, are defined in the Rural Generalist Curriculum. The Advanced Specialised Training Emergency Medicine knowledge, skills and attributes that build on this core are described below.

## Knowledge

- AS.K.1 Describe characteristics of rural and remote settings and their impact on emergency medicine that need to be considered including the differences when compared with metropolitan settings in:
- prevailing social attitudes to health, illness and health care
  - rural occupations
  - incidence and prevalence of emergency medical conditions
  - Aboriginal and Torres Strait Islander Peoples Health
  - access to physical resources including investigations, medications and treatments
  - working in a resource limited environment
  - access to specialist services
- AS.K.2 Detail selection criteria, protocols, principles, limitations and interpretation of results of the tests listed in skills section
- AS.K.3 Be aware of congenital and acquired conditions that may predispose patients to emergency presentations or complicate emergency management including congenital heart disease, congenital maxillofacial and other anatomical abnormalities, acquired anatomical abnormalities
- AS.K.4 Discuss features of common conditions difficult to diagnose and potentially obscured by patient age, body habitus, co-morbidities etc
- AS.K.5 Identify diagnostic features and initial management of "less common" conditions for example, endocrine emergencies, environmental emergencies (hypothermia, hyperthermia, barotrauma, high altitude illness etc), neuromuscular disorders (Guillain-Barre disease)
- AS.K.6 Discuss risk factors for secondary injuries in emergency patients, discuss strategies for reducing these risks, and outline appropriate management for secondary injuries if these occur: renal failure, cardiac failure, adult respiratory distress syndrome (ARDS), disorders of coagulation, cerebral hypoxia, multi-system failure, sepsis and neurovascular compromise
- AS.K.7 Discuss anaesthetics, procedural sedation and analgesic decision-making and delivery, including factors involved in making difficult anaesthetics decisions; neonates, young children, elderly, shock, obesity, co-morbidities and burns
- AS.K.8 Describe clinical and medico-legal requirements for consent, management of physical and/or sexual assault cases, including:
- sexual assault examination and specimen collection
  - recognition of non-accidental injury patterns in children and domestic partners

- understanding the coronial investigation process
  - writing medico-legal reports
  - giving evidence in court
  - treatment of minors and persons in custody
  - guardianship, advanced care directives, mentally impaired patients
  - duty of care for alcohol/recreational drug affected patients
- AS.K.9 Illustrate the principles of triage and their application to emergency situations
- AS.K.10 Interpret the Australasian Triage Score and its application to the clinical setting
- AS.K.11 Identify potential complications (including possible treatment failure) of the emergency procedures and definitive therapies
- AS.K.12 Describe signs and symptoms of the following complications and outline appropriate rescue plans.
- post-procedural complications – haemorrhage, thromboembolism, vascular insufficiency, infection/sepsis, wound breakdown, perforation/obstruction, mechanical failure, pneumothorax, spinal headache, renal failure, uncontrolled pain
  - complications of therapeutics, for example, adverse reaction, allergy/anaphylaxis, toxicity, drug interactions, GI bleeding, excessive sedation, dystonic reactions, neuroleptic malignant syndrome, transfusion reactions, over-hydration, over-anticoagulation, medication non-compliance and polypharmacy
  - complications of dialysis.
- AS.K.13 Describe the epidemiologic characteristics, prevention and control measures for infectious disease outbreaks, including:
- immunisation and post-exposure prophylaxis
  - community epidemics
  - nosocomial outbreaks
  - tropical and exotic infections
  - sexually transmitted infections
  - patients requiring isolation
  - personal protective equipment and safe working practices for other staff
- AS.K.14 Discuss the principles for disaster prevention, preparedness, response and recovery in rural and remote communities
- AS.K.15 Discuss principles of injury prevention in rural and remote contexts, including implementing an injury prevention program
- AS.K.16 Discuss ethical issues around end of life presentations (either medical, surgical, oncological, geriatric based or trauma)

## Skills

- AS.S.1 Competently provide definitive emergency medical care including emergency medicine procedural interventions for individual patients across all presentations, of all age groups across all Australian Triage categories.
- AS.S.2 Undertake initial assessment and triage of patients with acute or life-threatening conditions, including:
- seriously unwell conscious patients
  - patients with undifferentiated severe acute pain
  - undifferentiated unconscious patients
  - patients with undifferentiated shock
  - patients with undifferentiated fever or infective illness
  - undifferentiated sick children
  - major or complicated trauma – multiple trauma, head trauma, pelvic fracture, ENT, maxillofacial, abdominal (blunt and penetrating) and genital trauma
  - acutely psychotic patients, other mental illness including attempted self-harm and suicide
- AS.S.3 Recognition of the seriously unwell conscious patient, appropriate prioritisation and sequencing of assessments, investigations and management tasks in emergency cases
- AS.S.4 Recognise and evaluate variations in emergency presentations among Aboriginal and Torres Strait Islander patients that differ from the non- Aboriginal and Torres Strait Islander peoples including:
- young age at presentation with acute coronary syndrome
  - stroke or acute kidney failure
  - acute rheumatic fever
  - severe pneumonia
  - crusted scabies, and
  - disseminated strongyloidiasis
- AS.S.5 Utilisation of relevant diagnostic and imaging modalities including performing bedside imaging and interpretation of Point of Care Ultrasound (POCUS) and CT imaging without immediate access to radiology reporting
- AS.S.6 Arrange with consideration of urgency, onward transfer for higher-level diagnostic services eg MRI, invasive cardiology, and complex endoscopic procedures
- AS.S.7 Provide high-level pain management skills including oral, intramuscular, intravenous and intranasal analgesia: topical and local infiltration analgesia: common nerve blocks, regional anaesthesia, including management of analgesia complications and adverse reactions
- AS.S.8 Competent in techniques for difficult peripheral and central intravenous or intraosseous access, including with ultrasound guided access
- AS.S.9 Competent in techniques for vital signs monitoring including invasive; intra-arterial BP measurement, ventilation monitoring, and temperature monitoring
- AS.S.10 Stabilise critically ill patients and provide primary and secondary care for emergency conditions including:

- Airway and respiratory emergencies:
  - advanced airway management options and techniques
  - use of portable ventilators
  - use of non-invasive ventilation
  - techniques for pneumothorax drainage techniques including needle thoracostomy, Seldinger guided catheters and large intercostal catheters
- Circulatory and cardiovascular emergencies:
  - application of Advanced Cardiac Life Support (ACLS) algorithms
  - defibrillation, cardioversion and external cardiac pacing
  - advanced thrombolytic therapy, including management of complications
  - platelet inhibitor and anticoagulant therapy
  - advanced hypotensive therapy
  - pericardiocentesis with on-site or distant guidance
  - advanced haemostatic therapy
  - advanced anti-arrhythmic therapy
  - competent and confident administration of inotropes
  - principles of angioplasty and stenting
  - principles of occult blood loss in trauma
  - competent and confident fluid resuscitation including minimum volume fluid resuscitation, use of blood products and Massive Transfusion Protocol
- Neurological emergencies:
  - seizure monitoring and control
  - competent lumbar puncture for diagnostic and therapeutic procedures
  - basic surgical skills to undertake decompressive cranial burr holes with distant guidance from a neurosurgeon
- Musculo-skeletal emergencies:
  - independent splinting, casting and reduction of simple fractures and dislocations
  - reduction of complex fractures/dislocations under distant or on-site guidance, including minimisation of neurovascular compromise
  - competent and confident initial management of compound wounds
  - competent and confident initial management of spinal injuries, including awareness of patterns of spinal injury without radiological abnormality
  - independent joint aspiration
- Soft tissue emergencies and burns:
  - removal of superficial foreign bodies
  - independent abscess drainage

- independent wound management, including prophylactic antibiotic administration, local anaesthetic, tetanus injections, wound cleaning, debridement and complex wound closure techniques
- independent management of minor burns
- initial management of moderate or severe burns including special area burns e.g. face, neck, airway, hands, genitalia, circumferential burns, chemical, electrical, other associated injury with on-site or distant guidance
- management of rhabdomyolysis/acidosis
- monitoring and management of compartment pressure, including escharotomy with distant or on-site guidance
- pressure care of soft tissues at risk from ischaemia and infection
- regulation of body temperature in patients with dermatological emergencies
- Obstetric and gynaecologic emergencies:
  - competent and confident initial management of haemorrhage in early pregnancy
  - initial management of trauma in pregnancy
  - competent and confident management of miscarriage
  - timely recognition and transfer of patients requiring surgical intervention
  - competent and confident management of common labour and delivery complications
  - seizure control in eclampsia
  - management of precipitate delivery with distant guidance
  - initial management of post-partum problems
- Abdominal and genitourinary emergencies:
  - competent and confident initial management of acute renal failure
  - recognition of gastrointestinal foreign bodies requiring removal
  - urethral and suprapubic catheterisation
  - control of oesophageal varices
  - drainage of abdominal ascites for symptom control
  - reduction of paraphimosis with on-site or distant guidance
- Metabolic and endocrine emergencies:
  - competent and independent insulin infusion
  - competent and independent intravenous potassium replacement
  - competent and independent IV fluids for endocrine emergencies
- Acute infections:
  - chemotherapeutics for undifferentiated sepsis
  - be aware of and able to follow protocol for management of needle stick injury and other body fluid exposure
  - competent and confident application of infection control procedures, public health reporting procedures and management of contact persons

- Toxicologic and toxinological emergencies:
  - competent application of pressure immobilisation bandage
  - competent and independent antivenom and antidote administration
  - competent use of venom detection kit (VDK) with distance guidance
  - safety and decontamination procedures for deliberate CBR incidents – for patients, staff members and in an emergency department
- Environmental emergencies:
  - re-warming techniques
  - cooling techniques
  - temperature monitoring
  - initial management of diving injuries, including hyperbaric medicine
- Ophthalmological emergencies:
  - competent use of slit lamp
  - competent measurement of intra-ocular pressures
  - competent removal of simple superficial corneal foreign bodies
  - refer for removal of difficult foreign bodies
  - repair onsite or referral for repair peri-ocular lacerations
- ENT and dental emergencies:
  - tooth preservation techniques
  - infection prevention and management
  - competent and independent management of anterior and posterior epistaxis
  - removal of simple nasal and aural foreign bodies and identification difficult foreign bodies
- Psychiatric emergencies:
  - competent and confident differentiation between an acute severe behavioural disturbance due to acute delirium (including substance intoxication and withdrawal) and psychosis
  - competent and confident risk assessment, engagement and acute counselling skill

AS.S.11 Competent verbal de-escalation techniques in high stress and potentially violent situations

- competent and confident administration of rapid-acting antipsychotics sedatives and other medication where appropriate
- appropriate administration of chemical restraint
- use of relevant legislation for involuntary treatment admission
- leadership to manage Code Black situation

AS.S.12 Recognise and manage emergencies in all ages including the elderly, paediatric and neonatal groups and cover all emergency conditions including toxicology, obstetrics and psychiatric disease

- AS.S.13 Competent, sensitive and age-appropriate communication skills with anxious and distressed paediatric patients, parents and other carers including breaking bad news, onward referral, and engaging other support services
- AS.S.14 Competent and confident paediatric and neonatal emergency care, including:
- initiation of Advanced Life Support
  - paediatric calculations – appropriate dosages and equipment size
  - estimation and administration of fluid requirements for resuscitation and ongoing maintenance
  - lumbar puncture, clean catch urine and phlebotomy in children
  - procedural sedation
  - warming techniques in children and neonates
  - paediatric pain management techniques
  - seizure management, including diagnosis of the underlying cause/s
  - airway management in children and neonates, including wound repair, foreign body removal, management of stridor, croup and epiglottitis, paediatric intubation
  - advanced intravenous access techniques – intraosseous infusion and neonatal umbilical catheterisation
  - management of acute infections in children, including neonatal infections, sepsis and meningitis
  - management of diabetic ketoacidosis (DKA) in children
  - management of serious gastro-intestinal conditions, including pyloric stenosis and intussusception
  - management of serious neonatal conditions including prematurity, sepsis, respiratory failure and congenital abnormalities
- AS.S.15 Coordinate, work with and/or provide leadership (clinical and operational) as appropriate to multidisciplinary and/or inter-professional teams encompassing emergency services (police, fire brigade, ambulance), retrieval services, emergency department staff members, inpatient services and community members.
- AS.S.16 Establish and maintain appropriate emergency department systems and procedures
- trauma and priority team organisation
  - multi-casualty preparedness and response
  - co-ordination with police and other agencies
  - risk management, critical decision making and dealing with uncertainty
  - use of electronic record systems
  - quality assurance and audit policies and procedures
  - storage and handling of blood products
  - organ donation and transplantation protocols
  - pharmaceutical dispensing
  - staff management and communication skills
  - inter-professional co-operation skills
  - complaint management
  - occupational health and safety measures.
- AS.S.17 Perform emergency procedures as detailed in the AST Emergency Medicine Procedural Skills Logbook

## Attributes

At.2 Adaptability

At.15 Reflection

At.17 Resourceful

## Presentations and conditions

- Airway and respiratory emergencies: airway obstruction difficult foreign bodies, severe asthma, respiratory distress, tension pneumothorax, compromised airways, hypoventilation, hypoxia and chest trauma
- Circulatory and cardiovascular emergencies: chest pain, acute coronary syndromes, cardiogenic shock, hypovolaemic shock, hypertensive emergencies, haemorrhagic emergencies, cardiac tamponade, acute myocardial infarction, thrombo-embolic emergencies including pulmonary embolism, gas embolism and anaphylaxis:
- Neurological emergencies: neurologic trauma, coma, stroke, cerebral ischaemia, space occupying lesions, intracranial haemorrhage, subarachnoid haemorrhage, altered mental status, acute confusional states, delirium, undifferentiated headache, Guillain-Barre Syndrome, seizures, status epilepticus, meningitis and neurogenic shock:
- Musculo-skeletal emergencies: simple and complex fractures and dislocations, crush injuries, compound wounds, spinal injuries, ischaemic limbs (including compartment syndrome), degloving injury, amputated digits, acute back pain/sciatica and maxillofacial injury:
- Soft tissue emergencies and burns: foreign bodies, abscesses, burns (thermal, chemical and electrical), frostbite, necrotising infections, bite wounds, crush injury, neurovascular injury, degloving injury and acute desquamating conditions:
- Obstetric and gynaecologic emergencies: haemorrhage in early pregnancy, trauma in pregnancy, miscarriage, precipitate delivery, common labour and delivery complications, hypertensive urgencies, hyperemesis, pre-eclampsia, eclampsia and post-partum problems including fluid embolus, uterine rupture, haemorrhage, sepsis and retained products of conception (POC):
- Abdominal and genitourinary emergencies: acute renal failure, foreign body ingestion, abdominal trauma, acute urinary retention, abdominal ascites causing significant discomfort and/or respiratory compromise, oesophageal varices and paraphimosis:
- Metabolic and endocrine emergencies: hypoglycaemia, diabetic ketoacidosis (DKA), hyperosmolar non-ketotic states, hypokalaemia, hyperkalaemia, hypocalcaemia, hypercalcaemia, hyponatraemia, Addisonian crisis, hypothermia and hyperthermia:
- Acute infections: undifferentiated sepsis, septicaemia, urosepsis, neutropenic sepsis, febrile convulsion, septic shock, exotic infectious diseases, nosocomial infections, needle stick injury and other body fluid exposure:
- Toxicologic and toxinological emergencies: drug/alcohol overdose, accidental and deliberate toxic ingestion, terrestrial and marine envenomation, deliberate chemical biological or radiological (CBR) incidents, polypharmacy overdose and delayed presentations:
- Environmental emergencies: hypothermia, hyperthermia, barotrauma, near drowning, electrical injury and smoke/gas inhalation:
- Ophthalmological emergencies: chemical and thermal trauma, blunt and penetrating trauma, hyphema, blowout fracture, ultraviolet trauma, snow blindness, acute vision

loss, acute chalazion, glaucoma, viral and bacterial infections, foreign bodies and peri-ocular lacerations:

- ENT and dental emergencies: dental trauma, acute infection, maxillofacial trauma, anterior and posterior epistaxis, aural and nasal foreign bodies and quinsy:
- Psychiatric emergencies: acute psychosis, suicide threat or attempt, violent self-harm

## Learning resources

The following definitive texts are used in this AST:

- Cameron, P et al: Textbook of Adult Emergency Medicine, Edinburgh - Churchill Livingstone.
- Cameron, P et al: Textbook of Paediatric Emergency Medicine, Edinburgh - Churchill Livingstone.

ACRRM online courses are mapped to the Rural Generalist Curriculum. A range of courses are available on emergency medicine, these may be identified through the [search function](#). These courses also provide links to external learning resources.

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