

TRIAGE IN THE EMERGENCY DEPARTMENT

General Principles¹

Aims:

- To ensure that patients are treated in the order of their clinical urgency
- To ensure that treatment is appropriately and timely.
- To allocate the patient to the most appropriate assessment and treatment area
- To gather information that facilitates the description of the departmental casemix.

Background Information

Triage is an essential function in Emergency Departments (EDs), where many patients may present simultaneously. Urgency refers to the need for time-critical intervention - it is not synonymous with severity. Patients triaged to lower acuity categories may be safe to wait longer for assessment and treatment but may still require hospital admission.

Key points

1. The assessment/triage area must be immediately accessible and clearly sign-posted. Its design should allow for:
 - patient examination
 - means of communication between entrance and assessment area
 - privacy
2. Strategies to protect staff will exist
3. The same standards for triage categorisation should apply to all Emergency Departments (ED) settings. It should be remembered however that a symptom reported by an adult may be less significant than the same symptom found in a child and may render a child's urgency greater.
4. Victims of trauma should be allocated a triage category according to their objective clinical urgency. As with other clinical situations, this will include consideration of high-risk history as well as brief physical assessment (general appearance +/- physiological observations).
5. Patients presenting with mental health or behavioural problems should be triaged according to their clinical and situational urgency, as with other ED patients. Where physical and behavioural problems co-exist, the highest appropriate triage category should be applied based on the combined presentation.

Equipment Requirements

- Emergency equipment
- Facilities for using standard precautions (hand-washing facilities, gloves)
- Adequate communications devices (telephone and/or intercom etc)
- Facilities for recording triage information.

The Australasian Triage Scale¹

AUSTRALIAN TRIAGE SCALE CATEGORY	ACUITY (Maximum waiting time)	PERFORMANCE INDICATOR THRESHOLD
ATS 1	Immediate	100%
ATS 2	10 minutes	80%
ATS 3	30 minutes	75%
ATS 4	60 minutes	70%
ATS 5	120 minutes	70%

1. The **most urgent clinical feature** identified determines the ATS category.
2. Once a high-risk feature is identified, a response equal to the urgency of that feature should be initiated.

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Allocation of Triage Category¹

PROCEDURE	ADDITIONAL INFORMATION
<p>1. On arrival assess the patient.</p> <p>Balance the need for speed against the need to be thorough.</p> <p>Measure vital signs at triage if required to estimate urgency, and if time permits.</p>	<p>All patients presenting to an Emergency Department should be triaged on arrival by a specifically trained and experienced registered nurse.²</p> <p>The triage assessment should generally take no more than two to five minutes</p> <p>The triage assessment is not necessarily intended to make a diagnosis, although this may sometimes be possible.</p>
<p>2. Determine the clinical urgency of the patient.</p> <p>Notify doctor on call of patient's arrival and ATS category as required.</p>	<p>Use a combination of the presenting problem, general appearance and possibly physiological observations to assess the patient's urgency.³</p> <p>Indicate urgency of doctor's attendance.</p>
<p>3. Allocate an Australian Triage Scale (ATS) code in response to the question: "This patient should wait for medical assessment and treatment no longer than....".</p>	<p>The Australasian Triage Scale (ATS) is a scale for rating clinical urgency so that patients are seen in a timely manner, commensurate with their clinical urgency.¹</p>
<p>4. Take any patient identified as ATS Category 1 or 2 into the appropriate assessment and treatment area immediately.</p>	<p>A more complete nursing assessment should be done by the treatment nurse receiving the patient.</p>
<p>5. Meet any immediate care needs.</p>	<p>Standing orders may apply</p>
<p>6. As appropriate, initiate appropriate investigations (e.g. x-rays) or initial management according to hospital protocol.</p>	<p>Waiting time is reduced and patient satisfaction is increase where nursing staff follow protocols and order tests and or management. (Level III-3)^{4,5}</p>
<p>7. Document details of the triage assessment on the MR1.</p> <p>Include at least the following details:</p> <ul style="list-style-type: none"> • Date and time of assessment • Name of triage nurse • Chief presenting problem(s) • Limited, relevant history • Relevant assessment findings • MDC and BRIS code (if applic.) • Initial triage category allocated • Any diagnostic, first aid or treatment measures initiated. 	<p>Use a trauma record form as appropriate</p>

PROCEDURE**ADDITIONAL INFORMATION**

8. Ensure continuous reassessment of patients who remain waiting.

Re-triage a patient if:

- his/her condition changes while they are waiting for treatment
- additional relevant information becomes available that impacts on the patient's urgency

Both the initial triage and any subsequent categorisations should be recorded, and the reason for the re-triage documented.²

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The Australasian Triage Scale: Descriptors for Categories¹

The clinical descriptors listed in each category are based on available research data where possible, as well as expert consensus. However, the list is not intended to be exhaustive nor absolute and must be regarded as indicative only. Absolute physiological measurements should not be taken as the sole criterion for allocation to an ATS category. Senior clinicians should exercise their judgment and, where there is doubt, err on the side of caution.²

Key points

1. The **most urgent clinical feature** identified determines the ATS category.²
2. Once a high-risk feature is identified, a response commensurate with the urgency of that feature should be initiated.²

ATS Category 1 - Immediate simultaneous assessment and treatment

Immediately Life-Threatening Condition

Conditions that are threats to life (or imminent risk of deterioration) and require immediate aggressive intervention.

Clinical Descriptors (indicative only)

- Cardiac arrest
- Respiratory arrest
- Immediate risk to airway - impending arrest
- Respiratory rate <10/min
- Extreme respiratory distress
- BP < 80 (adult) or severely shocked child/infant
- Unresponsive or responds to pain only (GCS < 9)
- Ongoing/prolonged seizure
- IV overdose and unresponsive or hypoventilation
- Severe behavioural disorder with immediate threat of dangerous violence

ATS Category 2 - Assessment and treatment within 10 minutes (often simultaneously)

Imminently Life threatening

The patient's condition is serious enough or deteriorating so rapidly that there is the potential of threat to life, or organ system failure, if not treated within ten minutes of arrival **or**

Important time-critical treatment

The potential for time-critical treatment (e.g. thrombolysis, antidote) to make a significant effect on clinical outcome depends on treatment commencing within a few minutes of the patient's arrival in the ED **or**

Very severe pain

Humane practice mandates the relief of very severe pain or distress within 10 minutes

Clinical Descriptors Category 2 (indicative only)

- Airway risk - severe stridor or drooling with distress
- Severe respiratory distress
- Circulatory compromise
 - Clammy or mottled skin, poor perfusion
 - HR < 50 or > 150 (adult)
 - Hypotension with haemodynamic effects
 - Severe blood loss
 - Chest pain of likely cardiac nature
- Very severe pain - any cause
- BSL < 2 mmol/l
- Drowsy, decreased responsiveness any cause (GCS < 13)
- Acute hemiparesis/dysphasia
- Fever with signs of lethargy (any age)
- Acid or alkali splash to eye - requiring irrigation
- Major multi trauma (requiring rapid organised team response)
- Severe localised trauma - major fracture, amputation
- High-risk history:
 - Significant sedative or other toxic ingestion
 - Significant/dangerous envenomation
 - Severe pain suggesting PE, AAA or ectopic pregnancy
- Behavioural/Psychiatric:
 - violent or aggressive
 - immediate threat to self or others
 - requires or has required restraint
 - severe agitation or aggression

ATS Category 3 - Assessment and treatment start within 30 mins***Potentially Life-Threatening***

The patient's condition may progress to life or limb threatening, or may lead to significant morbidity, if assessment and treatment are not commenced within thirty minutes of arrival. **or**

Situational Urgency

There is potential for adverse outcome if time-critical treatment is not commenced within thirty minutes **or** Humane practice mandates the relief of severe discomfort or distress within thirty minutes

Clinical Descriptors (indicative only)

- Severe hypertension
- Moderately severe blood loss - any cause
- Moderate shortness of breath
- SAO₂ 90 - 95%
- BSL > 16 mmol/l
- Seizure (now alert)
- Any fever if immunosuppressed eg oncology patient, steroid Rx
- Persistent vomiting
- Dehydration
- Head injury with short LOC- now alert
- Moderately severe pain - any cause - requiring analgesia

- Chest pain likely non-cardiac and mod severity
- Abdominal pain without high risk features - mod severe or patient age >65 years
- Moderate limb injury - deformity, severe laceration, crush
- Limb - altered sensation, acutely absent pulse
- Trauma - high-risk history with no other high-risk features
- Stable neonate
- Child at risk
- Behavioural/Psychiatric:
 - very distressed, risk of self-harm
 - acutely psychotic or thought disordered
 - situational crisis, deliberate self harm
 - agitated / withdrawn / potentially aggressive

ATS Category 4 - Assessment and treatment start within 60 mins

Potentially Life-Threatening

The patient's condition may progress to life or limb threatening, or may lead to significant morbidity, if assessment and treatment are not commenced within thirty minutes of arrival. **or**

Situational Urgency

There is potential for adverse outcome if time-critical treatment is not commenced within thirty minutes **or**

Humane practice mandates the relief of severe discomfort or distress within thirty minutes

Potentially serious

The patient's condition may deteriorate, or adverse outcome may result, if assessment and treatment is not commenced within one hour of arrival in ED. Symptoms moderate or prolonged. **or**

Situational Urgency

There is potential for adverse outcome if time-critical treatment is not commenced within hour **or**

Significant complexity or Severity

Likely to require complex work-up and consultation and/or inpatient management **or**

Humane practice mandates the relief of discomfort or distress within one hour

Clinical Descriptors (indicative only)

- Mild haemorrhage
- Foreign body aspiration, no respiratory distress
- Chest injury without rib pain or respiratory distress
- Difficulty swallowing, no respiratory distress
- Minor head injury, no loss of consciousness
- Moderate pain, some risk features
- Vomiting or diarrhoea without dehydration
- Eye inflammation or foreign body - normal vision
- Minor limb trauma - sprained ankle, possible fracture, uncomplicated laceration requiring investigation or intervention - Normal vital signs, low/moderate pain
- Tight cast, no neurovascular impairment
- Swollen "hot" joint
- Non-specific abdominal pain
- Behavioural/Psychiatric:
 - Semi-urgent mental health problem
 - Under observation and/or no immediate risk to self or others

ATS Category 5 - Assessment and treatment start within 120 mins

Less Urgent

The patient's condition is chronic or minor enough that symptoms or clinical outcome will not be significantly affected if assessment and treatment are delayed up to two hours from arrival **or**

Clinico-administrative problems

Results review, medical certificates, prescriptions only

Clinical Descriptors (indicative only)

- Minimal pain with no high risk features
- Low-risk history and now asymptomatic
- Minor symptoms of existing stable illness
- Minor symptoms of low-risk conditions
- Minor wounds - small abrasions, minor lacerations (not requiring sutures)
- Scheduled revisit eg wound review, complex dressings
- Immunisation only
- Behavioural/Psychiatric:
 - Known patient with chronic symptoms
 - Social crisis, clinically well patient

TRIAGE IN THE EMERGENCY DEPARTMENT

Recognition of the Critically Ill Child^{6,7}

Background information

Serious illness in a child may not be recognised . This is because children:

- are poor historians
- may manifest non specific symptoms
- may be uncooperative during examination
- may not show significant indicators - but rather may present as subtle signs
- may be presumed to have age specific diseases

Markers of serious illness in infants under 6 months⁷

	High Risk	Medium Risk	Five point triage system (AIPDF) ⁷
Feeding	< 1/2 normal	1/2- 2/3 normal	Fluid intake < 1/2 normal
Arousal (CNS)	Often drowsy Decreased activity Convulsion Weak cry	Occasionally drowsy	Drowsiness Activity decreased
Breathing	Apnoea or cyanosis	Breathing difficulty	Chest wall recession (in drawing)
Circulation	Skin pale and hot	Skin pale	Paleness (sudden onset, but persistent)
Fluid output	Green vomit <4 wet nappies/ day	> 5 vomits in 24 hr Less urine than usual	
Faeces	Bloody stool		

Useful signs⁷

- Alertness drowsiness hypotonic on examination
- Breathing moderate/severe recession cyanosis wheeze
- Circulation pallor signs of dehydration
- Temperature > 38.5C
- Signs of dehydration
- Tender abdomen

Specific signs⁷

- Resp grunt, crepitations, stridor, apnoea tachypnoea >80
- Abdo mass, hernia, distension
- CNS weak cry, abnormal posture
- Skin cold periphery, mottling, bruise, rash
- Pulse > 200
- Urine output < 4 wet nappies

AGGRESSION IN THE EMERGENCY DEPARTMENT

Principles of Management¹

Aims

1. Maintain a safe work environment
2. Establish and maintain a positive client focus
3. Minimise the risk of escalation of aggression

Background Information

Triage is the first point of public contact with the Emergency Department where patients with the whole spectrum of acute illness, injury, mental health problems and challenging behaviour may present. Aggressive people presenting to the Emergency Department are usually either patients or the relatives or friends of patients. Aggression is said to occur where a person is verbally or physically abused, threatened, assaulted or injured and can arise directly or indirectly as a consequence of the actions of another person.⁸

Causes of Aggressive Behaviour

If present, these factors may provoke or magnify aggressive behaviour and create a risk of harm for the triage nurse and other reception staff.

- Pain
- Fear and stress
- Influence of drugs and / or alcohol
- Mental instability
- History of aggression
- Irritation and frustration
- A sense of loss of control
- Perceived prejudice

Relatives/friends can become quite anxious and upset when they see 'their' patient in pain or not being attended to by medical staff frequently enough. Usually this anger is expressed verbally.

Managing Immediate Threat

1. While some acutely-disturbed patients may require an immediate clinical intervention, other individuals who enter an emergency department and pose an immediate threat to staff (eg brandishing a dangerous weapon) should not receive a clinical response until the safety of staff can be secured.
2. Where the safety of staff and/or other patients is under threat, staff and (other ED) patient safety should take priority over clinical assessment and treatment. Staff should act so as to protect themselves obtain immediate intervention from security staff and/or the police service.
3. Once the situation is stabilised, a clinical response can take place as (and if) required, and triage should then reflect clinical and situational urgency.

Verbal Strategies⁹

1. While not effective with all patients, verbal diffusion can be as effective as pharmacologic restraint.
2. Offer food and drink to encourage co-operation if patient agitated
3. Enforce limits and explain the consequences of the person's unacceptable behaviour

Pharmacological restraint

1. More humane than physical restraint and most effective for severe aggression
2. No one medication is appropriate for every situation
3. Regular monitoring of patient will be required following sedation to detect adverse side effects.

AGGRESSION THE EMERGENCY DEPARTMENT

Assessment Process¹⁰

1. Alert police as required, police may provide assistance during the assessment.
2. It should be decided whether those who accompany the patient have a stabilising or destabilising influence. People who appear to provoke the patient should be asked to leave.
3. Staff who sense feelings of danger, however vague, should discontinue the assessment and seek assistance. So called 'gut feelings' should not be ignored.⁹
4. If a 'dangerous' person leaves the Emergency Department alert security and police immediately. Do not attempt to chase the person.

PROCEDURE

ADDITIONAL INFORMATION

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| <ol style="list-style-type: none"> 1. Do not assess people in confined or isolated areas. Ensure there is easy access to the door.⁹ 2. Consider: <ul style="list-style-type: none"> • whether the person's anger is manageable or out of control • the need for another person to be present (e.g. nurse or medical officer). • any previous history of violence. 3. Establish the circumstances of presentation from: <ul style="list-style-type: none"> • Referring person/letter • Other staff • Patient • Patient's family/friends 4. Use a confident reassuring approach by staff without added stimuli. 5. Use a soft modulated tone of voice when speaking to the person 6. Do not respond to verbal aggression with verbal aggression.
If a person's anger is specifically directed at you then hand over to another person. 7. If the person is rational acknowledge their anger.

Be aware of your own body language
Minimise direct eye contact⁹
Attempt to relax the person by appearing calm | <p>Lessens the client's feeling of being trapped and to create any easy escape route if necessary.</p> <p>One other person should be sufficient so as not to create an atmosphere of "them" and "us". This may cause further anxiety.</p> <p>Patient's old notes may provide additional information.</p> <p>It is difficult for angry people to maintain their anger when faced with calm, controlled people.</p> <p>Rarely will a person's anger be directed at the staff member. It is more likely they are angry about a situation or event and your are targeted for ventilation and relief.</p> <p>E.g. "you seem very angry about this I'm wondering what's causing this anger?"</p> <p>By engaging the client in thoughtful discussion he/she may mirror your sitting position and general demeanour.</p> |
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TRIAGE IN THE EMERGENCY DEPARTMENT

Physical Restraint

Principles

1. Physical restraint and emergency sedation should only be used when other reasonable methods of calming the patient down are unsuccessful. **If a patient who is acting out does not need acute medical or psychiatric care s/he should be discharged from the hospital rather than restrained.**
2. When restraint is required a coordinated team approach is essential, with roles clearly defined and swift action taken.
3. Unless contraindicated, sedation should usually accompany physical restraint.

Indications

Aggressive and combative behaviour in a patient who requires urgent medical or psychiatric care, which is:

- compromising the provision of urgent medical treatment (physical or psychiatric);
- placing the patient at risk of self-harm; or
- placing staff at risk.

Contra-indications to physical restraint and emergency sedation

- Safe containment possible via alternative means
- Inadequate personnel/setting/equipment
- Situation judged as too dangerous eg. patient has a weapon.
- Known adverse reaction to drugs usually used (eg neuroleptic malignant syndrome)

Key point

If staff do not think they will be able to safely restrain the patient or manage the threat, then the Police should be called.

PROCEDURE

ADDITIONAL INFORMATION

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| <ol style="list-style-type: none"> 1. Explain the procedure to the parents/carers if possible. 2. Establish roles, including defining person in charge. 3. Assemble all available staff.
Assign roles before approaching the patient. 4. Draw up drugs.
Drugs of preference are midazolam 5 mg, and haloperidol 5mg (draw up together). 5. Secure the patient quickly and calmly. 6. Hold the patient prone, with hands and feet held flexed behind back. 7. Administer midazolam 5 mg (onset rapid) and haloperidol 5mg (onset 15-20 minutes) by intramuscular injection into lateral thigh.
Beware the risk of needle-stick injury. | <p>This is usually the attending doctor.</p> <p>Drugs and dose will vary between patients
Ensure benzotropine available to treat extrapyramidal symptoms should they arise.</p> <p>Further titrated doses of 0.1 mg/kg may be required (preferably IV).</p> |
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PROCEDURE**ADDITIONAL INFORMATION**

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| <p>8. Once sedated monitor O₂ saturation continuously.</p> <p>Consider need to transfer patient to specialist facility.</p> <p>Observe conscious state, respirations, pulse, BP, and temperature as determined by the condition of the patient.</p> | <p>Patients who have been sedated may not be transferred into police custody.</p> <p>15/60 is advocated but this may vary.</p> <p>If sedation other than their normal medication has been administered, a nurse must accompany the patient being transferred to another health care facility.</p> |
| <p>9. Complications of emergency sedation include:</p> <ul style="list-style-type: none"> • anaphylactic reactions • respiratory depression • cardiovascular symptoms such as hypotension, tachycardia. <p>Monitor until transfer or response to the medication is determined.</p> | <p>Extrapyramidal reactions (dystonia) may occur with major tranquilizers, particularly as the benzodiazepine is wearing off. These is treated with benztropine (0.02mg/kg IV or IM) or repeated small doses of diazepam.</p> |
| <p>10. Follow up</p> <p>Following restraint the patient must have a complete medical and mental health assessment to guide subsequent management.</p> | <p>In some cases certification and transfer to an in-patient mental health facility may be required.</p> |
| <p>11. Consider the need for on-going physical restraint.</p> | |
| <p>12. Consider the need for on-going sedation.</p> | |
| <p>13. Document fully in the patient's unit record:</p> <ul style="list-style-type: none"> • the indication for chemical and physical restraint. • the patient's response to sedation • on-going observations • plan for future management | <p>Incident report - extremely helpful in auditing these events</p> |

Debriefing.

The need to restrain an aggressive patient is fortunately a rare event, but can be extremely distressing for staff involved. A formal debriefing session should be arranged, ideally chaired by an objective facilitator who was not involved in the restraint process.

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Management of Aggressive Behaviour

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