



# Assessment and Management of Interhospital Patient Transfers Policy

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## 1. Background

The purpose of this policy is to establish minimum practice standards for the assessment, care and management of the patient requiring interhospital transfer from a WA Country Health Service (WACHS) facility.

This policy outlines the processes for standardised organisation of interhospital patient transfer from WACHS facilities, including the following:

- Responsibilities of WACHS staff
- Responsibilities of Transport providers
- Required communication and documentation processes to ensure effective clinical handover for continuity of patient care.

## 2. Policy

WACHS is committed to ensuring Interhospital Patient Transfer is clinically safe, responsive, efficient and effectively coordinated.

This policy applies to all WACHS staff who are involved in the clinical decision and care regarding patient transfer and those involved in the assessment and management of the patient requiring Interhospital transfer.

Patient outings, home visits and overnight/other leave is not within scope of this policy document.

There are a number of decisions which need to be made to ensure the patient transfer is safe and effectively coordinated: these decisions are the critical steps for a successful and safe transfer.

The steps are:

- recognising the need to transfer the patient and which facility would be the most appropriate to provide the level of care required
- consultation with and consent of the patient and/or carers (consider documented consent)
- determining the clinical urgency
- determining the most appropriate mode of transport for the clinical urgency and distances to be travelled
- assessment and planning for appropriate patient escort as required
- appropriate patient preparation and planning.

## 3. Recognition, Assessment and Management of the Interhospital Patient Transfer

### 3.1 Recognising the need to transfer the patient and which facility would be the most appropriate to provide the level of care required

A guide for patient conditions that require transfer is outlined in [Appendix A](#). Specific Indications for Transfer of the Neonate are outlined in [Appendix B](#).

WACHS facilities provide a variety of levels of service provision which are outlined in the [WACHS Clinical Governance Framework](#) and within the [Emergency Care Capability Framework](#).

All clinicians are to be clear as to what level of service and scope of clinical care is provided within their facility, local referral sites and regional resource centres.

[Appendix C](#) Provides Medical Officers with a detailed list of contact details to obtain specialist advice and assist in the decision making for determining the most appropriate destination of transfer.

All WACHS sites must have a list displayed and available to clinicians which includes contact details of local and tertiary referral centres and a description of services provided by them. Templates for WACHS sites are available in [Appendix D](#).

The medical officer is to liaise with the required destination specialty team for acceptance of care and to provide clinical handover. The rationale for transfer and the acceptance of the receiving medical practitioner and facility is to be clearly documented in the patient's medical record.

There may be times where the referring hospital needs to outline the level of care that is available at that hospital site to help the metropolitan based medical officers understand the context and capabilities of rural and regional health services.

When clinically appropriate, patients should be directly admitted to the ward area bypassing the Emergency Department.

### 3.2 Patient and Carer Communication

It is important at all times to involve the patient and or significant others in the potential or actual decision to transfer. The patient and or significant others should be aware of the rationale for and demonstrate an understanding for the transfer. Ideally this conversation and understanding will be documented.

In regards to neonates, paediatrics and adult patients where potential for clinical deterioration is significant, a parent or significant other should be considered where possible to accompany and travel with the patient. This will be dependent on the transport provider.

Special considerations must be taken into account for the critically ill who are unlikely to survive the transfer. Family members / carers must be consulted and given the opportunity to discuss options.

### 3.3 Determining the clinical urgency

The referring medical officer is responsible for making the initial assessment of the clinical urgency of transfer required for the patient.

The referring medical officer is to make this assessment in consultation with specialist expertise at the receiving hospital and where required in collaboration with trained retrieval specialists such as St John Ambulance (SJA), Royal Flying Doctor Service (RFDS) and the Neonatal Retrieval Team (NETS).

WACHS Emergency Telehealth Service (ETS) may also be used as a resource to assist in the clinical decision making and or most appropriate destination.

The patient's **clinical condition** is the major determinant in choosing the clinical urgency and destination for transfer. The referring medical officer is to be guided by the following influencing factors:

- The urgency/timeliness of the likely intervention or diagnostic procedures required for the patient.
- Time-frame it takes to transfer patients from regional areas and the likelihood of patient deterioration during this time.
- The referring facility's resources available to respond to further patient deterioration, including equipment and staffing requirements.

The table below is a guide to assist medical officers with the decision-making for clinical urgency of transfer and to assure consistency of language in all sites. (Outlined in flowchart [Appendix D](#))

**Table 1 WACHS URGENCY CATEGORY**

Urgency Category	Description of Category
<b>Immediate</b> Request immediate transfer	<b>Imminently life-threatening</b> The patient's condition is serious enough or deteriorating so rapidly that there is the immediate potential of threat to life, or organ system failure, if not transferred.
<b>Emergency</b> Within 4-6 hours to arrival destination	<b>Important time for critical treatment</b> Potentially life or limb threatening, the patient's condition may progress to life or limb threatening, or may lead to significant morbidity or adverse event (depends on transfer occurring within 4-6 hours).
<b>Urgent</b> Within 24 hours to arrival destination	<b>Time critical</b> Treatment may be able to be initiated locally to reduce an adverse outcome for a patient and where the local staff, facility and equipment can safely maintain care for the patient with or without additional medical advice for a period not greater than 24 hours.
<b>Semi-urgent</b> Within 24-36 hours to arrival destination	<b>Semi-urgent</b> Potentially serious, where the patient's condition may deteriorate if transfer does not occur within 24 – 36 hours and where the local staff, facilities and equipment are able to safely care for the patient with or without ongoing medical advice.
<b>Non urgent</b>	<b>Less Urgent</b> The patient's condition is chronic or minor enough that symptoms or clinical outcome will not be significantly affected if transfer does not occur for 36 hours <b>OR</b> Clinic / outpatient type appointment where the patient requires stretcher transport and no other options are available.

## 3.5 Special considerations for patient transfer

Special considerations for the following groups of patients are required for the planning and management of the transfer.

- The Neonatal Patient
- The Mental Health Patient
- The Trauma Patient
- The Bariatric Patient
- The Stroke Patient.
- Department of Veterans' Affairs (DVA) Entitled Persons.

### The Neonatal Patient

Please refer to [Appendix B](#) Indications for Transfer for the Neonate.

Due to the large geographical nature of WACHS, there are three options for obtaining specialist neonatal medical retrieval services:

- The Newborn Emergency Transport Service (NETS); a neonatal retrieval service comprising of a team of experienced staff to assist in the transfer of sick neonates.
- Broome and Port Hedland hospitals are nominated sites for the provision of neonatal retrieval for the WACHS Kimberley and Pilbara regions.

**Table 2 : NETS Retrieval by Region**

WACHS REGION	CONTACT
Kimberley	<b>Broome Hospital 9194 2222</b> Ask to speak to the consultant paediatrician or paediatric registrar.
Pilbara	<b>Hedland Health Campus 9174 1410</b> Ask to speak to the consultant paediatrician or paediatric registrar.
Midwest, Goldfields, Wheatbelt, Great Southern and South West	<b>NETS 1300 638 792 (1300 NETS WA)</b> <ul style="list-style-type: none"> <li>▪ <b>General enquiries:</b> 9340 8536</li> <li>▪ <b>Email:</b> <a href="mailto:NETS.PMH@health.wa.gov.au">NETS.PMH@health.wa.gov.au</a></li> </ul>

The Princess Margaret Hospital (PMH) Neonatal Intensive Care Unit is responsible for the administration of NETS. PMH accepts the majority of babies, while the King Edward Memorial Hospital (KEMH) admits preterm babies less than 30-32 weeks gestation.

WACHS is to request NETS for any sick newborn or neonate up to 28 days of age and weight less than 6 kg (including ex-preterm babies up to four weeks corrected post-term age) requiring specialised skills for medical management during transfer to higher level care.

WACHS has responsibility to ensure that the consultant paediatrician and the registrar based in the Kimberley and Pilbara regions are suitably credentialed for neonatal retrieval and orientated to NETS equipment (such as cots and ventilators) and procedures.

For more detailed information regarding stabilisation and initial management of common neonatal conditions, refer to the [KEMH Newborn Emergency Transport Service Medical Guidelines](#).

### **The Mental Health Patient**

Depending on the status of the mental health patient, special considerations need to be taken when preparing and planning for transport.

Please refer to WACHS [Interhospital Transfer of the Mental Health Patient Guideline](#).

### **The Trauma Patient**

The State Trauma service **0404 894 277 or RPH Switch 9224 2244** is to be contacted to discuss management of trauma patients requiring transfer. Please refer to the Department of Health [Guiding Principles for Major Trauma Interhospital Transfer](#).

### **The Bariatric Patient**

Weight of patient must be discussed when making initial contact with RFDS to ensure the correct aircraft is deployed. Local procedures and use of equipment for management of the bariatric patient are to be adhered to. Please refer to the WACHS [Risk Assessment for Admission of the Heavier Patient Policy](#).

### **The Stroke Patient: Timely transfer of the acute stroke patient is crucial**

Immediate transfer is to be requested and the destination of transfer is dependent on tertiary facility as outlined in the [Acute Stroke transfer pathways](#).

### **Department of Veterans' Affairs (DVA) Entitled Persons**

There are special considerations for Interhospital transfer and transport options for the Department of Veterans' Affairs (DVA) Entitled Person, including transfer from a public hospital to a private hospital outlined in the following WA Health policies:

- [Hospital Transfer Policy for DVA Entitled Persons from Public to Private Hospitals](#)
- [Inter-Hospital Transport Arrangements for DVA Entitled Persons](#)

### 3.6 Mode of Transport Options

The medical officer responsible for the care of the patient at the referring hospital is responsible for making the initial assessment to determine the mode of transport required for the transfer. It is important that the mode of transport is discussed with the receiving facility and the transport provider.

The patient's clinical condition is the major determinant used when choosing mode of transport.

The responsible medical officer is to be guided by the following influencing factors:

- Urgency of intervention for the patient.
- Availability and skill set of personnel required for the transfer.
- Possible clinical impact of the transport environment for the patient.
- Location of destination and distances involved.
- Road transport times and road conditions.
- Weather conditions and aviation restrictions.
- Aircraft landing facilities.
- Availability, range and speed of vehicles.

All WACHS facilities have access to at least one of the following modes of transport for patients requiring interhospital transfer:

- Private transport
- Commercial or non-Government organisation transport e.g. bus, train, air, taxi, and community bus
- Health service vehicles
- Road Ambulance – current provider is St John Ambulance Association (Western Australia) (SJAA-WA) or WACHS in Derby, Fitzroy Crossing and Halls Creek.
- Commercial Airline – Refer to Considerations for Patient Transfer by Commercial Airlines ([Appendix E](#)). For more specific medical exclusions and time-frames for commercial travel, please refer to airline's website.
- Aeromedical transport – current provider is Royal Flying Doctor Service for fixed-wing aircraft
- Emergency Helicopter Retrieval Service for some areas in the South West which is coordinated by SJA ([Appendix F](#))
- Some regional areas have private aeromedical evacuation options for employees of mining companies.

The Interhospital Patient Transfer Flowchart site template [Appendix D](#) documents the local site transport options and contact details of the transport providers. However the following distance criteria will assist with determining the most appropriate mode of transport for critically ill or injured patients:

- By fixed wing air- journeys greater than 180- 200km or not accessible by road call - **RFDS 1800 625 800**
- By road (less than 200 km one-way) **St. John Ambulance (SJAA-WA): 131 233**
- By emergency helicopter – journeys less than 200km flying distance from Jandakot (Perth) Call- via **St. John Ambulance (SJAA-WA): 131 233**

If other modes of transport are determined to be required, such as private charter for medical evacuation, approval is to be obtained in accordance with the [WA Country Health Service Authorities Schedule](#) and regional clinical authorisation.

### 3.7 Escalation

If the referring medical officer determines significant patient clinical deterioration will occur due to either an unexpected significant delay in a patient's transfer or in the allocated timeframe provided for transfer, this can be escalated via the following process:

- The Referring Medical Officer at referral site contacts the most Senior Doctor on Call to discuss transfer concerns and inability to keep the patient stable at referral site.
- The Senior Doctor on Call determines the time to transfer is inadequate and patient deterioration is expected and cannot be managed at the referral site.
- The Senior Doctor on call contacts the Regional Medical Director (RMD) or Disaster Coordinator on-call if the RMD is not available.
- The RMD discusses transfer concerns with the RFDS senior doctor.
- If that does not resolve the issue, then the RMD or RD can then call **1800 625 800** and ask the RFDS OPS centre to escalate their call to the RFDS General Manager Operations where an executive to executive level conversation can occur.
- If this occurs on a weekend or afterhours when the RMD may not be available, the referring doctor can speak with the regional executive on call or Regional Director (RD) who can call RFDS and speak to their General Manager OPS.

The [Appendix D](#) flowchart documents the escalation procedures and contact details.

### 3.8 Assessment and Planning for Appropriate Escort if Required

Depending on the patient condition, potential for intervention, the distance to be travelled and in some instances the mode of transport a determination will be required on the type of escort required to accompany and care for the patient during transit to the destination, that being the receiving facility or to the transport provider.

The responsible medical officer at the referring facility is responsible for determining the skill set required by the escort during transfer.

Dependant on the patient's condition, escorts may be family members/carers, health care workers and/or clinicians. At times, additional escorts may be required such as police or correctional services.

[Appendix G](#) provides the skill set of SJA Ambulance Paramedics and Critical Care Paramedics. This is a guide for clinicians to assist with the decision-making of mode of transport and level of escort; however the final decision will be determined by the transport provider. In this case, SJA.

If the responsible medical officer determines that a clinical escort is required at level that is unable to be provided by the transport provider, the medical officer is to notify the senior nurse / Senior Medical Officer on duty at the referring hospital to arrange for a suitable health service staff escort. Consideration is to be given for continuity of clinician care for the patient transfer.



Due to potential distances travelled in WACHS, consideration needs to be given to the possibility of fatigue for the health worker performing the escort. WACHS [Safe Driving Policy](#) and supporting documents are to be adhered to. Escalation and discussion with senior management at your site may be required

When return transport is not accessible or impractical, the interhospital patient transfer (IHPT) provider may return the escorting staff to the referring hospital. However the IHPT provider may be required to attend to another emergency delaying the return of the escort. In these circumstances, contact is to be made with the senior nurse at the referring hospital to notify them of the situation. WACHS employees are reminded that they are not to work out of their scope of practice.

### 3.9 Appropriate Patient Preparation and Planning for Transfer

Notification to contracted transport company of the potential /actual transfer is to occur as early as possible. Depending on transport providers level of activity and geographical distance, there can be some delays in patients reaching the specialist destination. Both RFDS and ambulance services are in high demand and will coordinate the transfer based on the activity and demand of their service from across the state.

It is the transport provider's responsibility to inform the referring medical officer if the urgency of transfer cannot be met, or potential for significant delays. (Deputy State Coroner, 2004).

Should there be an unreasonable delay in transfer; clinicians are to escalate as per local site procedures. In addition , further consultation with the accepting clinicians at the receiving site is to be undertaken to determine any required changes in patient care.

Patient preparation for the various modes of transport may have some specific needs. Specific patient preparations include:

- [RFDS Guidelines](#)
- Commercial Airlines [Appendix E](#).

### 3.10 Ongoing care, documentation during transfer, and clinical handover

If a WACHS clinician is escorting a patient either to another facility or to handover to a transport provider, they remain responsible for ongoing patient care until the formal handover and acceptance of care has occurred. During this time the WACHS clinician must continue to document the care which is provided.

The documentation to record patient observations, care plan, changes and medications during a transfer / escort of the patient by a WACHS clinician is to be continued on the photocopied documentation that accompanies the patient, and which is received by the receiving hospital / clinician. This provides a seamless account of the patient picture and supports early recognition of the deteriorating patient.

At the point of handover of responsibility - be that to the receiving facility or transport provider, appropriate clinical handover is to occur as per the [WA Health Clinical Handover Policy](#).

### 4. Roles and Responsibilities

The **Referring Hospital** is responsible for:

- ensuring the [MR184 WACHS Inter-hospital Clinical Handover Form](#) is completed as per WACHS [Interhospital Clinical Handover Form Procedure](#) and faxed to the referral hospital and transport agencies
- updating the transport agencies and referral centres of any changes of status of patient awaiting transfer
- ensuring the patient has one identiband in situ, and that patient identification using three (3) core identifiers occurs at each point of care transfer
- providing an appropriate clinical escort in the absence of an available suitable clinical escort by the transport provider
- providing appropriate clinical equipment (within local capacity), in the absence of provision of suitable clinical equipment by the transport provider
- providing medications to treat the patient during transfer where the transport provider cannot provide them as per transport provider guidelines.

The **Receiving Hospital** is responsible for:

- reading back the information contained on the [MR184 WACHS Inter-hospital Clinical Handover Form](#) to the referring hospital. Once the receiving hospital is satisfied of the status of the patient, acceptance of care is to be documented on the MR184.
- being prepared to provide appropriate care of the accepted patient
- providing clinical advice for the interim management of the patient, as required.

The **Referring Medical Officer** is responsible for:

- assessment and medical management (including stabilisation) of the patient
- determining the need for initiating the transfer
- ensuring that the patient and the patient's nominated next of kin are informed of the requirement of transfer and that this is documented in the health record, including the risks to the patient during transfer
- determining the clinical urgency of the transfer (this assessment is to be made in consultation with specialist expertise at the receiving hospital and with trained retrieval specialists)
- determining the most medically appropriate means of transferring the patient and booking the transport provider (this function is dependent on the transport provider's policies)
- determining and arranging appropriate clinical escorts or other escorts as required, such as police, in liaison with the senior nurse on duty
- advising the transport provider if the patient's clinical condition should change, prior to departure, as clinical changes require a change in the transfer arrangements, such as the requirement for a higher level of clinical escort or additional monitoring equipment
- preparing the patient for transfer, including completing all relevant documentation
- providing clinical handover to the clinical team transferring the patient and the receiving hospital.

The **Registered Nurse / Midwife** is responsible for:

- preparing the patient for transfer, including coordinating all relevant documentation, patient transfer envelope/ checklist, medications, staff and clinical equipment required for transfer. Noting there is sufficient space on documentation for recording of observations, progress notes and medications within the photocopied documentation
- completion of the [MR184 WACHS Inter-hospital Clinical Handover Form](#), as per WACHS [Interhospital Clinical Handover Form Procedure](#) and other relevant documentation and faxing it to the receiving hospital and transport providers
- booking the transport provider (this function is dependent on the transport provider's policies)
- arranging for any logistical requirements for the transfer, such as meals for staff / patient, taxi vouchers or other fares as required for transferring the patient
- arranging for any necessary pick-up of the transferring team, such as arranging for RFDS staff to be transferred from the airport to the hospital
- confirming that the patient's nominated next of kin are informed of the impending transfer
- providing a verbal handover with the patient escort (or transport provider clinician) on patient's condition utilising the ISoBAR format
- telephoning the receiving hospital and transport provider with updated information should the patient's condition change, and prior to departure, and notifying the receiving hospital of the expected time of arrival.

In the absence of access to a medical officer (on-site, via telephone or emergency telehealth), the senior nurse/midwife on duty is to assume responsibility for the medical officer's responsibilities within their level of registration, and scope of practice.

The **Royal Flying Doctor Service (RFDS)** is responsible for:

- providing a fixed wing aeromedical interhospital patient transport service within contracted response times
- the provision of a suitably qualified medical officer and clinical coordinator of the emergency rescue helicopter service (ERHS)
- being available to respond 24/7
- advising the referring hospital of flight arrangements
- notifying the referring hospital and treating clinician of changes to the expected time of arrival
- providing the appropriate clinical escort, clinical equipment (including consumables) and medications (excluding pre-determined high cost medications) for the patient's clinical condition
- providing clinical advice to the referring hospital for preparation of the patient for transfer
- determining with the referring medical officer the clinical urgency and likely response times.

The **St John Ambulance Australia - Western Australia (SJAA-WA)** is responsible for:

- providing road IHPT service
- being available to respond 24 hours a day seven days a week
- advising the referring hospital of road transport arrangements
- providing a IHPT road transport service within agreed kilometre range
- assessing the patient's clinical needs and allocating appropriate clinical staff and equipment to meet the clinical needs of the patient, including requesting a clinical escort from the transferring hospital as required.

### 5. Compliance

It is a requirement of the WA Health [Code of Conduct](#) that employees “comply with all applicable WA Health policy frameworks.”

A breach of the Code may result in Improvement Action or Disciplinary Action in accordance with the WA Health [Discipline Policy](#).

WACHS staff are reminded that compliance with all policies is mandatory.

### 6. Evaluation

Monitoring of compliance with this procedure is to occur via monitoring of clinical incidents or complaints relating to interhospital transfers of patient for the identified retrieval site.

### 7. Standards

[National Safety and Quality Health Service Standards](#) – 6.4, 6.7, 6.8, 8.6, 8.10

### 8. References

WACHS [Stroke Pathway](#)

WACHS Link [Interhospital transfers](#)

[ACEM/ANZCA/CICM Guidelines for Transport of Critically Ill Patients](#)

### 9. Related Forms

[MR184 WACHS Inter-hospital Clinical Handover Form](#)

Datix Clinical Incident Management System ([Datix CIMS](#)) form

### 10. Related Policy Documents

WACHS [Inter-hospital Clinical Handover Form Procedure](#)

WACHS [Interhospital Transfer of the Mental Health Patient Guideline](#)

WACHS [Recognition and Management of the Newborn at Clinical Risk Policy](#)

WACHS [Royal Flying Doctor Service \(RFDS\) Clinical Manuals - Endorsed for Use in Clinical Practice](#)

WACHS [Patient Assisted Travel Scheme - Exceptional Ruling Guideline](#)

## 11. Related WA Health Policies

WA Health [Clinical Handover Policy](#)

## 12. WA Health Policy Framework

[Clinical Governance, Safety and Quality](#)

## 13. Appendices

**Appendix A** - [Indications for Transfer](#)

**Appendix B** - [Indications for Transfer for the Neonate](#)

**Appendix C** - [Inter-Hospital Transfer Destinations contact details](#)

**Appendix D** - [Inter-Hospital Patient Transfer Flowchart site template](#)  
(See: [Editable version](#) for inserting site specific details)

**Appendix E** - [Considerations for Patient Transfer by Commercial Airlines](#)

**Appendix F** - [Considerations for Patient Transfer by Helicopter Service](#)

**Appendix G** - [Job description skill set of SJA Paramedics](#)

**This document can be made available in alternative formats  
on request for a person with a disability**

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<b>Version:</b>	4.01	<b>Date Published:</b>	13 April 2021

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## Appendix A - Indications for Transfer

While the need for transfer is dependent upon the patient's condition and the resources of the referring hospital, transfer should be considered for the conditions described in Table below.

<b>AIRWAY</b>
<ul style="list-style-type: none"> <li>• Intubated emergency patients.</li> <li>• Patients potentially requiring airway intervention outside local capacity or clinical skill, such as threatened airway obstruction, altered or decreasing conscious state, head/neck trauma, head/neck burns.</li> </ul>
<b>BREATHING</b>
<ul style="list-style-type: none"> <li>• Significant respiratory distress or compromise after treatment.</li> <li>• RR &lt; 8 or &gt;30, SaO<sub>2</sub> ≤ 90% on 15L oxygen (adult – children according to age).</li> <li>• Any patient dependent on CPAP or BiPAP.</li> <li>• Drowning / immersion.</li> </ul>
<b>CIRCULATION</b>
<ul style="list-style-type: none"> <li>• Circulatory shock of any cause.</li> <li>• Hypotension: SBP ≤ 100mmHg (adult – children according to age).</li> <li>• Complex or recurrent arrhythmias (e.g. Recurrent VF, sustained VT, CHB).</li> <li>• Ongoing significant bleeding.</li> </ul>
<b>DISABILITY</b>
<ul style="list-style-type: none"> <li>• Significant altered Loss of Consciousness (LOC) (Glasgow Coma Score (GCS) ≤ 13).</li> <li>• Significant head injury, such as any LOC at any time of and since injury, any focal neurological deficit since injury, visible head trauma, GCS ≤ 13 at any time since injury, persistent headache since injury.</li> <li>• Acute spinal cord injuries.</li> <li>• Recurrent or prolonged seizures.</li> <li>• Intracerebral bleeding.</li> </ul>
<b>TRAUMA</b>
<ul style="list-style-type: none"> <li>• Patients with a significant injury to a single region (head, neck, chest, back, abdomen, pelvis, axilla or groin).</li> <li>• Chest injury with flail chest / subcutaneous emphysema.</li> <li>• Patients with lesser injuries involving at least two or more of the body regions (head, neck, chest, back, abdomen, pelvis, axilla or groin).</li> <li>• Penetrating trauma to head, neck, chest, back, abdomen, pelvis, axilla or groin.</li> <li>• <b>Burns &gt;20% BSA (adults) &gt; 10 % BSA (children).</b></li> </ul>
<b>HIGH RISK MECHANISM OF INJURY</b>
<ul style="list-style-type: none"> <li>• Vehicle rollover.</li> <li>• With other occupants in a vehicle, in which one or more were fatally injured.</li> <li>• Patient who was ejected from a vehicle.</li> <li>• Motor Vehicle Collision &gt;75kph.</li> <li>• Motor Vehicle Collision with intrusion &gt; 35cm.</li> <li>• Cyclist or pedestrian hit by a motor vehicle.</li> <li>• Fall &gt; 3m.</li> </ul>
<b>MISCELLANEOUS</b>
<ul style="list-style-type: none"> <li>• Severe Sepsis / Septic Shock.</li> <li>• Significant electrolyte, acid-base or fluid status abnormality.</li> <li>• Decompression illness.</li> <li>• Significant poisoning / snakebite / envenomation.</li> <li>• Serious complications of pregnancy.</li> <li>• Paediatric patients requiring advanced care.</li> <li>• Neonatal retrieval. (please see table below Indicative Clinical Conditions for Transfer of the Neonate)</li> <li>• Clients requiring assessment and care by Psychiatrist or specialist Mental Health Team</li> </ul>

## Appendix B - Indications for Transfer for the Neonate

While the need for transfer is dependent upon the patient's condition and the resources of the referring hospital, transfer should be considered but not limited to the conditions described in Table below.

Reference should be made to the following policy document: WACHS [Recognition and Management of the Newborn at Clinical Risk Policy](#).

Condition	Neonatal Indicative Clinical Indicators
Respiratory Distress	<ul style="list-style-type: none"> <li>• Oxygen therapy required for more than four hours after birth at a site without a licensed Special Care Nursery.</li> <li>• More than 40-50% oxygen required to maintain SaO<sub>2</sub> above 90%.</li> <li>• Apnoeic episodes requiring bag and mask ventilation.</li> <li>• Suspected pneumonia with signs of systemic infection.</li> </ul>
Low Birth Weight	<ul style="list-style-type: none"> <li>• Babies 34 - 37 weeks gestation and 2000- 2500g require at least Level 4 or above nursery care (at Clinical Service Level 3 or above as per WACHS Maternity and Newborn Services policy).</li> <li>• The decision to keep neonates in the above groups in WACHS SCN units is at the discretion of the maternity unit manager and the local consultant paediatrician advice.</li> <li>• All premature live born babies &lt; 32 weeks are to be discussed with NETS regarding transfer and management.</li> </ul>
Circulation	<ul style="list-style-type: none"> <li>• Any neonate with:                             <ul style="list-style-type: none"> <li>– weak palpable peripheral pulses.</li> <li>– severe bradycardia.</li> <li>– tachyarrhythmia.</li> <li>– persistent cyanosis with minimal distress, but poor perfusion.</li> </ul> </li> </ul> <p>May or may not be associated with poor respiratory function, intubation should be considered and discussed with NETS medical officer.</p>
Neonatal surgical emergencies	<p>Includes abdominal pathology such as:</p> <ul style="list-style-type: none"> <li>• bowel obstruction.</li> <li>• necrotising enterocolitis.</li> <li>• congenital diaphragmatic hernia.</li> <li>• gastroschisis.</li> <li>• airway obstruction related to Pierre Robin or Macroglossia and Choanal Atresia.</li> </ul>
Other neonatal conditions	<ul style="list-style-type: none"> <li>• Seizure activity – must be discussed with NETS</li> <li>• Sepsis (with signs of systemic infection).</li> <li>• Persistent hypoglycaemia at a site without a licensed Special Care Nursery.</li> <li>• Cardiac conditions.</li> <li>• Bleeding from any site.</li> <li>• Severe or multiple congenital abnormalities.</li> <li>• Congenital Heart Disease (suspected or known).</li> </ul>

Appendix C - Interhospital Transfer Destinations

<b>TABLE 2 : SPECIALISED SERVICES REFERRAL CENTRES</b>	
<p><b>Adults Requiring Transfer to Tertiary Hospital (Perth)</b></p> <p><a href="#">Unplanned IHPT WACHS LINK</a></p>	<p><b>GOLDFIELDS</b> Fiona Stanley Hospital contact <b>1800 659 475</b></p> <p><b>GREAT SOUTHERN</b> Fiona Stanley Hospital contact <b>1800 659 475</b></p> <p><b>KIMBERLEY</b> Royal Perth Hospital contact <b>9224 2244</b></p> <p><b>MIDWEST</b> Sir Charles Gairdner Hospital <b>6457 3333</b></p> <p><b>PILBARA</b> Royal Perth Hospital contact <b>9224 2244</b></p> <p><b>SOUTH WEST</b> Fiona Stanley Hospital contact <b>1800 659 475</b></p> <p><b>WHEATBELT</b>  <b>Eastern Wheatbelt</b> - Royal Perth Hospital contact <b>9224 2244</b>  <b>Coastal Wheatbelt</b> - Sir Charles Gairdner Hospital contact <b>6457 3333</b>  <b>Western Wheatbelt</b> - Royal Perth Hospital contact <b>9224 2244</b>  <b>Southern Wheatbelt</b> -Fiona Stanley Hospital contact <b>1800 659 475</b></p>
<p><b>Stroke Acute</b></p> <p>As per WA <a href="#">Acute Stoke transfer pathways</a></p>	<p><b>GOLDFIELDS</b> Sir Charles Gairdner Hospital contact <b>6457 3333</b></p> <p><b>GREAT SOUTHERN</b> Fiona Stanley Hospital contact <b>1800 659 475</b></p> <p><b>KIMBERLEY</b> Sir Charles Gairdner Hospital contact <b>6457 3333</b></p> <p><b>MIDWEST</b> Sir Charles Gairdner Hospital contact <b>6457 3333</b></p> <p><b>PILBARA</b> Sir Charles Gairdner Hospital contact <b>6457 3333</b></p> <p><b>SOUTH WEST</b> Fiona Stanley Hospital contact <b>1800 659 475</b></p> <p><b>WHEATBELT</b>  <b>Coastal Wheatbelt</b> - Sir Charles Gairdner Hospital contact <b>6457 333</b>  <b>Central Wheatbelt</b> - St John of God Hospital Midland – Public contact <b>9462 4000</b>  <b>Southern Wheatbelt</b> - Fiona Stanley Hospital contact <b>1800 659 475</b></p>



<b>Trauma</b>	State Trauma Service (Royal Perth Hospital) contact <b>0404 894 277 or RPH Switch 9224 2244</b>
<b>Burns</b>	<b>Adult</b> Burns Unit Fiona Stanley Hospital contact <b>1800 659 475</b> <b>Paediatric</b> Burns Unit Princess Margaret Hospital contact <b>93408222</b>
<b>Spinal Unit Acute</b>	Royal Perth Hospital contact <b>9224 2244</b>
<b>Obstetrics</b>	King Edward Memorial Hospital contact <b>9430 2222</b>
<b>Neonates</b>	Princess Margaret Hospital contact phone <b>9340 8222</b>
<b>Paediatrics</b>	Princess Margaret Hospital contact phone <b>9340 8222</b>
<b>Mental Health Inpatient Unit Referral centres</b>	<p><b>GOLDFIELDS</b> Goldfield Mental Health Inpatient Unit contact <b>9080 5888</b></p> <p><b>GREAT SOUTHERN</b> Albany Mental Health Inpatient Unit contact <b>9892 2222</b></p> <p><b>KIMBERLEY</b> Broome Mental Health Inpatient Unit contact <b>9194 2222</b></p> <p><b>MIDWEST</b> Graylands Mental Health Inpatient Unit contact <b>9347 6600</b></p> <p><b>PILBARA</b> Broome Mental Health Inpatient Unit contact <b>9194 2222</b></p> <p><b>SOUTH WEST</b> Bunbury Mental Health Inpatient Unit contact <b>9722 1000</b></p> <p><b>WHEATBELT</b> Graylands Mental Health Inpatient Unit contact <b>9347 6600</b></p>
<p><b>SPECIAL CARE NURSERIES WITHIN WACHS</b></p> <p><b>Please contact the on call Paediatrician</b></p> <p>The level of service varies between units and may change dependant on the local staffing arrangements and availability of clinical equipment.</p>	<p><b>GOLDFIELDS REGION</b> Kalgoorlie Health Campus contact <b>9347 6600</b></p> <p><b>KIMBERLEY REGION</b> Broome Hospital contact <b>9194 2222</b></p> <p><b>MIDWEST REGION</b> Geraldton Hospital contact <b>9956 2222</b></p> <p><b>PILBARA REGION</b> Hedland Health Campus contact <b>9174 1000</b></p> <p><b>SOUTH WEST REGION</b> Bunbury Hospital contact <b>9722 1000</b></p> <p><b>WHEATBELT</b> Referral to Perth metro is usual for Wheatbelt – PMH <b>9340 8222</b></p>

<p><b>High Dependency Units within WACHS</b></p> <p>The level of service varies between units and may change dependant on the local staffing arrangements and availability of clinical equipment.</p>	<p><b>GOLDFIELDS REGION</b> Kalgoorlie Health Campus contact <b>9347 6600</b></p> <p><b>GREAT SOUTHERN REGION</b> Albany Hospital contact <b>9892 2222</b></p> <p><b>KIMBERLEY REGION</b> Broome Hospital contact <b>9194 2222</b></p> <p>NOTE: East Kimberley Transfers form Kununurra, Halls Creek and Wyndham Hospital patients may be transferred to Royal Darwin Hospital (NT) on a case by case negotiated transfer through the Kimberley Regional Medical Director</p> <p><b>MIDWEST REGION</b> Geraldton Hospital contact <b>9956 2222</b></p> <p><b>PILBARA REGION</b> Hedland Health Campus contact <b>9174 1410</b></p> <p><b>SOUTH WEST REGION</b> Bunbury Hospital contact <b>97221000</b></p> <p><b>WHEATBELT</b> Referral to Perth metro is usual for Wheatbelt as per WACHS Link</p>
<p><b>Obstetric Consultant Services within WACHS</b></p> <p><b>Please contact the on call Obstetrician</b></p> <p>The level of service varies between units and may change dependant on the local staffing arrangements and availability of clinical equipment.</p>	<p><b>GOLDFIELDS REGION</b> Kalgoorlie Health Campus contact <b>9347 6600</b></p> <p><b>GREAT SOUTHERN REGION</b> Albany Hospital contact <b>9892 2222</b></p> <p><b>KIMBERLEY REGION</b> Broome Hospital contact <b>9194 2222</b></p> <p><b>MIDWEST REGION</b> Geraldton Hospital contact <b>9956 2222</b></p> <p><b>PILBARA REGION</b> Hedland Health Campus contact <b>9174 1000</b></p> <p><b>SOUTH WEST REGION</b> Bunbury Hospital contact <b>9722 1000</b></p> <p><b>WHEATBELT</b> Referral to Perth metro is usual for Wheatbelt – <b>King Edward Hospital 9430 2222</b></p>

<p><b>STEP 1</b></p> <p><b>DETERMINE THE CLINICAL URGENCY</b></p> <p>The referring medical officer is to make this assessment in consultation with specialist expertise at the receiving hospital and where required in collaboration with trained retrieval specialists such as St John Ambulance (SJA), Royal Flying Doctor Service (RFDS) and the Neonatal Retrieval Team (NETS). Also guided by the following influencing factors:</p> <ul style="list-style-type: none"> <li>• The urgency/timeliness of the likely intervention or diagnostic procedures required for the patient.</li> <li>• Time frame it takes to transfer patients from regional areas and the likelihood of patient deterioration during this time.</li> </ul>	Urgency				
	<p><b>Immediate:</b> Has life threat requiring immediate treatment not available in current setting</p>	<p><b>Emergency:</b> Current facility unable to provide care required; high risk of significant deterioration</p>	<p><b>Urgent:</b> Patient stabilised but has risk of deterioration</p>	<p><b>Semi-urgent:</b> Higher level of care required but not likely to deteriorate</p>	<p><b>Non-Urgent</b></p>
	<p>The patient's condition is serious enough or deteriorating so rapidly that there is the immediate potential of threat to life, or organ system failure, if not transferred.</p>	<p>Potentially life or limb threatening, the patient's condition may progress to life or limb threatening, or may lead to significant morbidity or adverse event (depends on transfer occurring within 4-6 hours).</p>	<p>Treatment may be able to be initiated locally to reduce an adverse outcome for a patient and where the local staff, facility and equipment can safely maintain care for the patient with or without additional medical advice for a period not greater than 24 hours.</p>	<p>Potentially serious, where the patient's condition may deteriorate if transfer does not occur within 24 – 36 hours and where the local staff, facilities and equipment are able to safely care for the patient with or without ongoing medical advice.</p>	<p>The patient's condition is chronic or minor enough that symptoms or clinical outcome will not be significantly affected if transfer does not occur for 36 hours <b>OR</b> clinic / outpatient type appointment where the patient requires stretcher transport and no other options are available</p>

<p><b>STEP 2</b></p> <p><b>DETERMINE THE LOCATION FOR TRANSFER</b></p> <p>This table outline the site specific locations for transfer, determined by location, clinical services available and specialised services and pathways for transfer to metro facilities. Contact referral centres to discuss level of care required.</p>	TERTIARY CENTRES LOCATED IN PERTH							
	ADULT	PAEDIATRIC	NEONATES	OBSTETRICS	MENTAL HEALTH	BURNS	STROKE	TRAUMA
	East Link Royal Perth Hospital <b>9224 2244</b>	Princess Margaret Hospital for Children <b>1300 851 511</b>	Princess Margaret Hospital <b>93408222</b>	King Edward Memorial Hospital <b>9430 2222</b>	Broome Mental Health inpatient unit. <b>9194 2222</b>	Adults – Fiona Stanley Hospital <b>1800 659 475</b> Paediatrics – Princess Margaret Hospital <b>1300 851 511</b>	Sir Charles Gairdner Hospital <b>6457 3333</b>	State Trauma Service (Royal Perth Hospital) <b>0404 894 277 or RPH Switch 9224 2244</b>
REGIONAL CENTRES FOR POTENTIAL TRANSFER								
Hedland Health Campus Regional Resource Centre Contact Physician, Surgical Consultant on call <b>9174 1000</b>	Hedland Health Campus Paediatric inpatient ward. Contact Paediatrician on call <b>9174 1000</b>	Hedland Health Campus Level 2 nursery – Contact Paediatrician on call <b>9174 1000</b>	Hedland Health Campus Contact Obstetrician on call <b>9174 1000</b>	No inpatient Mental Health facility within the Pilbara. Refer Tertiary centre above	No specialised burns management unit within the Pilbara. Refer Tertiary centre above	No specialised acute stroke management unit within the Pilbara Refer Tertiary centre above	No specialised acute trauma management unit within the Pilbara Refer Tertiary centre above	

STEP 3 DETERMINE THE MODE OF TRANSPORT AND ESCORT REQUIREMENT	TRANSPORT OPTIONS			TRANSPORT CONTACT NUMBERS
	Hedland Health Campus	PERTH	Broome (Mental Health Patient)	
Distance by road / approximate travel time from Karratha Hospital to receiving hospital	250Kms – 3hrs	1600kms – 15hrs	850kms – 9 hrs	RFDS .....XXXX ST JOHN AMBULANCE .....XXXX
Distance by air / approximate travel time from Karratha Hospital to receiving hospital	RFDS – 3hrs	RFDS / ASPEN – 3 hrs Commercial Airlines 2 hrs	RFDS – 2hrs Commercial Airlines via Perth	ETS .....XXXX NETS .....XXXX COMMERCIAL BUS .....XXXX COMMERCIAL AIRLINES .....XXXX ASPEN JET .....XXXX Senior Medical Officer .....XXXX
<b>Immediate:</b> Has life threat requiring immediate treatment not available in current setting	RFDS	RFDS Mining – ASPEN medical Jet	RFDS	
<b>Emergency:</b> Current facility unable to provide care required; high risk of significant deterioration	RFDS	RFDS Mining – ASPEN medical Jet	RFDS	
<b>Urgent:</b> Patient stabilised but has risk of deterioration	RFDS Ambulance	RFDS Mining – ASPEN medical Jet	RFDS	
<b>Semi - Urgent</b> Higher level of care required but not likely to deteriorate	RFDS Ambulance	RFDS Mining – ASPEN medical Jet Commercial Airlines	RFDS Commercial Airlines	
<b>Non – Urgent</b>	Ambulance Hospital Vehicle Private Vehicle	RFDS Mining – ASPEN medical Jet Commercial Airlines	RFDS Commercial Airlines Bus Private Vehicle	

**REGIONAL ESCALATION PROCESS**

If the referring medical officer determines significant patient deterioration will occur due to either an unexpected significant delay in a patients transfer or in the allocated timeframe provided for transfer, this can be escalated via the following process:

- The Referring Medical Officer at referral site contacts the most Senior Doctor on Call to discuss transfer concerns and inability to keep the patient stable at referral site.
- The Senior Doctor on Call determines the time to transfer is inadequate and patient deterioration is expected and cannot be managed at the referral site.
- The Senior Doctor on call contacts the Regional Medical Director (RMD) or Disaster Coordinator on-call if the RMD is not available.
- The RMD discusses transfer concerns with the RFDS senior doctor or their DMS.
- If that does not resolve the issue, then the RMD or Regional Director (RD) can then call 1800 625 800 and ask the RFDS Operations Centre to escalate their call to the RFDS General Manager Operations. There can then follow an Executive to Executive level conversation.
- If this occurs on a weekend or afterhours when the RMD may not be available, the referring doctor can speak with the regional Executive member on call or RD who can call RFDS and speak to their General Manager Operations.

## Appendix E - Considerations for Patient Transfer by Commercial Airlines

The referring medical officer is responsible for determining that commercial air travel is a safe mode of IHPT, including the level of escort required for the patient.

Where a patient is to travel via an IHPT, the referring medical officer is to:

- authorise the mode of travel by commercial air travel
- authorise the level of escort for the patient
- complete the relevant airlines Travel Clearance Form1 certifying that the patient is fit to travel. This is to be documented in the patient's health record. A copy of this is to be retained by the patient and carried when travelling.

Arranging for transfer by chartered aircraft requires clinical approval by the treating medical officer and the appropriate WACHS officer's authority according to the [WA Country Health Service Authorities Schedule 2016](#).

It is mandatory for health services to make their domestic air travel bookings through Carlson Wagonlit Travel (CWL) unless WACHS hospitals can purchase travel reservation services through a local travel agent in accordance with the Government's Buy Local Policy.

**Table 1. Conditions that Usually Prevent Commercial Airline Travel**

Condition	Conditions that may be imposed on travel
Abdominal surgery	Within 10 days of travel
Anaemia	Haemoglobin < 7.5 d L/L
Angioplasty	Within three days of travel
Angioplasty with stents	Within two days of travel
Assisted Breathing During Travel / Supplemental Oxygen	<p>While the aircraft may be at 40,000 feet, cabin altitude is generally maintained at 6,000 to 8,000 feet. This results in an oxygen level equivalent to an atmosphere with 15% oxygen content. Because of the nature of the oxygen dissociation curve most passengers can tolerate this partial pressure without detriment. However, passengers with pre-existing respiratory or cardiac conditions may need supplementary oxygen.</p> <p>If the patient requires supplemental oxygen during travel a Travel Clearance Form must be submitted to the airline.</p> <p>For some airlines, supplemental oxygen must be pre-ordered (2-5 days) and there is an additional charge, while other airlines require the oxygen cylinder to be supplied by the health service or patient with appropriate travel packs and restraints.</p>
Asthma	Recent deterioration within 48 hours of travel

Cardiac events	Within seven days of intended travel
Cerebral Vascular Accident	Within three (3) days of intended travel
Chest surgery	Within 10 days of travel
Contagious or infectious disease	If it imposes a direct risk of infection to passengers or crew
Decompression sickness	Is likely to require clearance from a specialist in hyperbaric medicine
Ear and/or Sinus Pathology	Within 48 hours of travel
Fractured jaw which has been wired	Must carry wire cutters on board. Must travel with an escort capable of cutting the wires if necessary. Suitable documentation must be carried because of the security issues
Head Injury	Within two weeks of travel or where there is air in the cranium
Inability to sit upright	Passengers are required to sit upright for take-off and landing.
Inability to toilet, eat or administer own medication	Subject to the length of flight, a competent escort (arranged by the health service) must be available to travel with the patient. The escort must sit in an adjacent seat.
Infants - newborn babies	Within seven (7) days of birth
Penetrating Eye Injury	While there is air in the eye or a vitreous leak
Phobias	If doubt about ability to cope with air travel
Plaster casts	Plaster cast <b>must</b> be split if the injury is < 48 hours old
Plug in electrical equipment	To prevent interference with aircraft electrical systems, all plug in equipment must be approved and pre-approval is required by the airline.
Pneumothorax	Within 14 days of resolution
Pregnancy	Multiple pregnancy after 36th week Flights > 4 hours – single pregnancy after 36th week
Psychiatric Disorder	Acute or uncontrolled
Psychiatric disorder that may deteriorate during flight	Must travel with medical escort. Escort must sit in adjacent seat.
Requirement for Stretcher / Humidicrib	Must travel with medical escort. Escort must sit in adjacent seat.
Significant cardiac arrhythmia	No medical clearance is required for patients with a pacemaker who are otherwise in good health
Stroke	Within 10 days of travel

## Appendix F - Considerations for Patient Transfer by Helicopter Service

The Emergency Rescue Helicopter Service (ERHS) is the preferred mode of transport for the transfer of all WA Country Health Service (WACHS) critically ill or injured patients within a 200km radius of the central business district (CBD) of Perth.

St Johns Ambulance is responsible for the clinical coordination of the ERHS for interhospital patient transfer (IHPT). Once the referring hospital is notified that the mode of patient transport is to be the ERHS, a number of actions are required to ensure the safety of staff and patients.

### Landing Site Preparation for the Helicopter

In addition to authorised helipads, the helicopter can land in an area provided it is large enough to accommodate the aircraft with a sufficient buffer zone for safe operations.

As a guide, the following is to apply to the area:

- The area is to be free of obstacles likely to interfere with the manoeuvring of the helicopter, such as power lines, tower, loose debris etc.
- The area is not to have an overall slope exceeding 7:5 degrees (1:8) vertical to the horizontal or the maximum slope landing limit for the helicopter, whichever is the lesser.
- An indication of wind strength and direction is desirable.
- At night, these helipads can either be lit by portable floodlighting or car headlights or if none is available, at least by defining the area with some form of lighting.
- All health service personal, emergency service personnel, bystanders, patients and vehicles (including ambulances) are to maintain a distance of at least 50 metres from the helicopter-landing site.

If a WACHS hospital has designated an area to receive the ERHS, local procedures must be available to ensure:

- the provision of safety clothing for designated persons to block traffic from the site. If a road is used health service vehicles are to be positioned so as to block traffic from all directions. Doors and windows are to be closed to reduce the noise.
- designated persons check and clear the designated landing site from loose debris and/or unsecured items that could interfere with the helicopter.
- designated persons light the landing area.
- designated persons ensure that health service personnel, bystanders, patients and vehicles (including ambulance) maintain a distance of at least 50 metres from the helicopter-landing site.
- that livestock or animals do not move into the landing area (animals are attracted to the high frequency pitch of the helicopter tail rotor).

## Staff Safety

The ambulance will park well clear of the landing area (greater than 50 metres), upwind of the site. To reduce noise and protect the patient, staff and ambulance officers, the windows and doors will be closed.

Staff are **not to approach** the helicopter on landing – a member of the aircrew will approach you to discuss the loading procedure.

Final operational matters regarding the helicopter rest with the pilot.

If, in exceptional circumstances for operational reasons, it is necessary for a person to approach or board the helicopter while its rotors are turning, the following precautions **MUST** be taken:

- Prior to the person approaching the aircraft, a member of the aircrew will give the person a safety briefing:
- The person must wear a reflective safety vest, day or night, as this will allow the aircrew to monitor their movements around the aircraft. In addition, safety glasses are to be worn to protect against airborne dust and earplugs or earmuffs are to be worn. The person will be issued with an intercom headset once inside the aircraft.
- All loose items of clothing, such as hats, are to be removed and linen is to be secured.

**NOTE:**

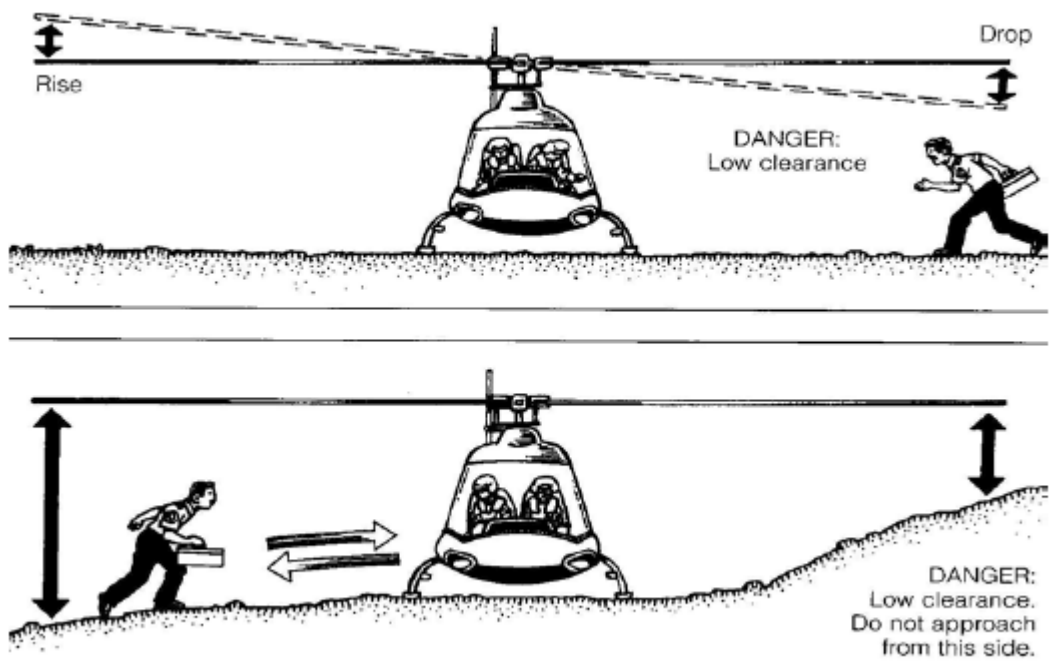
Helicopter rotor blades are very finely balanced and even a light object such as an empty plastic bag drawn up into the rotor disc can cause major damage. Additionally, loose objects may be drawn into the engine air intakes causing catastrophic engine damage.

If you drop something, **DO NOT** chase it, but notify a crew member immediately.

- Long items, such as carry poles or scoop stretchers, must be carried horizontally to prevent them from striking the rotor blades.
- Personal mobile phones must be turned off, as they may interfere with the aircraft navigational equipment.
- The approach and departure to the aircraft should always be made from the side, this keeps people clear of the tail-rotor. A return 'thumbs up' must be received from the pilot before proceeding towards the aircraft. This will normally be obtained by the guiding crewmember. Approach the aircraft walking upright. The height of the main-rotor blades will normally be well above your head height. The only exception will be on steeply sloping ground where the uphill section of the rotor disc, while remaining horizontal, will be made from downhill (see figure 1). The aircrew will provide briefings as to the correct direction of approach.
- The external skin of the aircraft, should not be touched as it may be hot and any radio antennae should not be touched. Areas marked as "No Step" should not be stood /stepped on as these areas, for example the floats, are not designed to support weight, and are easily damaged and expensive to repair.
- Anything which may pose a dangerous goods risk, should not be taken onto the aircraft, this includes matches and cigarette lighters. A crewmember can provide advice on items which are of concern during the pre-flight briefing.



**Figure1: Approaching the Helicopter**



**IMPORTANT SAFETY NOTE**

The main danger area of any helicopter is the TAIL-ROTOR.

With the engine running, the tail-rotor, turning at extremely high speed, becomes virtually invisible.

Additionally, the lowest point of the tail-rotor is well below the average person's head height. Contact with the tail-rotor will cause serious injury or death. For this reason, avoid any movement towards the rear of the aircraft.

**Do not take a 'shortcut' around the back of the aircraft.**

If you become blinded by airborne dust/debris when approaching or departing the aircraft, sit down where you are. This will prevent you walking to any area of danger. A crewmember will come to your assistance.

When operating around the helicopter, remain calm – do not rush. The aircrew are there to assist you and to ensure your safety. If you have any questions or doubts about what to do, ASK.

## AMBULANCE PARAMEDIC



### Role:

- Provide emergency care in the pre-hospital environment with the transport medium being a road ambulance

### Training:

- 4 year bachelor degree in Paramedical Science

### Skills include:

- Childbirth
- Cricothyrotomy
- Defibrillation
- Endotracheal Intubation
- IV Infusion Pumps
- Laryngeal Mask Airway
- Laryngoscope and Magill Forceps
- Nasopharyngeal Airway
- Needle Thoracocentesis
- Oropharyngeal Airway
- Vascular Access including Intraosseous cannulation

### Medications that can be administered

- Aspirin
- Adrenaline
- Amiodarone
- Cophenylcaine
- Fentanyl
- Glucagon
- Glucose Oral Gel
- Heparin Sodium
- Ipratropium Bromide
- Iv Crystalloid Solutions
- Intravenous Glucose
- GTN
- Ketamine
- Lignocaine 1%
- Methoxyflurane
- Midazolam
- Naloxone
- Ondansetron
- Prednisalone
- Salbutamol Sulphate



# CRITICAL CARE PARAMEDIC (CCP)



The Critical Care Paramedic performs in the same role, training, skill and medication as Ambulance Paramedic, plus the below listed items.

## Role:

- Provide primary and secondary aeromedical emergency critical care in the pre-hospital environment with the transport medium being rotary aircraft (Helicopter).
- Provide emergency search and rescue services for either land based or water/ocean based emergencies.

## Training:

- Graduate Diploma of Paramedical Science - Critical Care Specialisation
- Adult Anaesthetics Practical training - Royal Perth Hospital (Annually)
- Paediatric Anaesthetics Practical training - Princess Margaret Hospital (Annually)
- Anaesthetic Emergencies - Royal Perth Wet Lab
- Advanced Life Support (ARC)
- Paediatric Advanced Life Support
- Levitan Airway Course – Baltimore USA
- Cert III Rescue Crewman Course CHC

## Skills include:

- Advanced Adult and Pediatric airway management
- Bougie assisted intubation
- Fast Track LMA
- King Vision Video Laryngoscope
- Surgical Airway Advanced Vascular Access (Adult and Pediatric)
- External jugular cannulation
- EZIO intraosseous injection
- CCP Initiated Emergency Adult and Pediatric Rapid Sequence Induction
- Midazolam, Fentanyl, Suxamethonium, Rocuronium, Midazolam/Morphine controlled infusions for sedation and paralysis (Braun Syringe Drivers)
- Emergency chest decompression



- External Cardiac Pacing
- External Synchronized cardio version
- Administration of O neg packed red blood cells

## Additional medications that can be administered:

- Atropine
- Glucose 5%
- Maxalon
- Metaraminol
- Morphine
- Packed Red Blood Cells
- Rocuronium
- Suxamethonium