1. GUIDING PRINCIPLES

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.

The Royal Flying Doctor Service (RFDS) 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.

The Clinical Coordinator for RFDS has the sole responsibility for all aspects of patient management during retrieval, and will coordinate the transfer of an ill or injured patient from one hospital to another hospital including:

- Determination of the most appropriate clinical crew mix required to undertake the medical retrieval (critical care paramedic and medical retrieval doctor or critical care paramedic only); and
- Coordination of bed at the receiving hospital.

2. INFORMATION REQUIRED BY RFDS OPERATIONS CENTRE

The medical officer or senior nurse should provide the following information to the RFDS, by calling 1800 625 800:

- Type of incident;
- Caller name;
- Call back number;
- Number of patients;
- Medical category applied to tasking;
- Diagnosis / presenting problem;
- Patient details (including weight) if available;
- Type of injury or illness;
- Type of terrain and hazards (such as high tension or power lines) if an area has been designated within the hospital grounds, other than the local airport; and
- Weather conditions in the area if available.
3. 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 shall apply to the area:

- The area shall be free of obstacles likely to interfere with the manoeuvring of the helicopter, such as power lines, tower, loose debris etc.;
- The area should not 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; and
- 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 should be positioned so as to block traffic from all directions. Doors and windows should 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 personal, bystanders, patients and vehicles (including ambulance) maintain a distance of at least 50 metres from the helicopter-landing site; and
- That livestock or animals do not move into the landing area (animals are attracted to the high frequency pitch of the helicopter tail rotor).

4. 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 crewmember 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.
Figure 1: 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.

5. **DEFINITIONS**

See Interhospital Patient Transfer Policy
6. EVALUATION

Number of reported patient or staff incidents relating to patient transfer or transport by ERHS.

7. REFERENCES


Fire and Emergency Services Authority of Western Australia and St John Ambulance Australia. (2003) Tasking authority protocols and standard operating procedures for emergency rescue helicopter service.