



LONDON'S
AIR AMBULANCE
roadside intensive care



Pre-hospital Care Standard Operating Procedure

Working at Height

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APPROVAL/ ADOPTED:	PHC Policy Board	
DISTRIBUTION:	PHC Doctors PHC Paramedics	
RELATED DOCUMENTS:	SOP Safety at Scene SOP Personal Protective Equipment Equipment folder – Fall Arrest harnesses	
THIS DOCUMENT REFERS TO:	PHC Clinical Practice PHC Non-clinical Practice <input checked="" type="checkbox"/> PHC Operational Procedure	Ref: OP-10

Aims:

- Identify situations when fall-arrest protection should be employed.
- Describe the method of fall arrest harness application.
- Identify roles and limitations of fall-arrest protection.

Background:

The HEMS team are often required to attend to patients in environments where there is a risk of a fall from height. These environments include: scaffolding, hydraulic lifting apparatus, basket hoists and cranes. It is essential that when working in such environments, the HEMS team are protected in the event of a fall.

This SOP does not attempt to address “roped access” or “roped rescue” situations, which are beyond the scope of HEMS operations. The equipment should not be used for anything other than fall arrest.

Fall arrest is defined as prevention of the user hitting the ground in the event of a fall from height. Three Petzl harnesses are carried in the aircraft and two in DA77.

Policy:

1. Assessing the scene and general approach

- Safety of the rescue team is paramount. Do not be tempted to get involved anything that seems dangerous. Do not assume that those who work at height for a living have any greater concept of safety than you.
- When extricating someone from height use the safest route possible, even if the time taken is longer.
- Agree on a plan of action before leaving the kitting-up area.

2. Use of the harnesses

- The fall arrest harness should be used in conjunction with the energy absorber with integral lanyard and MGOs in all situations where personnel are required to work at heights of greater than 4.35 metres [15 feet] in an unprotected environment.
- Helmets must be worn in all situations where the fall arrest equipment is used.
- All HEMS registrars and paramedics will receive instruction on the safe inspection, use and maintenance of fall arrest equipment.
- The harness should be worn as shown on the instruction sheet and all fittings, buckles and carabiners should be checked each time it is used. Correct fit should be checked by other team members prior to entering the at-risk environment. The harness should be worn over the flight suit. Avoid using the rear lifting point of the harness.
- Harnesses are available in two sizes (1 and 2). It is important that all members of the team are aware of which size is appropriate for them prior to using the equipment. As a rough guide, size 2 will fit most men and size 1 most women.
- All excess "kit" should be removed - from pockets, including belts and attachments (Do not leave stethoscope around neck!).

3. To put on the harness

1. Remove the harness from the protective bag and put it on like a jacket. There is a large metal D-ring on the back. This ring will end up positioned between your shoulder blades. There are two small black loops which will end up positioned at the front of the harness at mid chest level.
2. Slide your hands down the chest straps until they rest just above the two small black loops.
3. Pass each of the leg straps between your legs. Adjust the size of each leg strap to provide a comfortable fit and secure each clip closed.
4. The shoulder straps are adjusted by pulling the right and left shoulder straps.
5. The chest strap should be adjusted so as to hold the shoulder straps in position on the front of the chest.
6. The two small black loops at the front of your chest should be connected by the carabiner and the absorbica device attached by its black loop before the screw-gate is closed.
7. The screw gate should be finger tight but not over tightened.

4. Buddy check

- Prior to entering the at-risk environment all personnel should have their harness checked by another member of the team.
- Check that the harness is appropriately fitted with legs and arms through the correct loops.
- Check that all straps are adjusted such that the harness fits snugly but does not restrict movement.
- Check that all excess strap lengths are tucked away and are not hanging loose.
- Check that the carabiner has been passed through the two black chest loops, the absorbica has been attached and the screw gate closed.

5. Using the energy absorber and MGOs

- The large hooks (MGOs) are designed to be clipped onto fixed horizontal structures such as scaffold bars to provide an anchor point in the event of a fall. At least one MGO should be attached at all times. Ideally this anchor point should be above the position of the user.

- To open the MGO gate, pressure should be applied with the palm of your hand to the small locking lever at the back of the hook to allow the gate to be pulled open. This prevents the device opening as a result of rope looping over the gate in the event of a fall.

6. Maintenance, cleaning and storage

- Before and after each use it is necessary to check the condition of webbing, ropes and stitching. Do not hesitate to scrap a product showing signs of wear which might affect its strength or limit its function.
- The harnesses should be checked every month. Any repair or modification of the equipment is forbidden.
- The equipment should not be re-used after a fall. It should be discarded.
- Dirty equipment should be cleaned by hand or machine on a delicate material wash and rinsed in clean water (maximum temperature 20 degrees). It should be dried in a cool, ventilated dark room. Grease spots may be removed with trichloroethylene. Webbing which has been wetted then dried will shrink very slightly.
- Always carry and store the equipment in its protective bag. Despite its UV protection it is recommended that the equipment is stored away from direct light, in a well ventilated place away from extreme temperatures. Check that it is not too crumpled or screwed up.
- All chemical products, corrosive materials and solvents should be regarded as harmful to this equipment.

7. Lifetime

- After first use the harnesses may have a life of five years, without taking wear into account. However, wear or damage could occur on the first use which limits its life to that use. Shelf-life of the equipment in suitable conditions is up to five years from first use.

8. Reference

- Instructions - Petzl Dorsal C76 Fall arrest harness - Petzl Absorbica energy absorber