Emergency Treatment of Anaphylaxis

A Guide for the Outdoor Industry

This information has been kindly supplied by the team at Peak Safety

Allergies are on the increase and given the remote nature of our outdoor environment, many operators have been asking whether their staff should carry adrenaline.

There is no doubt adrenaline is a life-saving drug. While it does not reverse the production of histamines and other chemicals during an anaphylactic event, it can overcome their life threatening effects for a period of time.

Each organisation should, before supplying adrenaline to its staff, conduct a thorough assessment of its anaphylaxis risk. Factors to take into account are how long the emergency services would typically take to arrive (beyond 15 minutes increases the risk), the presence of stinging insects, whether the trip involves food etc.

For most ½ day or more trips into remote areas the anaphylaxis risk will be significant. As such the best way to reduce the risk is to carry adrenaline as either a preloaded auto injector (epipens or anapens) or carry vials of adrenaline ready to draw up and administer manually.

Auto-Injectors

These are by far the least complex option. Something to consider in the heat of the moment when someone is crashing from airway constriction. The downsides are that they are expensive, they expire about 18 months from manufacture and it is possible for the rescuer to inject themselves in the thumb by using it upside down. Also most auto-injectors only allow one dose of adrenaline and it is possible that the reaction will outlast the adrenaline.

Auto-injectors are designed to be used by the public and are generally available from pharmacies.

Manual Injection

More and more outdoor organisations are deciding to carry vials of adrenaline for manual injection in the case of an anaphylactic emergency. In many cases the risks associated with carrying a manual injection will be outweighed by their benefits. The cost of a vial of adrenaline is less than $1 to manufacture apparently. Adrenaline is a very safe drug when given in its correct dose – even if the person doesn't need it. Given manually, the rescuer has enough of the drug to give 2 doses to an adult if the reaction outlasts the adrenaline.

Manual injection is certainly more complex than autoinjection, has more chance of someone administering an incorrect dose, requires more training and relies on being able to access a supply of adrenaline.

If you decide that you or your organisation might want to go down this path then you need to do the following:

1. Conduct and document a thorough assessment of your anaphylaxis risk. If carrying adrenaline is indicated then...
2. Decide whether the auto-injector or manual injection is better for you/your staff. (Organisations generally require an Outdoor PHEC qualification for their staff to be able to carry manual injections).
3. Develop a relationship with a medical professional (GP etc) who is happy to supply the drug based on their approval of your protocols, training and assessment of delivery.
4. Develop a protocol for the administration of adrenaline for anaphylaxis. Get that protocol approved by your medical professional.
5. Have staff trained and assessed in the administration to the satisfaction of the medical professional supplier.
6. Stock appropriate first aid kits with the drug and equipment.
7. Develop periodic checks to ensure the drug is replaced when used or before it expires.

Some organisations might choose to allow their clients to carry their own adrenaline for anaphylaxis. This is certainly an option but we have experienced a number of cases where someone has forgotten their adrenaline or has reacted to something they did not know they were allergic to. In which case carrying adrenaline can be a life saving measure.