



PHEC

for outdoor professionals

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Medical Drugs in our First Aid Kits

Why we carry what we do in our First Aid Kits, how they work and what could possibly go wrong.....

Many of us carry a variety of (often partially crumbled or soggy) tablets in our first aid kits. On trips overseas we get more from an obliging Doctor (just in case), these sit there for a few more years - the instructions fade...

During our PHEC refresher programmes we are often asked 'What drugs should we carry in our first aid kits, and to whom and when should we dish them out....'

Although our clients come from a wide range of backgrounds and organisations there do seem to be some common threads and concerns.

Working with any group professionally in the outdoors it is necessary to obtain some sort of medical/ client history so you know the following:

- Do any of your clients have any medical conditions which might mean that they may react adversely to drugs in your first aid kit (this is also important to pass on to emergency services if necessary).
- Then check they are carrying with them (and know how to administer) particular medicines specific to their condition e.g does the known anaphalactic carry adrenaline, or the asthmatic their inhaler.
- Are they taking any regular medication? If so, what is it, how much and often do they take it and what is it for?

An outdoor instructor or guide might commonly carry in their first aid kit:

- Paracetamol.
- Aspirin
- Anti inflammatories.
- Antihistamines.

Paracetamol:

Paracetamol is a commonly used mild analgesic. This is the first line of pain relief. Paracetamol is unique (compared to other pain medication) in that it provides a base of pain relief that enhances

other medications. The use of paracetamol and stronger (e.g Ibuprofen) medications together results in less use of the more sedative medications. Paracetamol is thought to work on the nerve endings in the brain and spinal cord to reduce the production of Prostaglandins which make us more sensitive to pain.

Uses: Pain relief, fever relief

Contraindications/ Limitations: Side effects are rare. However the recommended 4 doses in 24 hours should not be exceeded (8 tablets for an adult, 4 for a child under 12 years). An overdose of paracetamol can result initially in nausea and vomiting, then to liver damage, jaundice, confusion, loss of consciousness and death. Any suspected overdose should immediately be referred to a doctor or medical centre.

So who do we give it to? With adults its easy (many will carry and administer their own), be aware that if someone is taking paracetamol there needs to be a reason, question the person as to why they want pain relief and try and manage the cause of the pain.

With children, many outdoor instructors are too scared to give paracetamol out – check organisational protocol and refer to the packaging for recommended dose, often this is weight related. Someone who has had an accident (sprain or suspected fracture), a heavy cold, or menstrual pain will find relief

Aspirin

A useful pain relief drug. Aspirin is mostly safe and has few side effects.

Brand names include: Dispirin, Solaprin, Aspro, Cartia.

Drugs containing acetylsalicylic also work locally at the pain site to keep the brain clear.

Uses: Pain relief especially for rheumatic and arthritis. Aspirin is a blood 'thinner' and is used to stop clots in the blood. Cardiac patients are often on a daily prescribed dose of aspirin and patients delivered to A&E departments with chest pain are given an aspirin initially.

In a first aid situation patients suffering from non traumatic chest pain should be given one 300mg aspirin tablet.

Contraindications/Limitations: There is a possibility of severe reactions in some people with asthma – definitely ask the patient if they have had aspirin before and if they have reacted to it. Aspirin is much harder on the digestive system than Paracetamol and should not be administered to those with a history of stomach ulcers or previous painful reactions.

Antihistamines

Most outdoor instructors and guides will have some form of antihistamine in their first aid kit.

When your body is exposed to allergens e.g pollens, bee stings, it releases histamines. Histamines attach to the cells in your body and cause them to swell and leak fluid. This can cause itching, sneezing, runny nose and watery eyes. Antihistamines prevent histamines from attaching to your cells and causing symptoms.

Uses: to relieve symptoms of allergies.

There are two types of antihistamines:

Non Sedating: Containing Cetrizine (e.g Razene, Zytec), or Containing Loratadine (e.g Loratabs)

Sedating: e.g Polaramine, Phenergan

When to use: Both control the symptoms of allergies and hay fever. A known (conscious) person suffering from an anaphalactic reaction should intially be given an antihistamine.

Contraindication/ limitations: Sedation from polarmine and phenergan, people taking these should not drive or operate machinery. Some people suffering from asthma, heart disease or high blood pressure may react to the sedating antihistamines. They can also cause dry mouth and headaches. The non sedating brands are less likely to cause side effects.

Histamines are only part of what the body produces to combat allergens. Antihistamines therefore may not be enough on their own to combat an anaphylactic reaction.

Anti inflammatories: NSAID (Non Steroidal Anti Inflammatories)

Diclofenac e.g Voltaren, Diclax

Ibuprofen e.g Nurofen, Brufen, Act 3, Panafen

Reduces inflammation at the site of the injury/pain. Their strength varies depending on the chemical components of the medications.

Uses: Pain management, Reduces inflammation and swelling.

Contraindication/ limitations: It is important to follow recommended doses. Side effects of NSAID's include gastric upsets and irritation. Long term use can result in ulcers and internal bleeding, therefore they should always be given with food or milk.

Asthmatics can be sensitive or allergic to NSAID's and their use can bring on an asthma attack.

NSAID's should not be given to those with coronary heart disease, hypertension and ulcers.

Other things worth considering:

The following is a list of further drugs that aren't over the counter medication but can prove to be very useful on longer expedition type trips. It falls outside our professional capacity to prescribe these to a patient so it is necessary to obtain an overriding consent from a Doctor to carry and administer these.

Some organisations add an **asthma inhaler (e.g ventolin)** to their first aid kit.

This is useful for situations where a client's own medication either runs out or gets 'lost'. In a first aid situation ventolin can also be useful in a person who has a swelling airway due to anaphalaxis.

Opiate based pain relief:

These contain codeine e.g

Panadine – also contains paracetamol.

Codalgin- also contains paracetamol.

Nurofen plus- also contains ibuprofen.

These are stronger analgesic's that block pain receptors in the brain.

Contraindications/ limitations include: Constipation. Don't use for head injuries or for patients in hypovoleamic shock

Possible addiction issues in patients after long term use.

Once again it is important to follow recommended doses and check with the patient first.

Antibiotics:

A person sometimes needs antibiotics when: they have a bacterial infection.

Signs and symptoms: Localised pain specific part of the body e.g throat, ear, cut, severe sinus pain. Pain in passing urine. Infection sites when visible will appear red, swollen and hot.

Accompanied by: fever, chills, tiredness/malaise.

Not for colds and flu-these are usually viral and can take up to two weeks to clear.

Penicillin based e.g Amoxacyllin, Augmentin, Amoxil

These are 'broad spectrum' antibiotics are used for things such as: urinary tract, respiratory tract, skin infections and cellulitus.

Contraindications/limitations: Stomach upsets. Some people are highly allergic to penicillin (hopefully you have discovered this in client medical forms) – in these people taking penicillin could trigger a life threatening anaphalactic reaction.

Metronidazole e.g Flagyl

These antibiotics are used for Amoebic infections and giardia

Contraindications/ limitations: Avoid alcohol while taking Flagyl.

Doxyclyline e.g Doxine 100

These antibiotics are used for Chest infections and to treat acne.

Contraindications/ limitations: Side effects include stomach upsets and sun sensitivity- people taking this antibiotic should avoid having their skin exposed to the sun.

Roxithrmycin

Also used for Chest infections

Contraindications/ limitations Stomach upsets