

# First-aid supplies for backpacking

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A portable first-aid kit should be carried in the backpack of campers, hikers, and anyone who expects to spend time in a remote and unoccupied area. That is the recommendation found in lay texts dealing with medical care, in backpacking books, as well as in articles appearing in popular magazines. It goes without saying that it is far better to practise safety and prevention than to have to use first aid. However, many times medical problems occur which no amount of safety and forethought could have prevented. Information in this paper indicates that hikers are generally well prepared for the health-related problems they encounter. Hikers carry diverse supplies to meet health problems but there are some basic supplies with which hikers start their long-distance sojourn. Those supplies and their usage rates are discussed, as are attitudes toward using the supplies.

**Keywords:** First aid, hiking, health-related problems, attitudes, backpacking

Backpackers know the wisdom of the old saying: 'if something is bound to happen, it will happen when you least expect it'. It is far better to practise safety and prevention than to have to use first aid. But many times medical problems occur which no amount of forethought could prevent.

The Appalachian Trail is a 2100-mile footpath which traverses much of the east coast of the USA, Georgia to Maine, following the train of mountains collectively known as the Appalachians. Backpackers who hike the Appalachian Trail in 1 year (it takes approximately 5–6 months to walk the distance) are known as 'thru-hikers' (Figures 1 and 2).

Data from this study on Appalachian Trail thru-hikers carried out at the State University of New York, indicate that backpackers are generally well prepared for the health-related problems they encounter.

The supplies backpackers most commonly carry to meet health problems are shown in Table 1.

Among supplies that backpackers carry are several items which double as both first-aid supplies and standard miscellaneous backpacking equipment (safety pins, needles and scissors) while other supplies such as soap, moisturizing lotions and powder are standard toilet articles but useful for first-aid purposes. Some supplies can be used both

Table 1. Basic first-aid supplies

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Antipyretics: aspirin or paracetamol
Adhesives, gauzes, bandages
Antiseptics: hydrogen peroxide, alcohol, iodine
Anti-inflammatories: aspirin, ibuprofen
Antihistamines, decongestants
Antidiarrhoeal medications
Antibiotic ointments
Petroleum jelly/lip balm
Antipruritics

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for prevention and for first-aid: petroleum jelly; talcum powder or cornstarch (to prevent and treat chaffing); medicated foot powder (prevent and treat dermatitis); kneeguards; and liniments. Finally, although not first-aid supplies, insect repellent, sun protection lotion, and lip salve are necessary as preventatives. A word of caution on sun lotions – there is at least one study which indicates that athletes engaged in prolonged physical exertion increase their risks of hyperthermia and dehydration if they use commercial sunscreen lotions to protect exposed skin<sup>1</sup>.

## Most commonly used supplies

Supplies and methods used to treat health problems varied but most could be considered standard treatments. The supply which was used to treat the most diverse health problems was aspirin: it was used to treat 12 conditions ranging from knee and muscle problems to common colds and headaches. The other first-aid supplies which were used for a variety of problems included: antibiotic ointment (for scrapes, scratches and cuts, chaffing, blisters and heat rash); antiseptics (for scrapes, scratches and cuts, blisters, and chaffing); sticking plaster (for scrapes, scratches and cuts, blisters, and loss of toe nails); powder (for chaffing and heat rash); and petroleum jelly (for chaffing, blisters and skin conditioning).

The items that are used extensively are not surprisingly related to the activity of hiking and its concomitant foot problems – thus plasters, moleskin and adhesive were both carried and used by more than 70% of the hikers.

Backpackers are also generally prepared for the environmentally induced problems of scrapes, scratches and cuts: more than 75% of backpackers

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**Figure 1.** The author in Georgia at the beginning of the Appalachian Trail. (Photograph: Philip McDonald)

carried antibiotic ointment; 19% had alcohol; 29% had iodine; and 33% had packaged alcohol wipes. Although one would expect foot problems to plague hikers (and they did – primarily in the first month), scrapes, scratches and cuts are consistently the major reported health problem in ensuing months.

### Less common supplies

Although many hikers (almost two-thirds) brought elastic bandages, less than half of those people used them. However, of the 15% who brought kneeguards, more than 80% used them. This indicates that elastic bandages are viewed as a first-aid supply to use in case of problems whereas kneeguards are taken because of a pre-existing condition and a reasonable expectation of a problem. The same explanation is likely for the 100% usage of anti-inflammatory drugs by the 13% of hikers who carried them. However, the 100% usage of electrolyte powder drink (carried by 22% of the hikers) might be ascribed to the philosophy, 'if you take the trouble to carry something, use it' rather than indicating necessity and effectiveness of the product.

The question as to whether to bring snake bite extractors or kits presents a dilemma. Although the usage by those who carry them is low (or possibly non-existent for its actual purpose), it can not be recommended that it is excluded from first-aid supplies. The rationale is that although the probability of occurrence is low, the potential for serious problems and complications if one is bitten is high. Thus, carrying a kit or extractor 'just in case' makes sense. Hikers should learn what to do in case of snake bite.

### 'Macho' behaviour *versus* first aid

There are many problems which hikers experience for which they are unprepared. 'Macho' behaviour under those circumstances is understandable as it gets the hiker through the crisis and to a place where help can be obtained.



**Figure 2.** A group of aspiring thru-hikers attempting to complete the Appalachian Trail within 6 months. (Photograph: Mike Davis).

It is interesting to note that for those suffering from blisters, only one hiker treated it by being 'macho' – not the best form of treatment for blisters. But for many of the other ailments, 'macho' was not an incorrect method because practically it was the only one. No one advocated being 'macho' as a treatment for headaches and athlete's foot (problems for which medication is both effective and available), but several hikers used 'macho' to get through diarrhoea and poison ivy – also problems for which medication is available. If the supplies and/or methods are not available, one has to 'tough it out' until help is available, but why suffer needlessly? In the case of diarrhoea, some hikers were under the mistaken impression that they would eventually build up an immunity to intestinal parasites.

The existence of trail camaraderie was demonstrated by the large number of respondents who obtained first-aid supplies from their fellow hikers since 'someone is always willing to help out'.

Potera<sup>2</sup> claimed that most medical problems encountered are related to environmental conditions and can range from the serious to the merely annoying. One backpacker said: 'No two years are the same. The problems encountered by hikers in one year can vary widely from the next year's problems'.

### Handling emergencies

To be prepared for problems no first-aid kit can replace the knowledge of how to handle an accident. One author comments that 'nonprofessional outdoor experts may be technically proficient in rock climbing, setting up camps, and starting a fire without matches, but many of these people have almost universal misinformation on outdoor first aid'<sup>3</sup>. This information can best be acquired in practical courses. Only about 25% of the Appalachian Trail backpackers had some training in first aid, which is not encouraging. In addition to the recommendation for taking a first-aid course, many professionals recommend taking along some type of first-aid manual, e.g. *Medicine for Mountaineering* by Wilkerson<sup>4</sup> or *Mitchel's Mountaineering First Aid*<sup>5</sup>.

While most first-aid instruction manuals are directed toward treating an injury or illness after it has occurred, most experts agree that prevention should be the primary concern. Thus, although one cannot completely eliminate problems and accidents, backpackers can lower the chance of an emergency through preventive measures. However, if an emergency does occur, it is important to have the necessary first-aid supplies.

### Conclusions

Despite information in books and magazines, these data indicate that 25–33% of backpackers lacked the necessary supplies to treat all their medical problems at the time they occurred. However, a positive look at

the same data leads to the conclusion that the majority of hikers carried a variety of first-aid supplies that could be used to handle their diverse health-related problems and so were well prepared for the problems they encountered.

### References

- 1 Lee B. Brief reports: sunscreen lotions may increase heat risks. *Phys Sportsmed* 1982; 10: 27.
- 2 Potera C. Wilderness medicine – vast as the outdoors. *Phys Sportsmed* 1985; 13: 36–9.
- 3 Keeffe KM. Outdoor health care: how not to be a babe in the woods or mountains. *Am J Nursing* 1977; 77: 974–9.
- 4 Wilkerson J. *Medicine for Mountaineering*, 3rd edn. Seattle, Washington: Mountaineers Publishing, 1985.
- 5 Mitchel D. *Mountaineering First Aid*, 2nd edn. Seattle, Washington: Mountaineers Publishing, 1973.

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