Families and malaria
[Update for *Your Child's Health Abroad]*

Since *Your Child's Health Abroad* was first published in 1998, there have been some helpful developments in family travel health. The second edition, *Your Child Abroad*, covers these but below are updates relevant to owners of the first edition of our book.

The most important change is the new choices in the range of antimalarial (prophylactic) tablets **(see also *Your Child's Health Abroad* pages 10-11);** there have also been some advances in bite avoidance strategies **(see also pages 16-18)** that are appropriate for children.

It is estimated that about 300 children a year are treated for malaria in Britain, having brought the parasite back as an unwanted souvenir. Currently such ill children are likely to have taken no preventative medicine of any kind and one reason for this must be lack of suitable pharmacological preparations. Malarone is a welcome addition to the otherwise limited choices open to children travelling to malarious regions.

Lamentably, there is still only one antimalarial that comes in syrup form – chloroquine – and it remains very unpalatable. Chloroquine however is becoming less and less effective in more and more malarious regions. It is important to take expert advice on the best antimalarials for your destination; don't just buy the over-the-counter option.

As soon as a child can manage to swallow a tablet, choices improve somewhat, so find out what is required from an expert source. You can visit www.fitfortravel.scot.nhs.uk or alternatively – and preferably – there are now many more specialist travel clinics who can advise face to face

Antimalarial potions (see also *Your Child's Health Abroad* pages 10-11)
Mefloquine (Lariam) is now licensed in the UK as a prophylactic for children over the age of three months or weighing over 5kg. In effect this means that almost any child can take it as long as he or she is able to swallow the pills. The tablets are scored and can easily be cracked into quarters to give small people small doses. Most British prescribers will follow the guidelines developed by an expert committee on malaria, as given below, although these differ somewhat from the doses given in the packet insert:

Age	**Child's Weight**	**Dose**
up to 3 years	up to 16kg	¼ tablet
4--7 years	16--24.9kg	½ tablet
8--12 years	25--44.9kg	¾ tablet
over 13 years	over 45kg	1 tablet (adult dose)

Weight rather than age is a better guide to required dose and different prescribers may have slightly different recommendations about what proportion of the tablet is needed. Children don't seem to experience the

weird feelings, mood changes and psychedelic dreams that disturb some adult takers, although there has been an unconfirmed report of a baby seemingly having had a reaction. It is probably wise, therefore, to try this medication for three weeks before travel to see whether it suits. Generally, though, it is an excellent, safe option for children old enough to manage swallowing bits of tablets.

Lariam is probably safe to take during pregnancy but it is not suitable for people with epilepsy or for anyone who has had a fit. Four of us (husband and boys ages 7 and 12) took it on a family trip to southern Africa and experienced no side effects whatsoever; if this suits you, it is a good option. **Tip:** Tablets crack into halves and quarters quite easily when held between finger and thumb. Attempting to cut them with a knife will result in the tablet shattering into pieces, unless this is done on a soft surface, e.g.: on a napkin, handkerchief or folded tissues or kitchen towel.

Malarone is now licensed in the UK for use in preventing malaria in children. Recently a formulation for children was launched and this can be given to those who weigh 11kg or more. Malarone tablets have two advantages over chloroquine syrup – it tastes better and only needs to be taken for a week after leaving the malarious region rather than a month. It must be prescribed by a doctor. Its main disadvantage is cost. It is started 48 hours before arriving in a malarial zone, and is taken daily, with food. Some people are troubled with mouth ulcers when taking Malarone (this is also a problem with Palurine) and it can cause nausea, especially if taken on an empty stomach.

Deltaprim (Maloprim) is not licensed for use in children but some experts will prescribe it and it can be given from the age of three months or in those weighing over 6kg. The British formulation, which was known as Maloprim, was withdrawn in UK on 31st December 2002.

Insect repellents (see also *Your Child's Health Abroad* pages 16-18) If the family is venturing into high risk regions for malaria – sub-Saharan Africa for example – it is crucial to prevent bites, and the gold standard repellent is still diethyl toluamide, DEET. This is best used in association with wearing long clothes so that the amount of repellent that needs to be applied to the skin is kept to a minimum. There are many DEET formulations on the market, but most physicians will suggest using low concentrations for small children: 10% if you can find it. As the child grows, higher concentrations are fine. The newer, slow-release preparations should be least irritating and are said to repel effectively with less exposure to DEET. Products include a 6.2% time-release DEET preparation for children marketed in the US as Skedaddle, and 31.5% DEET, marketed as 3M Ultrathon. School-age kids can use 30% DEET such as Ben's Family insect repellent cream. This is nicer to use than other DEET preparations which have a rather strong, somewhat unpleasant smell, tend to be oily and are cosmetically unattractive. Ben's Family cream smells fine and it feels fine on the skin. It comes in a convenient spill-proof 125ml tube although you still need to be careful with it because it still destroys plastics, synthetics and varnishes. Like most repellents it needs to be reapplied frequently to be effective. Ben's also now market DEET wipes. Ben's products are available from chemists, Tescos and via freephone 0800 1957 400.

The natural alternatives include Mosiguard, which comes in stick, spray and roll-on preparations. These are probably not effective enough for use alone in malarious Africa, or other areas where the risk of serious malaria is high. A product with similar efficacy is Ben's Natural. The active will be PMD, which is said to be the best 'natural' around. PMD is the main active in citriodiol so Ben's Natural will be comparable with Mosiguard.

Clothes dunked in permethrin solution and then dried in the open remain repellent to ticks, mosquitoes, and other biters for two weeks and through a couple of washes. On a short trip – or a trip when you are passing through a malarious region – wearing permethrin-treated long clothes further minimises the amount of repellent that needs to be applied directly to your child's skin. And it doesn't sweat off. Nomad has won the licence to sell permethrin for this use in Britain; it is sold as 'Bug Proof', or it is also available in the form of bednet treatment kits.