

## PREVENTIVE MEASURES AGAINST TICKS

In the northern hemisphere Frühsommer meningoencephalitis (= tick-borne encephalitis) and Lyme disease are particularly notorious as tick-borne infectious diseases.

Other tick-borne diseases include African tick fever ("fièvre boutonneuse") in the Mediterranean and southern Africa due to *Rickettsia conorii* and *Rickettsia africae* respectively, and tick borreliosis caused by *Borrelia duttoni*, Crimean Congo Haemorrhagic Fever, etc. For further information you are referred to a specialist in tropical diseases.

The following protective measures should be taken:

- Wear long trousers with the legs tucked into the socks, high boots / shoes, etc.
- After a nature walk a systematic inspection of the body for the presence of ticks is advised, especially in the large skin folds and in the hairy zones (at least twice daily if you are permanently camping in an endemic area)
- Avoid walking through high grass in Africa
- Prompt removal of ticks substantially reduces the risk of transmission of infectious agents. Removal should take place within 12-24 hours for Lyme disease (New World, sooner in the Old World) and within 24 hours for rickettsiosis. The FSME virus may unfortunately already have been injected by the tick right from the beginning. The best and safest method for removing ticks is to grip them firmly, as close as possible to the skin, with a flat pair of tweezers (wear gloves), and slowly pull them out with an even, steady force. Application of vaseline or ether or touching them with a burning cigarette are practically useless. Due to the irritation that these cause such procedures even increase the risk of injection of saliva or stomach contents and therefore of microorganisms.
- The application of DEET-based insect repellents is useful; the product can be applied to the skin or to the clothing. The duration of the effect is limited (a few hours) and the efficacy certainly does not amount to 100%.
- For impregnation of cotton overclothing (such as forester's or military uniform) it is better to use permethrine, e.g. Permas® 100 ml (= 10 grammes), dissolved in 5 litres of water; prolonged direct contact of permethrine with the skin should be avoided.