POSSIBLE RISK OF LYME DISEASE FROM BITES BY TICKS AT SEABIRD COLONIES

The hard-bodied tick *Ixodes uriae* has been found to carry the *Borrelia* spirochaete, responsible for Lyme Borreliosis, at seabird colonies in Sweden and the United Kingdom. No cases of the disease have been reported from seabird workers as yet but it appears appropriate to warn them that they may be at risk of contracting Lyme Disease.

There are many species of ticks, but they are divided into two main types: the hard-bodied and soft-bodied ticks. Each tick has several life stages ranging from larvae, less than the size of a pinhead, to adults up to a centimetre. All stages can bite and all may carry the spirochaete or other disease-bearing organisms.

Based on *Ixodes dammini*, the main vector of Lyme Disease in the United States, *Ixodes* ticks need to be attached for as long as 48 hours to inject the spirochaete into a person. At 48 hours, feeding ticks look like grapes. Flat ticks have probably not had enough time to cause mischief. Even if there is a bite, relatively few result in Lyme Disease being contracted, because only about 15-33% of ticks have the spirochaete. The normal symptom in 60% of cases is a rash forming a ring around the bite site. In one third of the cases no rash occurs, or it is associated with other symptoms such as flu-like symptoms, Bell's Palsy (facial twitching), sensitivity to light, pain in one or more joints and headache. If the disease is treated at this point, recovery occurs in over 90% of cases.

Anyone bitten by a tick should save it because it is easier to test ticks for the presence of *Borrelia* than it is to test people. Ticks can be preserved in alcohol or dried.

Artificial pyrethrins appear to be highly effective as tick repellents when sprayed on field clothing. Trousers tucked into socks will prevent ticks from gaining access to the body. Simply checking oneself for ticks after field work in infested areas is probably the best defense against Lyme Disease.

With the cooperation of field workers from both the northern and southern hemispheres, a joint Swedish/UK/USA research project will survey ticks for the *Borrelia* spirochaete. Data from this project will give us a better understanding of the degree of risk to seabird researchers.

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