



TICKS

Tick Season – Beware!

One of the ACD staff returned from field survey work recently, to find that he had five ticks on him, and was naturally worried, so he was recommended to see his doctor and we have since reviewed and updated our Health and Safety Policy as a result.

Lyme disease, or Lyme borreliosis, is a bacterial infection spread to humans by infected ticks. Ticks are tiny spider-like creatures typically found in woodland and heath areas. They feed on the blood of birds and mammals, including humans. Ticks that carry the bacteria responsible for Lyme disease are found through-out the UK and in other parts of Europe and North America.

There is currently no vaccine available in the UK to prevent Lyme disease, although there is abroad. The best way to prevent the condition is to be aware of the risks when you visit areas where ticks are found and to take sensible precautions.

Lyme disease infections are becoming more common across the UK, possibly due to our changing climate, with its mild winters and warm, wet springs and summers, which is increasing the proliferation of the tiny ticks that transmit the Lyme disease infection, a bacterium called *Borrelia burgdorferi*.

There is little press coverage or official recognition of the issue, but John Naish ran an article in the Times in July 2017, warning of the problem. Also, two years ago, Sarah Oliver ran a piece on phone tycoon John Caudwell's theory that it may be passed on by other people and not just ticks, and that eleven of his family now suffer from the crippling disease. John Caudwell's concern is that too little research is being done by the NHS and that they limit themselves to only one strain of the disease. Yet Lyme disease can devastate vital organs, the brain and the immune system, and John Caudwell claims it is '*one of the most dangerous illnesses known to mankind*', with two of his former partners and four of his children diagnosed with the disease. He believes it isn't only passed by ticks, but also during pregnancy or sex.



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Most cases can be cured by prompt treatment with antibiotics, but if left untreated, serious symptoms may appear weeks, months or even years later. These can include inflammatory arthritis, facial paralysis, memory problems and even lethal heart failure and meningitis, according to the NHS. In his piece, in the Times, John Naish quotes Stella Huyshe-Shires, a former biologist and chairwoman of the charity Lyme Disease Action:

“Infections are not properly monitored, so essentially we have no idea. The authorities have only recently begun perceiving ticks as a problem.”

The signs all show that Britain faces an ever-growing threat from Lyme disease. Government statistics indicate a worrying trend. Official laboratory reports compiled by Public Health England show a rapid rise in infected blood samples taken from patients: in 2014 there were 386 cases; last year there were 1,062. The figures are controversial as the Government says that these may indicate an actual annual total of about 3,000 cases, but campaigners dispute the accuracy of the NHS blood test. They also say that the varied nature of the infection means that most of the victims are unaware of the source of their problem.

In France infections have tripled in the past decade, to about 30,000 a year, and the French health ministry is set to launch a summer media campaign to raise awareness of the risks of the disease. No one knows the extent of the threat in Britain, because of a dearth of data and infections apparently not being monitored.

In Central and Eastern Europe ticks are taken more seriously, particularly in Austria, Slovakia and the Balkans, where the problem has been known for a long time, and a vaccine is used. In fact, it was first developed in 1937, and is the Tick-Borne Encephalitis Vaccine, TBE. More than 87% of people who receive the vaccine develop immunity, but it cannot be used following the bite of an infected tick.

The inoculation is a three-injection programme, with the second injection six weeks after the first and the third after a year. The vaccine can be ordered in the UK and I had this course of injections back in the 90s. We asked Lyme Disease Action about this, and Stella Huyshe-Shires considers this is vaccination specifically against the Tick-Borne Encephalitis which we do not have the UK yet, so there is only need when travelling to affected areas of Europe.

The World Health Organization recommends immunising all people in areas where the disease is common. Otherwise the vaccine is just recommended for those who are at high risk – with a six week gap between injections, it is difficult to achieve and would it help against this form of borreliosis.



So, what are the signs? The first symptom is often a bullseye-shaped rash, called *Erythema migrans*, around the bite. In the early stages of infection, victims may also suffer flu-like symptoms such as tiredness, muscle and joint pains, headaches, and fever.



We advise that, where possible, wear long sleeves and full-length trousers, tuck trousers into socks - not ideal for summer surveys. We also provide staff with tweezers specifically to remove ticks and provide them with a suitable insect repellent.



A tick will find a quiet place on your body - perhaps an armpit, crotch, belly button or the back of a knee, and suck your blood slowly for several days. In the process, its saliva may enter your bloodstream. Studies show that as many as twenty per cent of the insects may carry Lyme disease bacteria, which is carried into your blood with their spit.



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To remove the tick, use a small pair of curved forceps, tweezers or specific tick-removing-tweezers, wear some sort of hand protection, such as gloves, so you don't spread pathogens from the tick to your hands. Using the tweezers, grasp the tick firmly as close to the skin as possible, and gently pull until the tick comes free. Twisting or turning the tick does not make removal easier because the mouthparts are barbed; in fact, such actions may break off the head and mouthparts, thereby increasing the chances for infection.

The culprit most likely to infect humans in Britain is the sheep tick, *Ixodes ricinus*. Despite its name, the sheep tick feeds from a wide variety of mammals and birds, and areas with high deer populations seems to have equivalently high tick populations, for example Thetford Forest and forested areas in Norfolk. The changing nature of Britain's countryside may be helping to increase infections - particularly the popular move to create wooded conservation areas.

Yet even in urban areas, people are at risk, and in March this year, emergency-response experts at Public Health England revealed that they had examined parks and other urban green spaces in an unnamed city in England and discovered Lyme infection in 18 per cent of the ticks infesting those areas.

So, if you go down to the woods today...

Stephen J Dale CMLI
Chairman