

Ticks and Tick Borne Disease Risk to UK Dogs – Consensus from the Industry August 2016

1. Tick borne diseases represent a health risk to all dogs. The degree of risk will vary depending on lifestyle, history of previous tick exposure and geographical location. Veterinary professionals should therefore make a risk assessment of tick exposure for dogs as part of an overall parasite control programme and recommend a tick control product in line with the Summary of Product Characteristics (SPC) where appropriate. Veterinary practices should encourage a consistent message regarding tick exposure risk.

2. Veterinary professionals and owners should be aware of the risk of exposure to ticks and tick-borne disease for all dogs but particularly the increased risk when a dog travels both abroad and potentially within the UK. Tick control based on this risk should be assessed.

3. Transmission times:

Current evidence suggests some pathogens can potentially be transmitted very quickly although *Borrelia* (agent of Lyme disease) resides in the tick mid-gut and transmission is usually >12 hours after attachment, with the risk increasing markedly by 24 hours. Risk of tick borne disease transmission is reduced by the use of effective tick control.

As disease transmission is positively correlated to duration of tick attachment, any product which kills or repels ticks will reduce the risk of disease transmission and the more rapidly this occurs, the greater the protective effect. Choice of product must also be based on lifestyle factors, owner capabilities and administration preference (tablet, collar or spot-on) and other parasiticide needs for the pet. A Lyme disease vaccine is available which can be discussed with owners based on an evaluation of risk.

4. Tick control products are never 100% efficacious but are an important part of reducing disease transmission risk. Therefore, owners should also be advised to check their pets at least every 24 hours and remove any ticks found with a tick removal device or fine pointed tweezers. Owners should be educated on the difficulty in finding ticks on their pet, especially the immature stages (larvae and nymphs) even with a thorough clinical examination. Ticks should be removed with either a simple "twist and pull" action (if using a tick removal device) or a straight gentle pull (if using fine pointed tweezers). Ticks should not be crushed, squeezed, topically treated or any other activity leading to delay in removal as this will lead to regurgitation of stomach and salivary gland contents, increasing the risk of disease transmission.

5. Opportunity should be taken to educate pet owners visiting high risk tick areas and whose dogs regularly pick up ticks, to also check themselves at least every 24 hours and remove any ticks found. This will reduce the risk of pathogen transmission. Pet owners should be warned that unattached ticks can be brought into the home on pet fur, and brushing pets off outside helps to reduce this risk.

6. People may also protect themselves by keeping their arms and legs covered and by the use of an effective repellent or pyrethroid impregnated clothing. These measures should be considered by anyone spending long periods of time in outdoor activity, especially in pasture, long grass/bracken or woodland. A person should be encouraged to check their skin after potential exposure as repellents are not guaranteed to be 100% effective.

7. Ticks removed should be effectively disposed of (<https://www.gov.uk/guidance/tick-surveillance-scheme>) to prevent contamination of the environment. Basic tick identification should be encouraged in practice and any non- *Ixodes* spp ticks sent to Public Health England.

8. Three *Ixodes* spp. are likely to be found on cats and dogs in the UK. The most common is *Ixodes ricinus* (also known as the sheep tick, wood tick, deer tick or castor bean tick). The second is *Ixodes hexagonus* (also known as the hedgehog tick) followed by *Ixodes canisuga* (also known as the British dog tick).

Dermacentor reticulatus (also known as the ornate cow tick or the marsh tick) is endemic in pockets of the UK (See ESCCAP UK website for further information).

9. *Dermacentor reticulatus* and *Rhipicephalus sanguineus* appear to be expanding their range across Europe with reported cases of tick borne diseases increasing, especially in popular pet holiday and importation destinations such as France and Eastern Europe. Tick treatment should therefore be routine for pets travelling abroad as well as regularly checking pets for ticks. Pets should be protected before, during and on their return. It is important that tick control is considered in a year round preventive health programme that is devised by the veterinary practice. Public Health England has a poster that can be displayed in waiting rooms on tick risk for travelling dogs: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/505029/PHEImportedTickInfoPoster2015.pdf

10. Due to the rapid transmission times of rickettsial diseases and the presence of *Leishmania infantum* in Southern Europe, tick and sandfly repellents should be used when travelling to countries where these pathogens are considered to be present.

11. When the required tapeworm treatment is given on return from travel before entering the UK, pets should be checked for ticks and any found removed and identified. This should be part of a tick protection programme as we recognise that it can be extremely difficult to identify all ticks on a pet even with a thorough examination. If the tick examination is carried out at this time it will help maximise UK biosecurity and disease surveillance. There is also the opportunity for veterinary professionals to offer a tick check if an additional tapeworm treatment is given within 30 days after return to the UK as recommended by ESCCAP UK & Ireland. For further information regarding the requirements for travelling pets visit [www.esccapuk.org.uk/professionals.php?run=travellingpets?](http://www.esccapuk.org.uk/professionals.php?run=travellingpets)

12. Veterinary, Human Health and Parasitology organisations should cooperate and share information to help monitor tick movements into, and within, the UK. Vector and vector borne disease surveillance remains vital to track the movement of these diseases across Europe and prevent their introduction to the UK. Ideally veterinary practices should look to develop a parasite protocol based on parasite risks, which is agreed by all members of the veterinary team.