

Dear Colleague

## Identification and Management of Lyme Disease – Educational Resources

1. There is a context of increasing public awareness and in some cases, concern about Lyme disease and its potential consequences for an individual. This letter shares current sources of public facing advice and information about Lyme disease as well as links to current guidance on diagnosis and management.
2. Lyme disease is a complex infection caused by the *Borrelia burgdorferi* bacteria which is transmitted to humans through the bite of an infected tick.
3. Ticks can be found in any of Scotland's green spaces including parks, garden, woodland and moorland areas.
4. Lyme disease can be difficult to diagnose as symptoms can vary widely and are often similar to a number of other conditions.

## Diagnosis

5. The classic clinical diagnostic of Lyme disease is the erythema migrans rash which looks like a bulls eye around the site of the bite, however not all people who develop Lyme disease will get this rash.
6. Other symptoms include flu like symptoms such as malaise, fatigue, lethargy, headache and joint pain. In more severe cases symptoms can include arthritis, meningitis and inflammation of the heart.
7. The vast majority of Lyme disease cases can be diagnosed and treated within primary care without the need for specialist input, however where specialist input is needed such cases would be cared for in Scotland by Infectious Disease Consultants.

**From the Chief Medical Officer**

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For action

Chief Executives, NHS Boards  
Medical Directors, NHS Boards  
Directors of Public Health  
Nurse Directors, NHS Boards  
Primary Care Leads, NHS Boards  
Infectious Disease Consultants  
Consultant Physicians  
General Practitioners  
Practice Nurses  
CPHMs  
Accident and Emergency  
Departments

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For information

Health Protection Scotland  
Directors of Pharmacy  
Chief Executive, NHS Health  
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## Management

8. Colleagues will be aware of the National Institute for Health and Care Excellence (NICE) guideline published in 2018 on the diagnosis and management of Lyme disease: <https://www.nice.org.uk/guidance/ng95>.

9. Antibiotic treatment regimens for the treatment of Lyme disease are detailed in the above NICE guideline: <https://www.nice.org.uk/guidance/ng95/chapter/Recommendations#management>.

## Awareness Raising

10. The Lyme Borreliosis Group, which is part of the Scottish Health Protection Network, is a multidisciplinary expert group dedicated to Lyme disease. The focus of the group is to reduce the burden of Lyme disease in Scotland through increasing awareness amongst the public and health professionals, improving diagnosis and accurate surveillance.

11. The group have produced a number of public facing resources, including information leaflets and posters, explaining the risks from ticks and tick borne diseases and highlighting simple steps people can take to avoid infection: <https://www.hps.scot.nhs.uk/web-resources-container/ticks-and-lyme-disease-in-scotland/>

12. The group have also launched the 'Avoiding Bugs and Germs Outdoors' webpage on NHS Inform, bringing together in one place comprehensive advice on how to avoid infection from bugs and germs, including tick bite prevention and a video on safe tick removal: <https://www.nhsinform.scot/bugs-and-germs>.

13. To support frontline healthcare practitioners in the identification and management of Lyme disease, the Lyme Borreliosis Group have developed a number of workforce education resources.

14. These resources are freely available on the NHS Education for Scotland website through the following link: <https://www.nes.scot.nhs.uk/education-and-training/by-theme-initiative/public-health/health-protection/gastrointestinal-infection-and-zoonoses/ticks-and-lyme-disease.aspx>.

## Action

15. Frontline healthcare practitioners have a key role not only in the early diagnosis and management of Lyme disease cases, but also in promoting awareness of ticks and tick borne infections amongst their patients. NHS Boards should promote awareness raising by frontline Healthcare Professionals, including those in Primary Care and GP practices.

Yours sincerely

*Catherine Calderwood*

**DR CATHERINE CALDERWOOD**