

Scotland's Rural College

## Lyme Disease General Practice Sentinel Scheme

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## **Lyme Disease General Practice Sentinel Scheme**

### **Background**

Lyme Disease (LD) is a multisystem zoonosis with uncertain epidemiology. It may be increasing in rural hotspots. GP datasets are weakened by coding and definitions. Public and climate concerns have raised awareness of LD.

### **Aim**

Improving diagnostic coding, UK Lyme Disease incidence and distribution. Behavioural risk factors for public health policy.

### **Method**

Education modules for 35 general practices from Orkney to Southampton.

Remote installation of software providing decision support, case definitions, pictures, coding, prescribing guidelines. Questionnaire on tick exposure and removal methods. Anonymous data extraction.

Data on tick bite body location, age, place of exposure, attachment time, removal methods, leisure pursuits and occupation to guide public health policy.

GP data capture and coding from hospital, A&E and OOH (out of hours) records.

Erythema Migrans (EM) is a clinical diagnosis without serological testing. Rash photographs establish a data bank of disease expression in age groups, ethnicity, and skin types.

### **Results**

There were 69 cases reported in the pilot period (September to December 2021), 52% diagnosed EM following a definite tick bite. Tick attachment time showed a majority > 24 hours, with home tweezers, fingernails often used for removal, with both associated with higher disease transmission.

Analysis of pilot data suggested a Lyme Disease incidence of 94/100 000 with the inclusion of EM. This compares to a serologically confirmed incidence of 38.2/100 000 in 2019 in Highland Region.

### **Conclusion**

Early data suggests that the Lyme Disease General Practice Sentinel Scheme has improved case ascertainment, epidemiology, and risk factor understanding.

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