



THE TICK CHALLENGE

The Public Health response to Lyme disease in the Outer Hebrides

Background

Following concerns raised locally about the incidence of Lyme disease, NHS Western Isles Health Protection Team (WIHPT) identified the need to lead a public health response to raise awareness of ticks and prevention of tick bites.

Initial investigation by WIHPT showed that Lyme disease is being more frequently diagnosed in the Outer Hebrides when compared to the rest of Scotland. Diagnosis is based on either positive serology or clinical presentation, with erythema migrans being the commonest clinical feature.

Table 1: Incidence of Laboratory-confirmed Lyme disease Borreliosis, 2010-2017

Area	Per 100,000 population
Outer Hebrides	30.2
Scotland	3.2
USA	9.5
Canada	2.6
France	51

Table 2: Number of people presenting with erythema migrans in primary care, 2010-2017

	2010	2011	2012	2013	2014	2015	2016	2017
Outer Hebrides	34	33	39	32	45	44	33	46

This level of presentation equates to an incidence of erythema migrans in 142/100,000 of the population of the Outer Hebrides.

Methodology

To raise awareness of ticks and prevention of tick bites we:

- planned and implemented an awareness campaign
- produced a range of printed resources to inform the public on the safest way to enjoy the outdoors and protect against Lyme disease
- worked in partnership with local retailers to ensure tick removers are stocked
- worked in partnership with the local authority (Comhairle nan Eilean Siar) to provide information in a mail shot to parents of all island school pupils
- launched the campaign with two seminars - an evening event which was open to the general public and a daytime educational session for local stakeholders. The seminars covered prevalence of disease, distribution of ticks across the Islands, the lifecycle of ticks and of Borrelia spirochaetes and effective measures to reduce the risk of contracting Lyme disease
- hosted information stalls providing awareness materials and demonstrations of safe tick removal throughout summer events and festivals
- fostered close multi agency partnership working with a range of groups and agencies including the local authority, Calmac, BADA-UK, Lyme Disease Action, Uist Deer Management Group, EDF Music Festival, North Uist Tractor Rally and the South Uist Agricultural Show.

Results

Through this response, we have achieved:

- widespread resource distribution to GP practices, local businesses, mobile library unit, community halls, airport and ferry terminals and inclusion on all Calmac ferries travelling to the Outer Hebrides
- well attended and well evaluated awareness raising events
- engagement with the schools and nurseries; the mail shot enabled access to 3,300 households within the Outer Hebrides.

People told us that:

- instructing on correct tick removal was important
- the seminars highlighted the need to educate children, this led to the production of a school lesson plan for schools with links to Curriculum for Excellence experiences and outcomes
- there was a need to produce and distribute information packs to all local schools and nurseries, consisting of a tick remover and link to BADA-UK film demonstrating correct tick removal.

Conclusions

- There was a very positive response from the public to the awareness campaign.
- Educating the community on actions they can take to prevent tick bites is essential and finding ways to engage all age groups remains important.
- We need to continue to educate and inform everyone in the Outer Hebrides, including visitors.
- NHS Western Isles has sought support from Health Protection Scotland and further plans of action are being developed to address the wide range of issues that arise from high prevalence of ticks.




Further information

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