

Estimating the frequency of veterinary attended equine laminitis in Great Britain, 2009-2011

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Although laminitis is recognised as an important disease among equids, a recent systematic review assessing quality of published evidence highlighted a paucity of quality studies estimating the frequency of laminitis worldwide. This study aimed to estimate both the prevalence and incidence of veterinary-attended laminitis in the general British horse population. A prospective study followed a cohort of horses attended by a representative but compliant convenience sample of British veterinary practices for 24 months from May 2009. A custom-designed reporting form was used to collate numerator data on active laminitis cases diagnosed by practitioners. Denominator data comprised figures supplied by practices on animals visited by ('visits') and registered with them ('registered') each month. Prevalence based on denominators of horse visits and registered horses and incidence measures based on incident only and recurrent cases were estimated from available data. The overall 'visits' laminitis prevalence estimate was 0.47% (95% CI 0.42-0.52%) based on 297 reported cases among 63,054 horse visits. The overall 'registered' laminitis prevalence estimate was 0.49% (95% CI 0.43-0.55%) based on 235 reported cases among an average of 48,082 registered horses. Laminitis incidences based on incident only and recurrent cases were estimated as 0.50 cases/100 horse-years at risk (95% CI 0.44-0.57) based on 235 cases in 46,814 horse-years and 0.53 cases/100 horse-years at risk (95% CI 0.47-0.60) based on 241 cases in 46,970 horse-years, respectively. Laminitis prevalence and incidence were lower than previous published estimates, probably due to differences in geographical setting (nationally representative of Great Britain), study period (May 2009 for 24 months), case definition (veterinary confirmed), study design and population studied (prospective veterinary-attended cohort).