

Preliminary quantification of the prevalence of angular and flexural limb deformities in a population of Standardbred and Thoroughbred foals in New Zealand

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This study aimed to describe the quantification of the prevalence of angular and flexural limb deformities in a population of Standardbred and Thoroughbred foals in New Zealand in their first week after birth. Furthermore, it aimed to describe the influence of several risk factors such as gender, breed, size, condition score, gestation length, season and parity of the mare on the prevalence of limb deformities. Two Standardbred stud farms and two Thoroughbred stud farms were selected using a convenience sample. Data on limb deformities were collected on all foals that were on the farms during the 2010/2011 breeding season. Observational assessments were used to score foals from their first week after birth to fifteen months of age. Descriptive statistics, univariable logistic regression and multivariable logistic regression models were used to evaluate data. The majority of the foals (253/313, 80.83%) had one or more limb deformities recorded in their first week after birth. Of these, 196 had more than one problem recorded (196/253, 77.47%). Carpal valgus was recorded in the majority of the foals (162/313, 51.8%), with 84/162 (51.85%) being unilateral and 78/162 (48.15%) being bilateral. Most of the problems recorded (628/807, 77.82%) in this study were slight deformities that required no veterinary attention. The risk factors that showed a significant association with 3 of the limb deformities investigated were: breed, gender, size, condition score and season. This study provides preliminary work where future studies could build on and it could provide a reference point for the New Zealand industry. Furthermore, it could provide an opportunity to examine if angular and flexural deformities are associated with racing and sale performances.