Survey of Handlers of 158 Police Dogs in New Zealand: Functional Assessment and Canine Orthopedic Index

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Objectives: To determine the functional assessment (FA) of fitness and Canine Orthopedic Index (COI) of 158 police dogs. We hypothesized handlers would report excellent fitness and no evidence of orthopedic disease in the dogs regardless of age.

Methods: COI and FA questionnaires were completed via e-mail. Fisher’s Exact test assessed scores by age group (**<**2 years, 2–5 years, **>**5 years); Wilcoxon Signed-rank test correlated COI parameters (stiffness, function, gait, quality of life) to FA.

 Results: The dogs were 3.2 ± 2.4 (mean ± standard deviation) years-old, 96% were German Shepherds and 111 were male. 32% of dogs could hold the “Hup” position for no longer than 4s and 8% frequently had difficulty with this task. One third had difficulty jumping into vehicles. Overall FA was impaired in 20% (score **>**8), abnormal in 15% (score=5–7), and reduced (1–4) in 36%. Only 29% had normal function (FA= 0) and these were significantly younger (2.8 ± 1.7 years, p**<**0.05) than impaired dogs (6.6 ± 2.2 years). COI stiffness score was abnormal in 37% (3.3± 2.2) and gait was abnormal in 41% (5.4 ± 4.0). Quality of life (QOL) was excellent

in 69% overall, with better scores for 2-year-olds (0.3±1.1) and 2–5-year-olds (0.8± 2.0) than the **>**5-year-olds (3.0± 2.5). Only the COI gait score correlated with the FA score (p= 0.30).

Conclusions and Clinical Relevance: Police dogs were reported by handlers to have good to excellent QOL, however, increasing age was associated with declining FA and COI scores.

Keywords: police working dog, functional assessment, canine orthopedic index, musculoskeletal disease, gait

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