Assessing the physical well-being of dogs in commercial breeding facilities

Judi Stella¹, Moriah Hurt², Paulo Gomes³, Amy Bauer² and Candace Croney²

¹USDA-APHIS, Purdue University, 625 Harrison St, W Lafayette, IN, 47907-2042, USA, ²Purdue University, Comparative Pathobiology, 625 Harrison St, W Lafayette, IN, 47907-2042, USA, ³Purdue University, Veterinary Clinical Sciences, 625 Harrison St, W Lafayette, IN, 47907-2042, USA;
judith.l.stella@aphis.usda.gov

In the U.S., dogs are raised in commercial breeding (CB) facilities for sale as pets. This study aimed to assess the physical well-being of dogs housed in CB kennels. A random sample of dogs (n=111, 86 female, 25 male, mean age 35.7 months) representing 14 breeds were assessed at five facilities that volunteered for the study. Assessment included body condition score (BCS) using a 1-5 scale, paw health (e.g. toenail length, paw pad abnormalities), elbow/hock health (e.g. alopecia, calluses, inflammation), ear health (e.g. debris, excessive hair, infection), and periodontal disease (PD) using a visual scale of severity (0-4). Published scales were used to assess BCS and PD, while the others were developed for this study based on the literature and veterinary input. Descriptive statistics (e.g. means, standard deviations) were used within facilities since variation in breed and management prohibited direct comparisons across facilities. Relative risk (RR) was calculated for PD by weight and age. Mean BCS was 3.2 (3 being ideal). Mean toenail length was 1.3 (1 being ideal). Matted hair was the most common paw problem, more common in long-haired breeds (n=69). Sores (n=1), inflammation (n=7), and interdigital cysts (n=1) were rare. Elbow/hock exams found no inflammation or calluses while the presence of alopecia was more common in dogs housed on concrete flooring (concrete n=5, other n=2, RR=15.7, P<0.0001). Ear exams revealed overgrown hair (n=21), debris (n=121), and erythema (n=106) most commonly in long-haired breeds. Periodontal disease was more common in dogs <20 kg (n=12) than in larger dogs (n=0) but neither size (RR=0.0, P=0.1) nor age (RR=0.65, P=0.5) significantly increased the RR of PD. Significant physical welfare problems were rare at these facilities. Ongoing studies, including assessment of the dogs' behaviour, should provide a more comprehensive understanding of their well-being in CB operations.