GUIDELINE 3: 
FREEZE BRANDING OF DOGS

Policy

It is the opinion of the New Zealand Veterinary Association that, given the legal requirement for dogs to be microchipped, freeze branding of dogs should be discouraged. If a dog is to be freeze branded, a short acting general anaesthetic and concurrent longer acting pain relief should be used. NZVA believes that the act of freeze branding of dogs without anaesthetic relief would contravene the Animal Welfare Act 1999.

Explanation

According to a review of the animal welfare aspects of various identification methods carried out by John Carragher and Lindsay Matthews of the Animal Behaviour and Welfare Research Centre, Hamilton, cold [freeze] branding became common in the mid 1960s as an alternative to hot-iron branding. Freeze branding appears to be a more stressful procedure than hot-iron branding [based on post-branding aversions].

Observations by those who have seen freeze branding carried out in dogs without anaesthesia being used included increased heart rate, increased respiratory rate, and vocalisation. These signs are recognised as evidence of pain and or distress in such a situation.

Freeze branding of dogs is a procedure that causes a superficial, partial thickness skin burn. It is likely to cause sharp, intense pain at the time of the procedure and secondary pain for a period following the procedure.

Guidelines

Two different techniques are employed:

- Cooling an iron with either liquid nitrogen [-196 degrees Celsius] or dry ice in alcohol [-70 degrees Celsius] and applying to the shaved skin for 15-30 seconds until the skin is frozen.
- Using an aerosol coolant spray directed over a stencil on the shaved hide to cool the skin to -50 degrees Celsius. [This method is not as effective in terms of brand clarity].

Note

Yeruham et al have described carcinogenic epidermal neoplasia (papillomas and squamous cell carcinoma) at the sites of tattooing with liquid nitrogen in dairy cattle, and squamous cell carcinoma at the sites of freeze or heat-branding in beef cattle and sheep.
References
Animal Welfare Act 1999
Dog Control Amendment Act 2003
Yeruham I, Perl S, Nyska A. Skin tumours in cattle and sheep after freeze-or heat-branding. *Journal of Comparative Pathology* 114 (1), 101-106, 1996