Answer to Question on Notice - Evidence of the animal welfare impacts of prong collars

The committee requested scientific articles on the animal welfare impacts of prong collars. Due to the inherently aversive design of pronged collars, the long-standing ban on their importation, and evidence that aversive training methods have both immediate and long-term consequences for dog welfare, it is highly unlikely that ethics approval would be provided to conduct research on their use. Thus, most of the information on the use of pronged collars and their impact comes from studies on the use of other aversive collars and devices. We provide information on this below. It is clear that there is no justifiable reason to use a device which inflicts pain, suffering and distress in an attempt to control the behaviour of a sentient animal.

1. Legal aspects

Prong collars are prohibited from being imported into Australia on welfare grounds under the *Customs Act 1901* (Cth):

- *Customs (Prohibited Imports) Regulations 1956* Schedule 2, Item 10 - "Dog collars incorporating protrusions designed to puncture or bruise an animals skin.

In March 2021, Border Force issued a warning of a huge increase in illegal imports of prong collars over the previous 12 months, with 477 being detected compared to 56 in 2020. Due to the lack of jurisdictional legislation to prohibit use of these collars, once they are imported undetected, there is no law to prevent them being used.

Commonwealth legislation and the work of Border Force can only achieve so much. It requires states to introduce legislation to prevent possession and use of these devices to protect dogs.

A precedent has been set in Victoria under POCTA Reg 2008 Part 2 Protection of Animals – General Requirements:

- *S9 Pronged collars prohibited A person must not use a pronged collar on any animal.*
- *Definition in the Regulations:* pronged collar means a collar designed for use on dogs that consists of a series of chain links with blunted open ends turned towards the dog's neck so that, when the collar is tightened, it pinches the naturally loose skin around the dog's neck.

Internationally prong collars are receiving attention with the City of Toronto, Canada outlawing them in 2017 under their bylaws.

2. Welfare impacts

The use of a prong collar causes constriction and pressure on the neck, which contains sensitive tissues and nerves, especially the trachea. Applying even a small amount of pressure to the

trachea causes discomfort with the likelihood of significant pain when a prong collar is applied. Warnings regarding damage to other neck tissues caused by the use of prong and other collars have been made by many veterinarians.

Tissue damage

"The thyroid gland is a butterfly-shaped organ just in front of the larynx and trachea, and the mandibular salivary glands are found on the side of the face just below the ears. Thus, they can be easily injured by trauma and sudden pressure forces (like could occur from the slip ring and chain of metal collar, and a metal prong or hard braided leather collar)."

- Dodds, W.J. (2013). Q&A with Dr. Dodds: Can Collars Really Damage the Thyroid? Dr. Jean Dodds' Pet Health Resource Blog | Q&A with Dr. Dodds: Can collars really damage the... (tumblr.com)

"The all-important laryngeal nerve is the longest nerve in the body, and it travels down the left-hand side of the neck near the windpipe. Anything that severely compresses this nerve can damage the way the larynx works. This is why choke collars are not recommended"

- Elliott, P. (2017). How Choke Collars Can Cause Real Damage to Your Dog. Retrieved May 28,2019, from https://www.petful.com/pet-health/cautionary-tale-choke-collars/

"A sudden jerk to the neck as part of inappropriate behavior training is another too common reason for laryngeal paralysis. It's the fear-based, old school and 'you must be dominant over your dog' training, where neck pops with the leash, or prong or choke collars are used. When the trachea cartilage is popped repeatedly during this type of 'training,' the dog can wind up with tracheal damage. This type of handling puts a tremendous amount of pressure on the larynx because the collar sits right on top of it."

- Becker, K. (2017). Laryngeal paralysis. DrBecker-LaryngealParalysis.pdf (fileburst.com)

Fear and anxiety

The use of a prong collar not only causes negative physical impacts but pain results in fear, anxiety, agitation. Veterinary behaviorists and trainers who use positive reinforcement methods have reported increases in negative mental states of dogs who have been trained using punishment. This is also reported in the scientific literature.

Aversive methods or tools showed stress-related behaviours during training, including tense body, lower body posture, lip licking, tail lowering, lifting front leg, panting, yawning, and yelping.

- Vieira de Castro AC et al (2020) Does training method matter? Evidence for the negative impact of aversive-based methods on companion dog welfare. PloS ONE 15(12): e0225023.
- Deldalle S, Gaunet F (2014) Effects of 2 training methods on stress-related behaviors of the dog (Canis familiaris) and on the dog–owner relationship. J Vet Behav. 9(2):58-65.
- Haverbeke A et al (2008)Training methods of military dog handlers and their effects on the team's performances. Appl Anim Behav Sci. 113(1-3):110-122.

3. Learning theory and contemporary training methods

The use of a prong collar for dog training is based on positive punishment. Aversive training methods are not consistent with good animal welfare nor contemporary best practice dog training principles.

This position is supported by policy statements from evidence-based behaviour, dog training, veterinary and animal welfare organisations.

> *Australian Veterinary Association* - The use of punishment and negative reinforcement in dog training (ava.com.au)
> *Positive punishment can also result in inhibition of behaviours that serve as communication signals[5,14]. An example is an animal who is punished for using normal threat displays, for example when a dog growls, snarls or barks. These threat displays are a form of early communication to warn people to stay away. If such displays are punished, the animal will cease warning people; however, the underlying fear causing the behaviour remains or may be even increased due to the punishment. This can lead to what appears to be unpredictable, explosive and sometimes higher intensity aggression. Positive punishment techniques are known to be associated with increased aggression from dogs.*
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> RSPCA Policy 7.5.4 Pronged/pinch collars
> *RSPCA Australia is opposed to the use of pronged/pinch collars. Such devices are inhumane as they inflict pain, involve punishment and can be used to abuse animals.*
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> *Pet Professional Guild Australia policy* - Use of shock and prong collars
> *Choke chains and prong collars are designed to administer negative reinforcement and positive punishment. Training techniques based in these two learning theory quadrants are prone to side effects. As an example, a dog wearing a choke or prong collar that fearfully barks and lunges at another dog would then be choked or pain inflicted by the prong collar. The pain and choking then adds to the negative association the dog wearing the collar has with other dogs. This is the polar opposite of what an ideal training protocol is designed to accomplish.*
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> *American Veterinary Society of Animal Behaviour* - *AVSAB Position Statement on Humane Dog Training*

Based on current scientific evidence, AVSAB recommends that only reward-based training methods are used for all dog training, including the treatment of behavior problems. Aversive training methods have a damaging effect on both animal welfare and the human-animal bond. There is no evidence that aversive methods are more effective than reward-based methods in any context. AVSAB therefore advises that aversive methods should not be used in animal training or for the treatment of behavior disorders.

4. Problem behaviours and erosion of the human-animal bond

Survey studies have shown an association between the use of aversive training methods and long-term behaviour problems including aggressive behaviour towards people and other dogs, and anxiety-related behaviours such as avoidance and excitability.

- Casey RA et al (2014) Human directed aggression in domestic dogs (Canis familiaris): Occurrence in different contexts and risk factors. Appl Anim Behav Sci 152, 52-63. 152(52-63).
- Casey RA et al (2013) Inter-dog aggression in a UK owner survey: prevalence, co-occurrence in different contexts and risk factors. Vet Rec. 172(5):127.
- Herron ME, Shofer FS, Reisner IR (2009) Survey of the use and outcome of confrontational and non-confrontational training methods in client-owned dogs showing undesired behaviors. Appl Anim Behav Sci. 117(1- 2):47-54. 14.
- Hiby EF, Rooney NJ, Bradshaw JWS (2004) Dog training methods: their use, effectiveness and interaction with behaviour and welfare. Anim Welf. 13(1):63-69.
- Reisner IR, Houpt KA, Shofer FS (2005) National survey of owner-directed aggression in English Springer Spaniels. J Am Vet Med Assoc. 227(10):1594-1603.
- Ziv GJ (2017) The effects of using aversive training methods in dogs—A review. Journal of Veterinary Behavior 19: p. 50-60.