

# MANDATORY DESEXING OF DOGS IN WESTERN AUSTRALIA

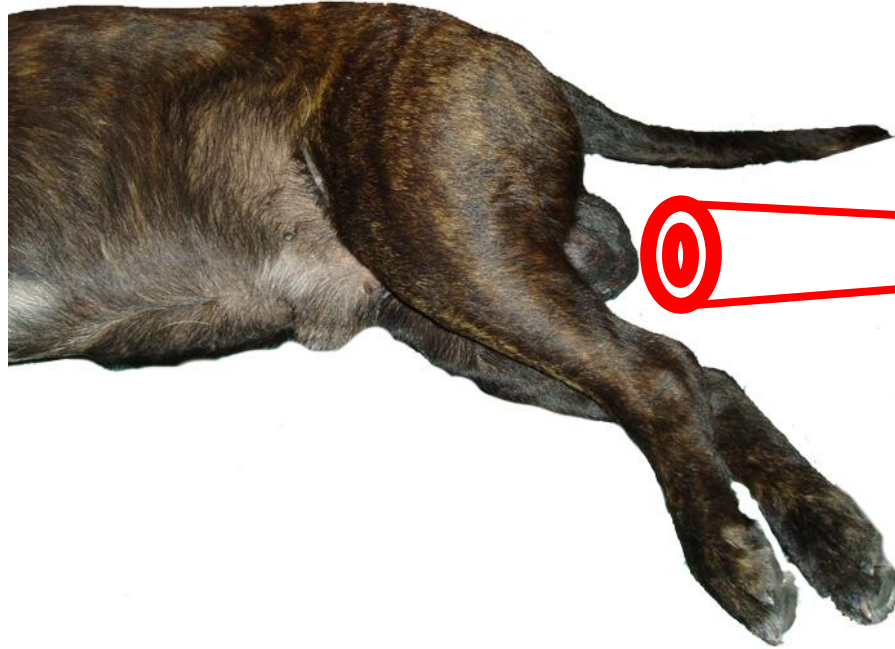
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# Mandatory Desexing of Dogs



- I have the following disclosures related to my presentation:
  - Funding Sources - *none*
  - Financial Interests - *none*
  - Other Interests - *none*

# Mandatory Desexing of Dogs



**Exterminate! Exterminate!**

# Mandatory Desexing of Dogs

- Proposed legislation
  - ▣ Transitioning pet shops to adoption centres
  - ▣ Mandatory dog de-sexing for non breeding dogs
  - ▣ Mandatory Standards
  - ▣ Centralised Registration System
- Listed 17<sup>th</sup> April 2018.
- Distributed for public comment May 2018.
- Submissions closed 3<sup>rd</sup> August 2018.
- Summaries provided 26-29 November 2018

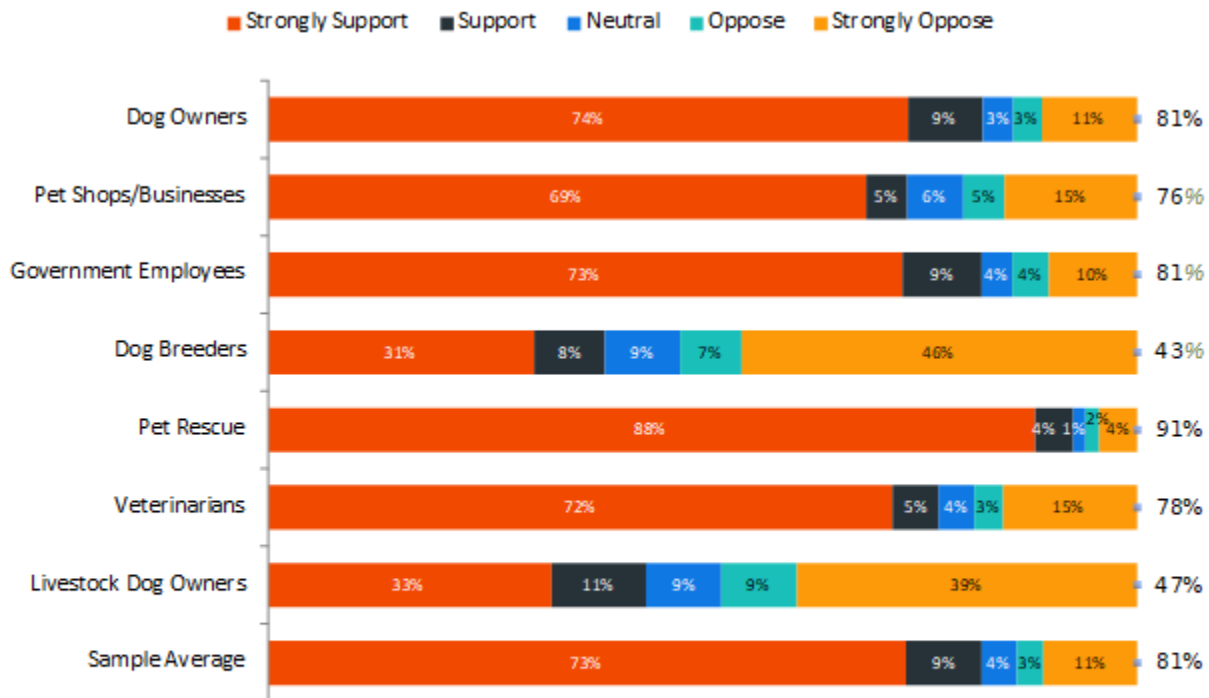
# Mandatory Desexing of Dogs

## □ Dog Act 1976 (as at 24 Jan 2017)

- Under the Dog Act, **sterilised** currently means ‘made permanently infertile by a surgical procedure’ (**sterilisation** is the same thing as **de-sexing**).
- In Australia, this usually means by the removal of the ovaries and uterus in female dogs (spaying), and the testes in male dogs (castration). The primary reasons for de-sexing dogs are population control and other societal and owner benefits including absence or reduction of behaviours associated with sex hormones (such as marking, roaming, fighting in males, and signs of oestrus or “heat” in females).
  - Other benefits of de-sexing for the health and welfare of dogs include:
    - increased longevity **????? X**
    - reduced risk of cancer and other diseases affecting the reproductive organs **????? X**
    - prevention of pregnancies in female dogs (✓), which can cause exhaustion and other medical issues. **????? X**

# Mandatory Desexing of Dogs

## Extraction of results



163 Veterinary professionals responded (67 Vets, 96 Nurses)

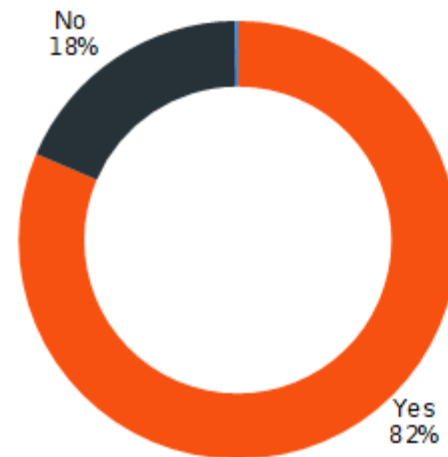
- Strongly Support = 48 , 69
- Support = 3 , 5
- Neutral = 3 , 4
- Oppose = 2 , 3
- Strongly Oppose = 10 , 14

# Mandatory Desexing of Dogs

## □ Extraction of results

**Figure 18: De-sexed**

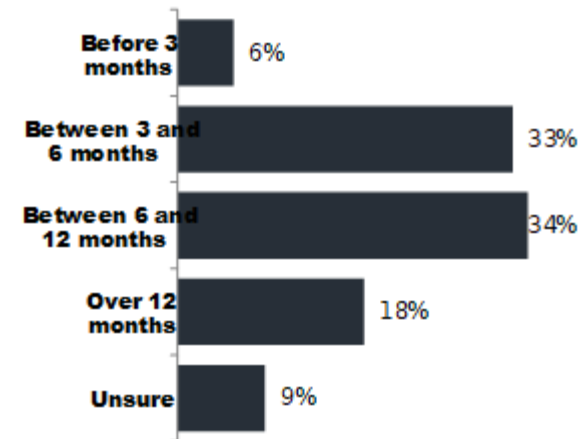
*Is your dog de-sexed?*



Culture Counts 2018; Total Sample Size; n = 2,989

**Figure 19: De-sexing Age**

*At what age was it de-sexed?*



Culture Counts 2018; Total Sample Size; n = 2,412

# Mandatory Desexing of Dogs

- The problem with ignorance of risk factors and history
- **Australian Great Dane Health & Lifestyle Survey 2015**
  - ▣ “26 or 55.3% of the cruciate injury dogs were sterilised at or prior to 12 months of old, 18 females and 8 males.”
  - ▣ “9 or 19.1% of the dogs that had a cruciate injury had never been sterilised.”
  - ▣ “The highest prevalence for osteosarcoma being diagnosed in any sterilisation sub-set was the 7-12 month group with 6.2% of all sterilised dogs in that age range acquiring the cancer.”
    - Trish Neill





# Mandatory Desexing of Dogs

- The problem with ignorance of risk factors and history
- **Ovarian autograft as an alternative to ovariectomy in bitches**
  - The literature on auto-transplantation of the ovary is briefly reviewed with emphasis on the portal vein drainage area as the transplant site. An experiment is reported whereby bitches bearing such grafts were compared to entire and ovariectomised subjects with regard to endocrine status and behaviour. It is concluded that auto transplantation of the ovary to the portal vein drainage area may be a promising method of abolishing oestrus and yet avoiding the **eunuchoid syndrome** as seen in a ovariectomised subjects.

■ PH LE ROUX and LA VAN DER WALT

■ JOURNAL OF THE SOUTH AFRICAN VETERINARY ASSOCIATION 48(2) **1977**



# Mandatory Desexing of Dogs

- Literature Conflict - Longevity
- **Probing the perils of dichotomous binning: How categorizing female dogs as spayed or intact can misinform our assumptions about the lifelong health consequences of ovariectomy**
  - ▣ In this study population, there was a three-fold increased likelihood of exceptional longevity (living  $\geq 13$  years) associated with the longest duration of ovary exposure. However, categorizing females in this population as spayed or intact yielded the spurious, contradictory assertion that spayed females (presumed to have the least ovary exposure) are more likely to reach exceptional longevity than those that are intact.
    - DJ Waters, SS Kengeri, AH Maras, EC Chiang
    - Theriogenology 76 (2011) 1496–1500

# Mandatory Desexing of Dogs

- Literature Conflict - Longevity
- **Life expectancy and causes of death in Bernese mountain dogs in Switzerland**

Sex	Number	Mean	95% CI	Median	IQR
Male Intact	60	7.60	7.05-8.16	7.65	6.47-9.24
Male Castrated	53	8.18	7.67-8.69	8.53	7.23-9.45
Female Intact	85	8.85	8.39-9.31	9.36	7.33-10.52
Female Spayed	106	8.38	7.97-8.80	8.50	7.00-9.52

- M Klopfenstein, J Howard, M Rossetti and U Geissbühler
- BMC Veterinary Research (2016) 12:153

# Mandatory Desexing of Dogs

- Literature Conflict – Mammary Neoplasia
- **The effect of neutering on the risk of mammary tumours in dogs – a systematic review**
  - ▣ Due to the limited evidence available and the risk of bias in the published results, the evidence that neutering reduces the risk of mammary neoplasia, and the evidence that age at neutering has an effect, are judged to be weak and are not a sound basis for firm recommendations.
    - W. Beauvais, J. M. Cardwell and D. C. Brodbelt.
    - *Journal of Small Animal Practice* (2012) 53, 314–322

# Mandatory Desexing of Dogs

- Literature Conflict – Prostate Neoplasia
- **Immunohistochemical characterization of canine prostatic carcinoma and correlation with castration status and castration time**
  - ▣ These results show that most canine prostatic carcinomas are of ductal/urothelial, androgen-independent origin. This is consistent with the epidemiological findings, showing increased risk in castrated dogs. Canine prostate cancer may, therefore, not be a realistic model for the human disease.
    - KU Sorenmo, M Goldschmidt, F Shofer, C Goldkamp and J Ferracone
    - *Veterinary and Comparative Oncology*, 1, 1, 48–56 (2003)

# Mandatory Desexing of Dogs

- Literature Conflict - Behaviour
- **Behavioural risks in male dogs with minimal lifetime exposure to gonadal hormones may complicate population-control benefits of desexing**
  - ▣ Forty behaviors differed between entire and castrated dogs, of which 25 were associated with percentage lifetime exposure to gonadal hormones (PLGH) and 14 with age-at-castration (AAC). Only 2 behaviours, indoor urine marking and howling when left alone, were significantly more likely in dogs with longer PLGH. In contrast, longer PLGH was associated with significantly reduced reporting of 26 (mostly unwelcome) behaviours. Of these, 8 related to fearfulness and 7 to aggression.
    - PD McGreevy, B Wilson, MJ Starling, JA Serpell.
    - PLOS ONE | <https://doi.org/10.1371/journal.pone.0196284> May 2, 2018

# Mandatory Desexing of Dogs

## □ Current Registration Costs

Time	One Year	Three Years	Life
Sterilised	\$20	\$42.50	\$100
Unsterilised	\$50	\$120	\$250