



DANGEROUS DOGS - A SENSIBLE SOLUTION



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Executive summary

As individuals and a society we value the positive role that companion animals play in our lives. However there is a persistent gap between the community's desire to live alongside animals and its knowledge of how to properly interact with those animals.

Dog attacks on humans, other companion animals, livestock and wildlife in Australia are similar to other developed countries in most respects. Some breeds of dogs receive more media attention when attacks take place, even though the frequency of attacks by these breeds may be small. For many years countries including Australia have attempted to regulate certain breeds in an attempt to reduce the frequency of dog bites.

The Australian Veterinary Association (AVA), along with the national veterinary associations of Britain, the United States and Canada, has recognised that breed-specific approaches to dog regulation are not effective as they do not protect the public by reducing dog bite incidents. This report sets out the facts about dog bites in Australia, along with a detailed critique of breed-specific legislation that bans particular breeds of dog perceived to be more inclined to be aggressive.

The association is advocating a legislative approach based on the identification of individual potentially dangerous animals and preventing them from inflicting harm. To develop this model, the association has:

- reviewed relevant legislation in Australia
- reviewed overseas initiatives and their results in reducing dog bite incidents
- drawn on the scientific literature for the most up-to-date information on dog behaviour and welfare
- identified the key elements of dog management legislation in relation to dangerous dogs and dog attacks
- developed the key principles and elements of a model legislative framework.

Dog bites are the result of a complex behaviour caused by the interaction of many factors. While regulation is an important foundation, to reduce dog bites an effective policy response must also include:

- Identification and registration of all dogs.
- A national reporting system with mandatory reporting of all dog bite incidents to the national database.
- Temperament testing to understand the risks and needs of individual animals, to help owners make more appropriate choices for their new pets, and to guide breeders to improve the temperament of puppies.
- Comprehensive education programs for pet owners, dog breeders, all parents and all children.

- Enforcement of all dog management regulations. Resourcing is often a major barrier to effective enforcement, and this problem needs to be addressed to achieve tangible reductions in dog bite incidents.

The facts about dog bites

While genetics are an important factor, the impact of the environment and learning are critical to the behaviour of a dog. The tendency of a dog to bite is dependent on at least five interacting factors:

- heredity (genes, breed)
- early experience
- socialisation and training
- health (physical and psychological) and
- victim behaviour (Beaver 2001, Seksel 2002, Snyder 2005).

Other factors include the sex and age of the animal, along with a range of other social and environmental factors.¹

Dog bite incidents generally occur either in domestic settings where the animal is known to the victim, or by dogs at large (refer to the definition on page 33) unknown to the victim.

While dogs at large are responsible for a minority of dog bites², they attract disproportionate media and political interest. They are the public face of the dog bite problem, and most legislation is designed to control this part of the problem.

However, most bites occurred in the dog's own home and involve victims bitten by their own dog (Kizer 1979 cited in Overall and Love 2001). In Australia, 73% to 81% of attacks occur in the domestic environment (Ashby K 1996 quoted in Ozanne-Smith et al 2001, Thompson

¹ Other factors include:

- Male dogs are 6.2 times more likely to bite than females (Gershman 1994, Shuler 2008)
- Entire (undesexed) dogs are 2.6 times more likely to bite than those that are spayed or neutered (desexed) (Gershman 1994 although see Guy 2001, Messam 2008)
- Chained dogs are 2.8 times more likely to bite than unchained dogs (Gershman 1994, although see Messam 2001, Yeon 2001)
- Dogs with "dominance aggression" are more likely to be 18-24 months old (Overall and Love 2001)
- Dogs bred at home are less likely to bite, compared to those obtained from breeders and pet shops (Messam 2008)
- Dogs are more likely to bite the older they are when they are obtained (Messam 2008)
- Biting dogs are more likely to live in areas of lower median income (Shuler 2008)
- Dogs are more dangerous when acting as a pack (Kneafsey et al 1995, Avis 1999 cited in Patronek and Slavinski 2009; Raghavan 2008)

² Owned dogs at large in public places (stray, escaped or being walked off-leash) were responsible for 13-25% of reported bites in Baltimore (Berzon cited in Overall and Love 2001), 35% of reported bites to children in Belgium, 38% of reported bites in the Netherlands (Cornelissen 2010), and 42% of reported bites in Toronto (Bandow 1996). Only 10% (cited in Beaver et al 2001) to 27% (Messam et al 2008) of biting dogs are not known to the victim.

2004). Not surprisingly, Council data report that 62% of dog attacks occurred in public places (Anon 2012) because few people will report bites by their own dog to council.

Research has shown that owned dogs delivered more bites, were larger, bit more victims on the head and neck, delivered more bites needing medical treatment, and, in short, were more dangerous than strays (Harris et al 1974 cited in Overall and Love 2001).

Victims

Most scientific studies report that children are more likely to be bitten by dogs than adults. In their 2001 paper, “A community approach to dog bite prevention – AVMA Task Force on Canine Aggression and Human–Canine interactions”, Beaver et al noted that:

“Children are the most common victims of serious dog bites. Seventy per cent of fatal dog attacks (Sacks et al 2000) and more than half of bite wounds requiring medical attention involve children.” (Beaver et al 2001)

In a review of United States research into victims of dog bites, Overall and Love found that:

- Most dog bites affect children under 15 years of age
- 60-75% of those bitten are under 20 years of age, and most are 5-9 year olds
- After 1 year of age, the incidence increases through to ages 5-9
- Children are bitten 2-3 times more frequently than would be expected on the basis of their population proportion
- 45% of 3,200 children 4-18 years of age reported being bitten during their lifetime
- Children are at least three times more likely to experience a bite needing medical attention than are adults.

An extensive telephone based survey of 1184 families in Belgium revealed a 2.2% annual prevalence of dog bites to children, and research from Indiana, USA mirrored these findings³. Far less than 50% of bites were reported to medical or legal authorities (Kahn et al 2004).

The number of dog bite cases presented to hospital emergency departments was about one-quarter of those caused by road accidents and one-third of those caused by burns received at home. Of the dog bite cases, 65% of patients were bitten at home and 35% in public. In 86% of the home bites and 31% of the public bites, the bite was determined to result mainly from the child’s or adult’s behaviour. Bites at home occurred when there was no adult supervision (Kahn et al 2003).

Figures like these are from medical reporting sources, and reflect the likelihood of a bite being reported. Children are generally shorter, weaker and have poorer judgement than adults. They also actively interact with dogs differently to adults, so are more likely to be bitten on the face and head causing complex, serious and disfiguring injuries. However,

³ In Indiana, USA, the following bite incidences were reported:

- 475 bites per 100,000 children under 5 years of age
- 613 bites per 100,000 children between 5 and 9 years of age
- 462 bites per 100,000 children between 10 and 14 years of age
- 81 bites per 100,000 adults older than 60 years of age (Sinclair and Zhou 1995 cited in Patronek and Slavinski 2009).

children typically require significantly shorter periods of hospitalisation than do adults (Ozanne-Smith et al 2001). Beaver (2001) concisely summarises the findings:

“Children’s natural behaviours, including running, yelling, grabbing, hitting, quick and darting movements, and maintaining eye contact, put them at risk for dog bite injuries. Proximity of a child’s face to the dog also increases the risk that facial injuries will occur.”

Surveys using different data sources report different child:adult bite incidences. One survey which revealed different results from most other studies was of 40,355 households in the Netherlands. It found that 1420 people had been bitten, with 1078 of these responses able to be analysed in detail. 79% of the bites were to adults and only 21% to children, and no difference existed between the incidence for people up to 18 and those over 18 years of age. About one-third of victims were bitten by their own dog, and the majority of incidents occurred in non-public places. Most of the incidents resulted in no (32%) or minor (48%) injuries, while 20% resulted in serious punctures. In 62% of cases, the bite was not medically treated (Cornelissen and Hopster 2010).

Breed-specific legislation

Breed-specific legislation generally refers to laws that target specific breeds of dogs. This legislative approach has been used by a large number of jurisdictions in an effort to address the issue of aggressive and dangerous dogs in the community. The legislation has generally taken the form of either banning or placing stringent restrictions on the ownership of certain breeds of dog.

The Australian Veterinary Association does not believe that breed based approaches reduce public risk. The Australian Veterinary Association is opposed to breed-based dog control measures because the evidence shows that they do not and cannot work. National veterinary associations of Britain, the United States and Canada, and major animal welfare organisations internationally also hold this view.

The failure of breed-specific legislation to prevent dog attacks is due to a number of factors.

- Firstly, breed on its own is not an effective indicator or predictor of aggression in dogs.
- Secondly, it is not possible to precisely determine the breed of the types of dogs targeted by breed-specific legislation by appearance or by DNA analysis.
- Thirdly, the number of animals that would need to be removed from a community to have a meaningful impact on hospital admissions is so high that the removal of any one breed would have negligible impact.
- Finally, breed-specific legislation ignores the human element whereby dog owners who desire this kind of dog will simply substitute another breed of dog of similar size, strength and perception of aggressive tendencies.

Jurisdictions are recognising this through experience and opting to repeal breed-specific legislation where it is in place – see the section below on international case studies.

Breeds, temperament and dog bites

All dogs, regardless of breed, are capable of biting and causing serious injury, especially to children and the elderly. In a survey of 3226 dogs attending Canadian veterinary clinics, the owners reported that 15.6% of the dogs had bitten a person at some time (Guy et al 2001).

While all dogs can bite, the size of the dog plays a significant role in the potential harm that can be done. Data based on medical surveys have identified that certain breeds are more likely to cause injury requiring medical attention than others. Bites from large breed dogs are more likely to do more serious damage to the victim (Patronek et al 2009).

Bites from large breed dogs (and especially well recognised breeds such as the Pit Bull terrier, Rottweiler and German Shepherd) are more likely to be reported so these breeds are tend to be over-represented in reports. This is especially true when certain breeds are referred to and characterised in the media (Podberscek 1994, Twining et al 2000).

It is important to note that those breeds responsible for the most reported attacks have changed over time.

Thompson (1997) reported that five breeds were responsible for 73% of South Australian attacks where the victim was hospitalised. The same five breeds represented only 31% of the whole dog population. In 2004 he reported that the following breeds topped the list.

Breed	2000-2002		2002-2004	
	% of all attacks	% in survey population	% of all attacks	% in survey population
Rottweiler	20.3%	5.7%	12.4%	5.7%
Jack Russell Terrier	10.9%	4.7%	6.5%	4.7%
German Shepherd	15.6%	8.1%	8.2%	8.1%
Bull Terrier (all types)	8.6%	7.9%	9.8%	7.9%
Kelpie	5.5%	6.0%	8.2%	6.0%
Doberman	1.5%	1.2%	1.0%	1.2%
Heeler (all types)	3.9%	6.3%	6.5%	6.3%

Table 1 – Breeds responsible for dog bite hospital admissions in South Australia (Thompson 2004)

The “most dangerous breeds” change with time as breeds wax and wane in popularity. In the USA, Pit Bull terriers were responsible for the majority of dog bite fatalities in the 1980s, but were eclipsed by Rottweilers in the 1990s (Sacks et al 2000). Similar trends are seen in NSW, as in Table 2.


	2004-5	2005-6	2006-7	2007-8	2008-9	2009-10	2010-11
Highest number of attacks	German Shepherd	American Staffordshire terrier	Staffordshire	Staffordshire	Staffordshire	Staffordshire	Staffordshire
	Cattle Dog	Rottweiler	Rottweiler	German Shepherd	German Shepherd	Cattle Dog	Cattle Dog
	Rottweiler	Cattle Dog	German Shepherd	Cattle Dog	Cattle Dog	German Shepherd	German Shepherd
	Staffordshire Bull Terrier	Pit Bull	Pit Bull	Rottweiler	American Staffordshire	American Staffordshire	American Staffordshire
	Pit Bull Terrier	Kelpie	American Staffordshire	American Staffordshire	Bull Terrier	Rottweiler	Rottweiler
	Bull Mastiff	German Shepherd	Border Collie	Husky	Jack Russell	Border Collie	Husky
	Bull Terrier	Labrador	Labrador	Jack Russell	Kelpie = Border Collie = Labrador	Husky	Jack Russell
	Fewer attacks						

Table 2 – Breeds responsible for dog attacks in New South Wales by year (Anon, NSW Government 2005, 2010, 2011)

In Australia restricted breeds are the Japanese Tosa, fila Brasileiro, dogo Argentino, Perro de Presa Canario, and American Pit Bull Terrier. The first four breeds have been banned from import for some time and are present in insignificant numbers in Australia, if at all. The Pit Bull Terrier has been the target of recent state legislation, despite data that the breed is responsible for no more attacks than a number of other breeds.

It is clear that one of the factors that differs between breeds of dogs is temperament (Hart and Miller 1986, Hart and Hart 1986, Bradshaw et al 1996, Coppinger and Coppinger 1996, Takeuchi and Mori 2006). However there is strong evidence that behavioural traits are more associated with current use than with a breed's historical purpose (Svartberg 2006). Social and non-social fearfulness (resulting in aggression) can be rapidly altered in a few generations under intense selection (Muphree 1969 referenced in Svartberg 2006).

A number of studies have been undertaken in the past decade that clearly question the proposition that certain breeds are inherently more aggressive than others.

Temperament testing – Germany 2008

Schalke et al (2000a, 2000b) examined 415 dogs in compulsory, standardised behaviour tests delivered by qualified and experienced veterinary behaviourists. 95% of the dogs' tests showed no indication of disturbed aggressive communication or aggressive behaviour in inappropriate situations. No significant differences were found between American Staffordshire Bull Terriers, Pit Bull Terriers, Doberman Pinschers and Rottweilers. In a comparison study with 70 Golden Retrievers, no significant difference was found between the Golden Retrievers and the restricted breeds.

Breed differences in canine aggression – United States 2008

9,813 US dogs were assessed by their owners using the validated, standardised questionnaire, C-BARQ. "The substantial within-breed variation in C-BARQ

scoressuggests it is inappropriate to make predictions about a given dog's propensity for aggressive behaviour solely on its breed." Pit Bull Terriers scored fourth for "stranger aggression" after (Dachshunds, Chihuahuas and Australian Cattle Dogs), third for owner-directed aggression (after Beagles and Dachshunds), and second for dog aggression (after Akitas). 7% of Pit Bull owners reported their dog had bitten or attempted to bite a strange person, while 22% reported bites directed to other dogs. Duffy et al (2008) concluded that "In general, the highest rates of human directed aggression were found in smaller breeds whose aggression is presumably easier to tolerate".

Aggression, behaviour and animal care among Pit Bulls and other dogs adopted from an animal shelter – United States 2011

In an adoption shelter survey of 40 Pit Bulls and 42 other similar-sized dogs, both before and after adoption, three Pit Bulls and two dogs of other breeds were euthanased prior to adoption because of aggression toward people. Of the 77 adoptees, one Pit Bull and 10 dogs of other breeds were returned because of alleged aggression. Reported care was similar except that Pit Bulls were more likely to sleep on their owner's bed and cuddle their owner (MacNeill-Alcock et al 2011).

What Pit Bulls can teach us about profiling – United States 2006

25,000 dogs were tested by the Georgia-based American Temperament Test Society. 84% of Pit Bulls passed, a higher percentage than Beagles, Airedales, Bearded Collies and most Dachshunds (Gladwell 2006).

Many authors note the profound influence of the owner and the way the dog is raised on its temperament, and the observation that some breeds are more likely to be owned by certain types of people. While clearly a generalisation, certain breeds, especially Pit Bull-type dogs, are seen as desirable by irresponsible owners and seen as a macho status symbol by young men (Kaspersson 2008). In a survey of 355 dog owners in Hamilton County, Ohio, owners of Pit Bulls had almost 10 times more criminal convictions (5.9 vs. 0.6) than owners of "low risk" licensed breeds. Convictions included aggression, problems with drugs and alcohol, crimes involving children and domestic violence. "High risk dogs are part of a high risk lifestyle and ownership of high risk cited dogs appears to be a significant marker of general deviance." (Barnes et al 2006)

A survey of dog ownership by youth gang members in the UK, where ownership of so-called "status" dogs was high, revealed that the dogs were owned for a range of reasons. Status dogs in this context refers to dogs kept to enhance feelings of masculinity and they were predominantly bull-type and mastiff-type dogs. The main function of dogs in youth gangs was as companions and for their role in facilitating socialising. A secondary function was as weapons or status symbols, and in fighting dogs for entertainment. In this context dog ownership makes "a clear statement of aggressive intent and reflects an individual's status (hard, tough and to be respected)" (Maher and Pierpoint 2011). It is important to remember the valuable role that dogs, even "status" or "dangerous" dogs have in providing companionship, reducing stress, building social capital, and engendering feelings of empathy, even though a very small number of dogs are dangerous and their owners may keep them for undesirable or illegal purposes. It is also important to note that dogs kept for reasons other than ones we perceive as positive are more likely themselves to suffer abuse, and neglect (Maher and Pierpoint 2011).

It has been frequently stated that banning certain high risk breeds will simply cause those who see such breeds as desirable to choose another large, powerful breed with a higher likelihood of aggressive behaviour. Council officers recognise that problem dogs typically come from certain, low socio-economic areas with high rates of general crime and violence. This is the “elephant in the room” for those trying to protect society from serious dog bites. An example is cited by Gladwell (2006), in which the three dogs that killed a child were owned by a 21 year old with convictions for domestic assault and aggravated assault. The dogs got out and attacked some teenagers. He was fined and ordered to have the dogs muzzled in public. This did not happen, because he claimed he couldn't afford the muzzles. He talked about neutering the dogs and taking them to obedience classes, but this never happened. After the dogs were stirred up by a visitor, they were put outside when the snowdrifts were high against a fence, and they were able to escape and kill a 2 ½ year old child.

The Victorian girl who was killed by a Pit Bull in August 2011 was the victim of an unregistered, unrestrained dog (Helman 2012). While the dog may have been aggressive, the tragedy was much less likely to have occurred if the owner had displayed a more responsible attitude toward the dog and the community.

Breed identification

Breed-specific legislation has depended on identification of those breeds for which restrictions are to be imposed. However positive identification of breeds can be extremely problematic.

Breed templates have been developed by state jurisdictions and breed assessment committees (in Victoria) or assessors (in NSW) have also been used. Under the Victorian legislation, defence against an identification that a dog belongs to a restricted breed is dependent on certification by an affiliate of the Australian National Kennel Council, opinion from a certifying authority, or a veterinary certificate.

Veterinarians have been reluctant to certify that an animal is a member of a breed. This is understandable as breed assessment by observation has been shown to be flawed. In one study, 20 mixed breed dogs were identified as containing certain breeds (e.g. Chow Chow) or types (e.g. terrier). DNA was collected and submitted for analysis to the Mars Veterinary Wisdom Panel MX™. 87.5% of the dogs did not contain DNA of the breeds or types identified, based on presence or absence of single nucleotide polymorphisms (Voith et al 2009). DNA has now been used successfully to establish that dogs seized by councils are predominantly breeds other than restricted breeds (Chivers 2010)

In considering the current high profile breed, it is still impossible to establish whether a dog is a Pit Bull. There are currently two DNA tests available in Australia. The first (BITSa by Gene Technologies <http://www.gtqlabs.com/bitsa>) does not include Pit Bulls in its range of breeds, so it cannot prove that a dog is a Pit Bull. It does include American Staffordshire terriers. It does not include Pit Bulls because this breed is banned from importation into Australia (and restricted in a number of states) and not recognised by any breed registering society, so there is not a pool of “confirmed pure bred Pit Bulls” to use to establish a common DNA profile. Some have claimed that, because Pit Bulls could not be legally imported, Australian Pit Bulls are just a mix of other breeds bred to produce a “Pit Bull type” dog (Chivers 2010).

For similar reasons, the other available test, which is produced by Mars Petcare Australia Pty Ltd, is not designed to validate the purity of a purebred dog, and test results should not be relied upon as official certification of a dog's genetic make-up, including for the purposes of the laws relating to restricted breeds (<http://www.advancepet.com.au/dna/>).

Effect of removal of restricted breeds

Given that we have data on dog bites and dog populations, it is possible to calculate the effect of removing particular breeds retrospectively on dog bite incidents. The Number Needed to Treat (NNT) is a concise, clinically useful presentation of the effects of an intervention, used to assess the costs and benefits of a treatment⁴. It represents the average number of patients who would need to be treated to prevent one patient from developing the outcome of interest (e.g. death).

In relation to dog bites, we can calculate the number of dogs of a particular breed that would need to be removed from the population to prevent one unwanted outcome (for example, a visit to an emergency department). Assuming a breed was responsible for 15% of dog bites and there was a total of 130 dog bite visits to emergency departments per 100,000 people caused by all breeds of dogs, then 5,128 dogs of the particular breed of interest would need to be removed to prevent a single emergency department visit.

For more serious injuries, if 35% of serious injuries were ascribed to a breed, and assuming 9.3 reconstructive surgeries due to dog bite per 100,000 people, then 30,663 dogs would need to be removed to prevent a single reconstructive surgery, or 109,495 dogs to prevent a single hospitalisation per year.

This shows the implausibility that breed-specific legislation will substantially reduce the number of dog bite related injuries in a community (Patronek et al 2010).

“If we want to prevent all bites, there is only one sure way and that is to ban all dogs. That is of course as unrealistic as trying to prevent bites by enacting breed specific legislation.”⁵ (Bandow 1996).

New South Wales

There is readily available data on dog attacks from NSW for the period 2004-2011. This data is available by year on:

- the total number of dogs and the number of dogs of different breeds registered
- the total number of attacks and the number of attacks due to each breed.

The number of attacks increased steadily during the period. The major reason for the increase is likely to be due to increasing awareness of the issue and likelihood of attacks being reported.

⁴ It is the inverse of the difference between the absolute risk before treatment and the absolute risk after treatment (in this case, banning dogs of a certain breed).

⁵ James Bandow was at the time General Manager, Animal Control Services, Department of Public Health, City of Toronto, Canada.

Chart 1 shows that the number of dog attacks reported and the percentage of all registered dogs attacking has risen over the data period, since the introduction of breed-specific legislation in 2005. Breed-specific legislation has not been effective at reducing the number of dog attacks, and has not provided additional protection to the public.

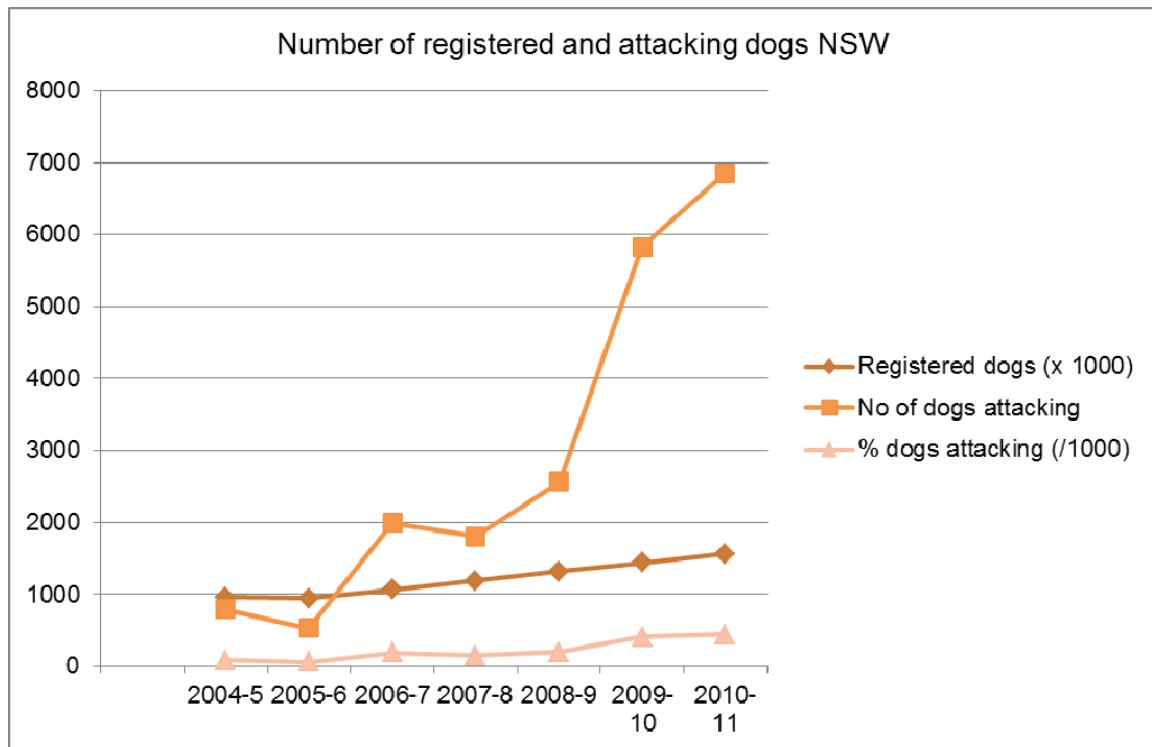


Chart 1 – Number of registered and number of attacking dogs NSW 2004-2011

Chart 2 shows that the number of Pit Bulls attacking has risen from 33 to 87 even though the number of Pit Bulls registered has fallen over the data period since breed-specific legislation was introduced. Despite breed-specific legislation, the % of the breed attacking has risen from 1.02 to 3.39%. Breed-specific legislation targeted against Pit Bull terriers did not reduce the number of attacks by this breed or the percentage of the breed attacking.

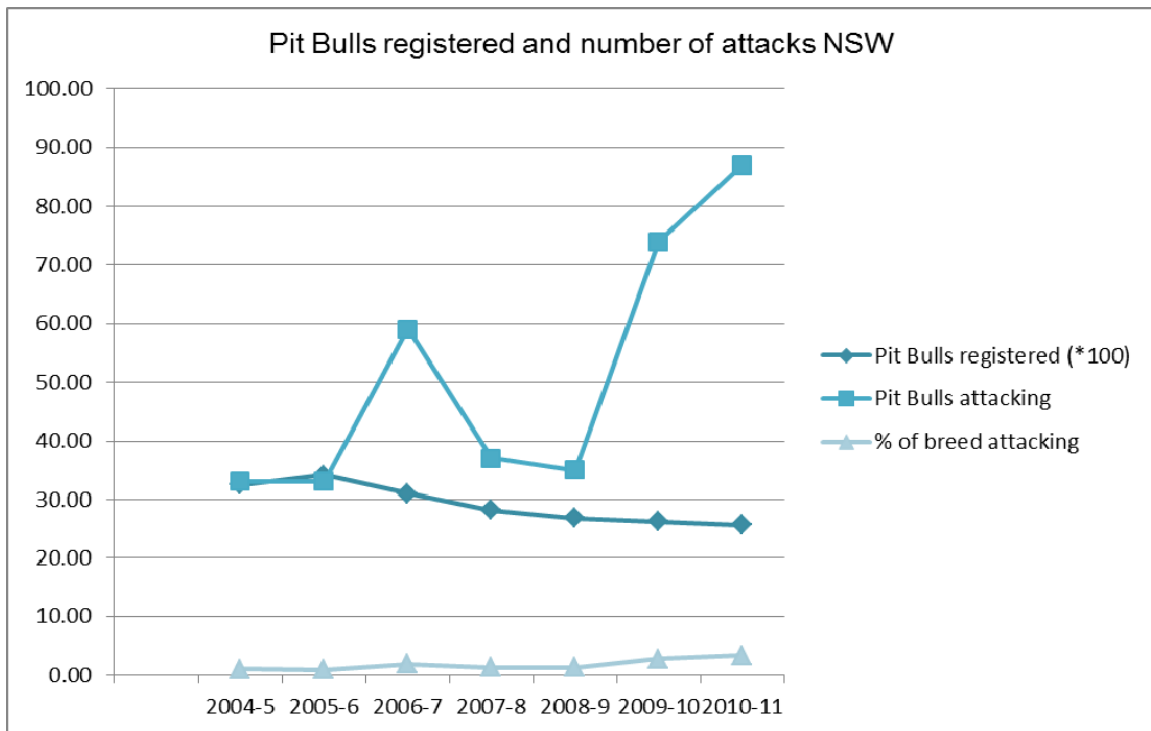


Chart 2 – Number of Pit Bulls registered and number of Pit Bulls attacking NSW 2004-2011

Chart 3 shows that the percentage of all dogs attacks caused by Pit Bulls has fallen (from 4.16% to 1.27%). The number of attacks that would still have occurred had all Pit Bulls been removed has increased dramatically over the time period (from 760 to 67,600). Even if fully successful (removal of all members of the breed), breed-specific legislation directed against Pit Bulls cannot reduce the number of dog attacks or better protect the public.

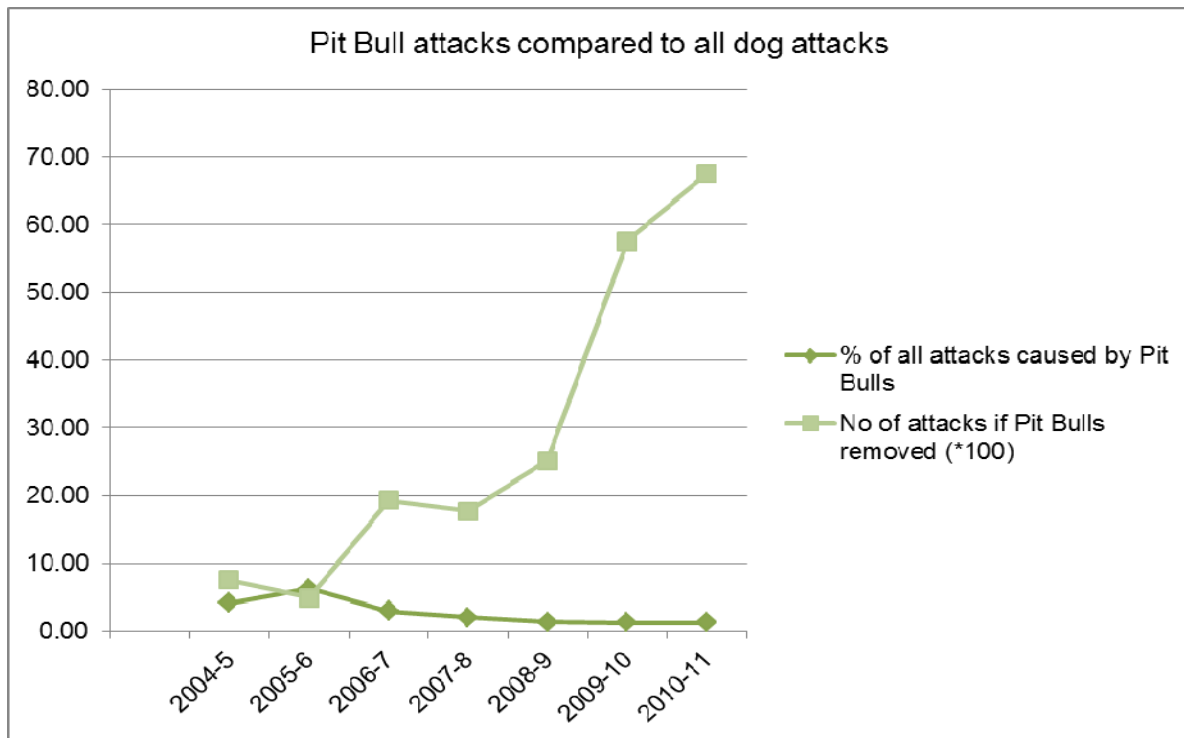


Chart 3 - Percentage of all dog attacks by Pit Bulls and number of attacks if all Pit Bulls removed NSW 2004-2011

Chart 4 groups all attacks by Pit Bulls and their crosses, and American Staffordshire Terriers (Amstaff - a very similar dog not currently the subject of breed-specific legislation) and their crosses. It shows that over the data period, the number Pit Bulls and Amstaffs and their crosses attacking and the percentage of these breeds attacking has risen (from 81 to 463 and from 0.726 % to 1.832%).

Additionally, the rise in percentage of Pit Bulls attacking (1.02 to 3.39 – a 70% increase) is exceeded by the rise in percentage of AmStaffs attacking (from 0.25 to 1.53 – an 84% increase).

Breed-specific legislation has failed to reduce the number of attacks or the percentage of these breeds attacking. It has neither protected the public nor given them a feeling of security.

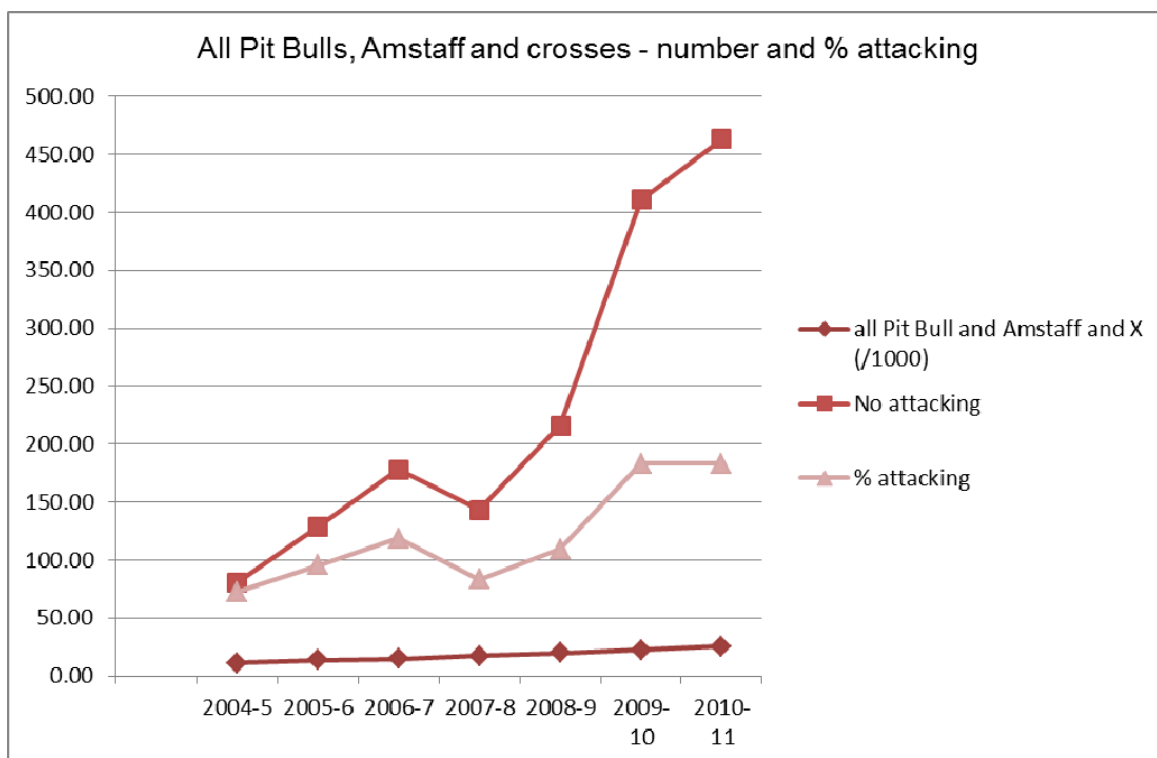


Chart 4 - All Pit Bulls and American Staffordshire Terriers and their crosses, numbers registered and percentage attacking NSW 2004 to 2011

Over the data period if all Pit Bulls, AmStaffs and their crosses were removed from the community, the number of dog attacks would have been reduced by 81 in 2004-5 rising to 463 in 2010-11. The number of attacks that would still have occurred would have been 712 in 2004-5 rising to 6384. The reduction in number of attacks (6-10%) shows that even completely effective breed-banning would only improve public safety by a very small percentage. Chart 5 illustrates this.

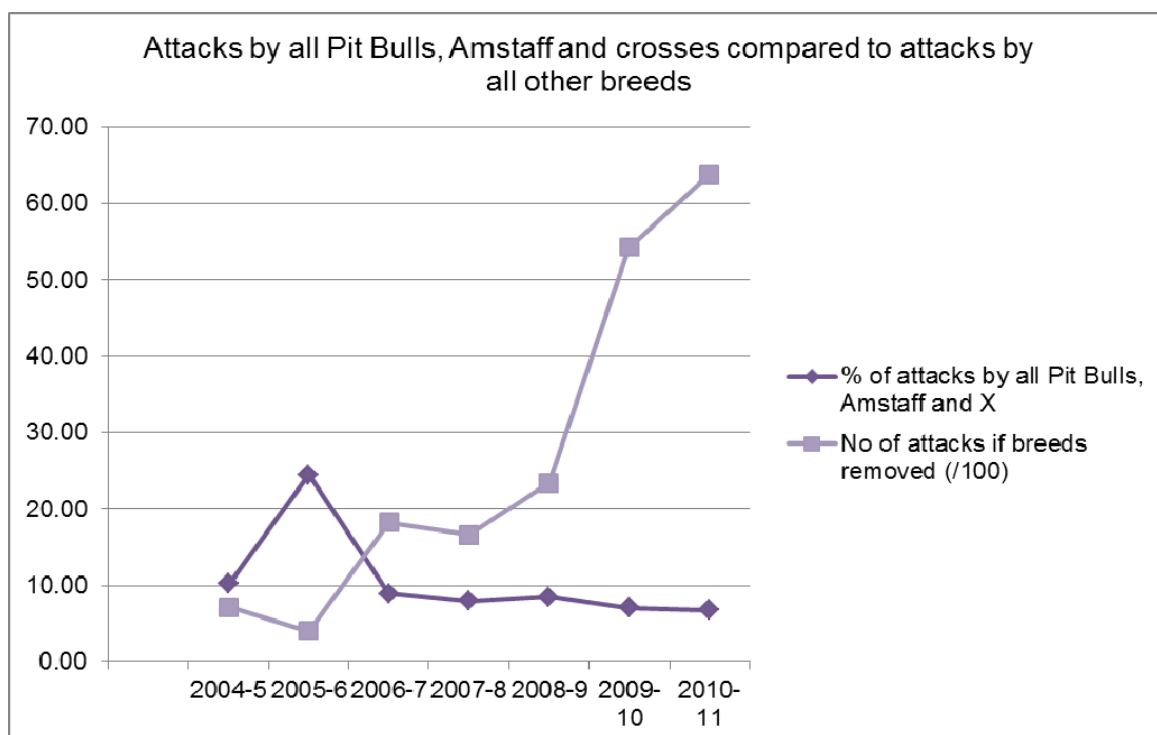


Chart 5 – Pit Bulls, American Staffordshire Terriers and their crosses, percentage of all attacks by the breeds and number of attacks if all members of these breeds removed NSW 2004-2011

Victoria

Following the death a four-year-old child in August 2011, the Victorian government strengthened its dangerous dog provisions. They included expanding the restricted breed definition to include cross-bred dogs and bringing forward an amnesty deadline set in 2010. The new provisions took effect on 30 September 2011. Greater criminal sanctions for the owners of dogs that kill people have been established in Victoria.

The legislation specifies that a dog with particular physical characteristics can be automatically treated as a dangerous dog. However there's no way to reliably determine the breed of a dog by sight (or by DNA in the case of Pit Bulls). This has led to owners appealing decisions and dogs being impounded for extended periods, creating or exacerbating behaviour problems and compromising the welfare of the dog.

International case studies

Various models of breed-specific legislation have been tried in many countries of the world, including Austria, Denmark, Germany, France, Ireland, Italy, Malta, the Netherlands, Spain, the United Kingdom and Switzerland (de Meeter 2004), as well as in various states in the United States of America and Canada.

United Kingdom

Breed-specific legislation was introduced in the UK in 1991. After two years, a study conducted at the Aberdeen Royal Infirmary showed that there had been no reduction in the incidence of dog bites (Klaassen et al 1996), and the estimated cost to the UK government of determining whether an individual animal belonged to a specified breed was in the order

of US\$14 million (Anon 1996). The UK Dangerous Dog Act is now widely considered a failure (Grant 2008).

Spain

Spain introduced breed-specific legislation in 1999, applying it to Pit Bull terriers, Staffordshire Terriers, American Staffordshire Terriers, Rottweilers, Argentine Dogo, Brazilian Fila, Tosa Inu and Akita Inu breeds. No impact on dog bite data collected before and after the introduction of the legislation was found (Rosado et al 2007). However, Villalbi et al (2012) has reported a decline in hospitalisations due to dog bites associated with the introduction of the regulations. The regulations included various measures to enhance responsible dog ownership as well as breed-specific legislation.

Germany

Lower Saxony (Germany) instituted breed-specific legislation in 2000, however this was subsequently withdrawn (September 2002) when government-mandated temperament assessment tests showed that there was no scientific basis for increased aggressiveness in the specified breeds (Schalke et al 2008, Ott et al 2008).

Netherlands

The Netherlands abolished breed-specific legislation in June 2008 after carefully assessing the validity of the legislation and its impact (Cornelissen 2010). The legislation had been introduced in 1993.

Italy

In September 2003, Italy placed into effect laws that banned or restricted 92 breeds including not just controversial breeds such as the Rottweiler and Pit Bull, but breeds such as the Corgi and Border Collie. Italy later dropped the 'deemed dangerous' list to 17 breeds, and in April 2009, removed the restrictions altogether.

USA

The situation regarding breed-specific legislation in the USA is complex, as each county adopts its own animal control ordinances. A list of states, counties (and countries internationally) and their ordinances is listed at http://en.wikipedia.org/wiki/Breed-specific_legislation. A list of US and Canadian counties that have repealed or voted against breed-specific legislation is available at <http://www.understand-a-bull.com/BSL/BSL2011Wins.htm>.

The alternative

The AVA's alternative to breed-specific legislation is a comprehensive strategy to address the multiple complex causes of dog bites.

The model legislative framework sets out sound principles for regulating dangerous dogs as well as describing a system to identify and control potentially dangerous dogs.

At the same time, a complete system of measures to support socially responsible pet ownership is essential to achieve a real reduction in dog bite incidents:

- Identification and registration of all dogs.
- A national reporting system with mandatory reporting of all dog bite incidents to the national database.
- Temperament testing to understand the risks and needs of individual animals, to help owners make more appropriate choices for their new pets, and to guide breeders to improve the temperament of puppies.
- Comprehensive education programs for pet owners, dog breeders, all parents and all children.
- Enforcement of all dog management regulations. Resourcing is often a major barrier to effective enforcement, and this problem needs to be addressed effectively to achieve tangible reductions in dog bite incidents.

Identification and control of potentially dangerous dogs

The alternative approach requires early identification of individual animals that pose a risk, and intervention to protect the community.

While some Australian jurisdictions do have specific restricted classes of dogs based on breed, they also have provisions for declaring individual dogs as dangerous. The classes of dangerous dog vary across states and territories. Some have only one category, while most have a range of classifications such as dangerous or menacing. South Australia also has further categories for nuisance and barking animals.

Table 3 summarises the current approaches in each Australian jurisdiction (a detailed table may be found in Appendix 3).

Jurisdiction	Classes	Potential triggers for declaring a dog to be of a certain class
Australian Capital Territory	Dangerous	Where the dog has attacked or harassed a person or animal
New South Wales	Dangerous	Where the dog: <ul style="list-style-type: none"> • has, without provocation, attacked or killed a person or animal (other than vermin), or • has, without provocation, repeatedly threatened to attack or repeatedly chased a person or animal (other than vermin), or • has displayed unreasonable aggression towards a person or animal (other than vermin), or • is kept or used for the purposes of hunting.
Queensland	Dangerous	Where the dog: <ul style="list-style-type: none"> • has seriously attacked, or acted in a way that caused fear to, a person or another animal; or • may, in the opinion of an authorised person having regard to the way the dog has behaved towards a person or another animal, seriously attack, or act in a way that causes fear to, the person or animal.
	Menacing	Where the dog: <ul style="list-style-type: none"> • has attacked, or acted in a way that caused fear to, a person or another animal; or • may, in the opinion of an authorised person having regard to the way the dog has behaved towards a person or another animal, attack, or act in a way that causes fear to, the person or animal.
South Australia	Dangerous	<ul style="list-style-type: none"> • the dog is dangerous; and the dog has attacked, harassed or chased a person or an animal or bird owned by or in the charge of a person in circumstances that would constitute an offence against the Act.
	Menacing	<ul style="list-style-type: none"> • the dog is menacing; and the dog has attacked, harassed or chased a person or an animal or bird owned by or in the charge of a person in circumstances that would constitute an offence against the Act.
	Nuisance	<ul style="list-style-type: none"> • the dog is a nuisance; and the dog has attacked, harassed or chased a person or an animal or bird owned by or in the charge of a person in circumstances that would constitute an offence against the Act.
Tasmania	Dangerous	<ul style="list-style-type: none"> • the dog has caused serious injury to a person or another animal; or • there is reasonable cause to believe that the dog is likely to cause serious injury to a person or another animal

Jurisdiction	Classes	Potential triggers for declaring a dog to be of a certain class
Victoria	Dangerous Menacing	<ul style="list-style-type: none"> • if the dog has caused the death of or serious injury to a person or animal • if the dog is a menacing dog and its owner has received at least 2 infringement notices • if there has been a finding of guilt or the serving of an infringement notice • for any other reason prescribed. • the dog has rushed at or chased a person; or • the dog bites any person or animal causing injury to that person or animal that is not in the nature of a serious injury.
Western Australia	Dangerous	<ul style="list-style-type: none"> • the dog has caused injury or damage by an attack on, or chasing, a person, animal or vehicle; • the dog has, repeatedly, shown a tendency — <ul style="list-style-type: none"> ○ to attack, or chase, a person, animal or vehicle even though no injury has been caused by that behaviour; or ○ to threaten to attack.
Northern Territory	No classes	N/A

Table 3 – Summary of current dangerous dogs classifications in Australian jurisdictions

In most cases, to be declared a dangerous or menacing dog there needs to be a significant event or attack. While it is essential to have these provisions in place to allow authorities to respond to incidents, it can be seen in many cases as too little too late. As De Meester (2004) points out:

“... the direct effects of classical dog aggression legislation on the reduction of the number and severity of incidents will be very limited. The problem is that the existing dog aggression legislation is almost always purely repressive and is rarely preventative.”

The key to dog bite prevention is much earlier identification of potentially dangerous dogs. Multnomah County in Oregon USA implemented a “potentially dangerous dog” classification in 1989. The program was judged to be successful in that, in the five years prior to its implementation, 25% of the dogs involved in bite incidents had bitten again within one year. After three years under the program, the percentage of dogs repeating the bite behaviour within one year was 7% (statistically significant $p=0.01$).

The Oregon model uses a progressive scale to categorise and restrict potentially dangerous dogs.

Classification level	Restrictions
Level 1 - A dog, while at large, menaces, chases, displays threatening behaviour or aggressive behaviour or otherwise threatens or endangers the safety of any person or domestic animal	The dog shall be restrained by a physical device or structure in a manner that prevents the dog from reaching public property or adjoining property
Level 2 - A dog, while at large, causes physical injury to any domestic animal	The dog shall be confined within a secure enclosure whenever the dog is not on a leash or inside the home of the owner. The owner may be required to pass a responsible pet-ownership test.
Level 3 - A dog, while confined, aggressively bites or causes physical injury to any person	The dog shall be confined within a secure enclosure, and the owner shall post warning signs provided by the director. The director may also require liability insurance. The dog must be muzzled and leashed whenever outside the enclosure. The owner may be required to pass a responsible pet-ownership test.
Level 4 - A dog, while at large, aggressively bites or causes physical injury to any person or kills a domestic animal	Same as level 3
Level 5 - A dog, whether or not confined, causes the serious physical injury or death of any person, is used as a weapon in the commission of a crime, or, having been classified level 4, repeats level 4 behaviour	The dog shall be euthanased. In addition, the director may suspend the owner's right to own a dog for a period of time determined by the director.

Table 4 – The Oregon Model classifications for dangerous and potentially dangerous dogs

The Oregon model is significant because it is the only example of a successful animal control or dangerous dog intervention in the published scientific literature.

The essential elements of the Oregon approach are:

1. Dogs of many breeds are responsible for dog bite incidents.
2. Upbringing and control exerted by a dog's owners are as important as breed in determining the potential dangerousness of a dog.
3. Dogs that cause serious injury to humans have frequently already exhibited behavioural problems.
4. The ownership of dogs should be restricted only as far as reasonably necessary to protect the public.
5. Special efforts must be undertaken to teach children skills in interacting with dogs at an early age, and to develop effective ways to warn children of the presence of a potentially dangerous dog.
6. Dogs that pose a reasonably significant threat of causing serious injury to humans or other animals must be identified and subjected to precautionary restrictions.

This approach is similar to the model proposed by the Australian Veterinary Association's Urban Animal Management group in conjunction with Animal Control Officers from throughout Australia in 2004. The model was subsequently endorsed by National Consultative Committee on Animal Welfare (NCCAW 34) and accepted by the then Minister for Agriculture (NCCAW 35). This model recognises six classifications:

1. Dog that exhibits unacceptable aggression without actually biting.
2. Dog that inflicts a single (not serious) bite wound in a situation where provocation of the dog has been established as a significant causal factor.
3. Dog that inflicts a single (not serious) bite wound without provocation.
4. Dog that inflicts multiple bite wounds in a situation where provocation of the dog has been established as a significant causal factor.
5. Dog that inflicts multiple bite wounds without provocation.
6. Life threatening attack (potential grievous bodily harm) no matter what the cause was.

Each classification level includes progressively more stringent restrictions placed on identified dogs and their owners. Further details of the model are in Appendix 4.

The Humane Society of the United States developed Model Dangerous Dog Legislation in 2006 that also incorporated the approach of identifying 'potentially dangerous dogs'. Under its model the definitions of dangerous and potentially dangerous dogs were given as:

"Dangerous dog" means any dog that:

- (1) Causes a serious injury to a person or domestic animal; or
- (2) Has been designated as a potentially dangerous dog and engages in behavior that poses a threat to public safety as described in the "potentially dangerous dog" definition.

"Potentially dangerous dog" means a dog that may reasonably be assumed to pose a threat to public safety as demonstrated by any of the following behaviors:

- (1) Causing an injury to a person or domestic animal that is less severe than a serious injury;
- (2) Without provocation, chasing or menacing a person or domestic animal in an aggressive manner;
- (3) Running at large and impounded or owners cited by the Animal Control Authority two (2) or more times within any 12-month period.
- (4) Acts in a highly aggressively manner within a fenced yard/enclosure and appears to a reasonable person able to jump over or escape.

The consequences of both designations are broadly similar, with the notable exception that a dog determined to be "potentially dangerous" can have that status removed after three years following appropriate temperament testing.

The important commonality across all of these examples is the ability of animal management authorities to identify and intervene with animals prior to an attack occurring.

Proposed legislative framework

The legislative framework set in this paper can be found in Appendix 1. It is a synthesis of the approaches discussed above that adapts them for Australian jurisdictions and is based on early identification and intervention for potentially dangerous dogs

Determination of a dangerous or potentially dangerous dog

The relevant animal management authority, generally local governments in Australia, would have the role and authority to classify individual dogs as either dangerous or potentially dangerous. These determinations occur after an investigation triggered by a range of circumstances as detailed in Table 5.

Potentially dangerous dog	Dangerous dog
<p>Any dog that may reasonably be assumed to pose a threat to public safety as demonstrated by any of the following behaviours :</p> <p>(a) Causing an injury to a person or domestic animal that is less severe than a serious injury;</p> <p>(b) Without provocation, chasing or menacing a person or domestic animal in an aggressive manner;</p> <p>(c) Running at large and impounded or owners cited by the Animal Control Authority two (2) or more times within any 12-month period.</p> <p>(d) Acts in a highly aggressively manner within a fenced yard/enclosure and appears to a reasonable person able to jump over or escape.</p> <p>(e) Fails a temperament assessment test conducted by a person approved by the Authority</p> <p>(f) Exhibits unacceptable aggression without actually biting</p> <p>(g) Inflicts a single (not serious) bite wound in a situation where provocation of the dog has been established as a significant causal factor</p>	<p>Any dog that:</p> <p>(a) Causes a serious injury to a person or domestic animal; or</p> <p>(b) Has been designated as a potentially dangerous dog and engages in behavior that poses a threat to public safety as described in the “potentially dangerous dog” definition.</p> <p>(c) Inflicts a single (not serious) bite wound without provocation.</p> <p>(d) Inflicts multiple bite wounds in a situation where provocation of the dog has been established as a significant causal factor.</p> <p>(e) Inflicts multiple bite wounds without provocation</p> <p>(f) Inflicts a life threatening attack (potential grievous bodily harm)</p> <p>(g) Kills a person or domestic animal</p>

Table 5 – Proposed model for dangerous and potentially dangerous dog classification

Once classified as a potentially dangerous dog or a dangerous dog, the following requirements are placed on the care and ownership of the animal:

- The owner must be 18 years of age or older
- The owner must have a valid license for the potentially dangerous dog or dangerous dog as required by the jurisdiction

- The dog must wear a collar identifying it as a potentially dangerous dog or dangerous dog, as prescribed by the Authority
- The dog must be kept in a proper enclosure to prevent the entry of any person or animal and the escape of the dog, to the standard prescribed by the Authority
- The owner must pay an annual fee in an amount to be determined by the Authority or his/her designee, in addition to regular dog licensing fees, to register the dog
- The dog must be spayed or neutered
- The dog must be implanted with a microchip
- The owner of a potentially dangerous dog shall enter the dog in a socialisation and/or behaviour program approved or offered by the jurisdiction
- When the dog is outside its home enclosure, it must be under effective control, muzzled, and restrained by a suitable lead not exceeding 1.3 metres in length
- The owner or carer must notify the relevant Authority immediately if the dog is on the loose, is unconfined, has attacked another domestic animal, or has attacked a human being
- The owner or carer must notify the relevant Authority within five (5) business days if the dog has died
- The owner or carer must advise the Authority that he intends to dispose of the dangerous dog, and the prospective owner must obtain a licence from the Authority before taking possession of or responsibility for the dangerous dog
- The owner or carer must notify the relevant Authority within twenty-four (24) hours if the potentially dangerous dog has been sold or has been given away, and
- The owner or carer must comply with any other requirement set out by the Authority.

In addition to these requirements, owners of Dangerous Dogs must also:

- have written permission of the property owner or homeowner's association where the dangerous dog will be kept if applicable
- maintain the dangerous dog exclusively on the owner's property except for medical treatment or examination, and
- have posted on the premises a clearly visible warning sign that there is a dangerous dog on the property with a conspicuous warning symbol that informs children of the presence of a dangerous dog. The sign shall be very visible from the public roadway or 15 metres, whichever is less.

Review of potentially dangerous dog classification

If any dog previously determined to be a potentially dangerous dog has not exhibited any of the behaviours specified in the definition of 'potentially dangerous dog' within the previous three years, then that dog is eligible for a review.

In the review, the dog and owner or person in charge must have completed an approved socialisation and behaviour program, and the dog must have passed a temperament test approved by the Authority.

This approach differs from current approaches within Australia in a number of important ways. Firstly, the bar for declaring an animal as potentially dangerous is set considerably lower than conventional approaches to either dangerous or menacing dogs. This is not meant as a punitive measure, but rather as a strong encouragement towards socially responsible dog ownership. Secondly, there is a review mechanism embedded in the proposed legislative framework that allows owners of potentially dangerous dogs a clear pathway to the removal of that determination.

Other factors

Given that the causes of dog bites are complex, an effective solution needs to be more comprehensive than laws to control dangerous and potentially dangerous dogs.

Identification and registration

There needs to be an effective identification and registration system in place to provide the structure for regulation of dangerous dogs. This provides the:

- Link between legislation, the dog owner and the individual dog.
- Relationship between dog, owner and dog control service.
- Revenue to pay for dog control service through registration fees.

Identification must be permanent, unalterable and be capable of use across the country. Microchipping that is linked to registration on an open access database is the preferred method.

National database and mandatory reporting

A nationally consistent reporting system is required to truly understand the nature of the problem, to base policy on reliable data, and to assess the impact of policy and legislative change. The system would require a single database and mandatory reporting of dog bite incidents including:

- Dog bites from hospitals, with a standard grading system for injuries and data about the victim, location and time of attack, and the dog/s involved
- Dog attack reports from states, territories or councils (depending where the legislation and data records lie). Sources should include dog management personnel and police. The *Council Reports of Dog Attacks NSW* is a good example of data reporting and analysis

Details of declared dangerous dogs would also need to be recorded, given that the human and therefore dog populations are highly mobile and move from jurisdiction to jurisdiction.

Surveys of dog bite incidence in the general population are also required, since the vast majority of dog bites are not reported to authorities and do not require medical attention. In particular, dog bites in the home or by known dogs are unlikely to be reported. Random digit dial telephone surveys (Gilchrist et al 2008) are probably the most useful, as well as surveys in, for example, veterinary practices (Guy et al 2001).

In 2004, the Urban Animal Management conference agreed and published a Dog Aggression Incident Severity Scale, which could be used to classify dog bite incidents nationally. The scale was subsequently endorsed by the then National Consultative Committee on Animal Welfare (NCCAW), accepted by the relevant Minister, and recommended to be used by the Australian States. This scale is detailed in Appendix 4.

With mandatory reporting, those making the report must be appropriately protected similar to the mandatory reporting of the NSW *Children and Young Persons (Care and Protection) Act 1998*, Chapter 3, sections 27 and 29. This is considered a good model to be adopted Australia-wide. These sections ensure that there is no breach of professional etiquette, ethics or standards and that the reporter is protected from liability for defamation or civil proceedings as a result of mandatory reporting.

Temperament testing

Temperament testing is a tool to assign risk categories to dogs (and their owners) and to reduce community risk by enforcing controls or rehabilitation. This tool could also reduce risk within the household and family by making owners more aware of their dog's potential to bite.

Temperament testing could be useful if:

- Encouraged by a reduction in registration fees for dogs which pass the test
- Mandated by animal control authorities, or
- Required by owners' public liability insurance.

Temperament and behaviour tests have been used since the 1980s by those responsible for selecting working and assistance dogs, by pounds and shelters to assess suitability for rehoming, and by animal management authorities to determine potentially dangerous dogs. There are a number of tests available and in use in Australia, but there remains a critical need for a standardised and reliable test that can be applied on-site at shelters, pet shops, veterinary practices and training venues.

There is currently no formal approval or accreditation in place for either the tests or the testers, and this is a significant gap in the ability to respond effectively to dog bites.

Education

Education has long been considered the "answer" to dog bite problems. Because most dog bite incidents occur in the home, "it is more effective to support activities which include the training abilities of dog owners" (Kuhne and Struhe 2006).

Studies have shown that well designed and appropriately targeted programs to educate children (and their parents) about how to behave around dogs are effective in reducing the incidence of dog bites (Chapman et al 2000, Wilson et al 2003, Jalongo 2008, Meints and de Keuster 2009).

Education was the centrepiece of the approach to reducing dog attacks in Calgary, Canada (City of Calgary 2012). The Calgary model was based on:

- A high level of dog registrations
- Strong education investment for pet owners and children

- Increased penalties for owners of dogs that attack.

The education component included programs delivered in kindergartens and primary schools that focused on dog safety⁶.

A proportion of all dog registration fees should go to community and targeted education programs, as occurs in Victoria. Some other states have government-run education programs, while others offer very little education on responsible pet ownership. Education programs are also provided by the AVA, dog clubs and shelter and welfare organisations. A comprehensive education program needs to address:

- Educating all types of dog breeders in correct selection of breeding stock, and the raising and socialisation of young puppies (Korbelik et al 2011)
- How to select a pet of an appropriate size, activity level, coat type and temperament
- Importance of effective socialisation during the critical period of 3-14 weeks and throughout life
- Importance of lifelong training
- Benefits of spaying and neutering
- Dog restraint (fences, collars, harness, leashes)
- Recognition of canine body language
- Addressing human behaviour around dogs
- Training parents to protect small children from dogs
- Training children in safe behaviour around dogs.

Education programs need to be scientifically evaluated to ensure they result in the required knowledge and behaviour changes.

Enforcement

No policy solution will be effective without consistent enforcement to ensure a high level of compliance. Resourcing is often a major barrier to effective enforcement, and this problem needs to be addressed in every jurisdiction to achieve tangible reductions in dog bite incidents.

Sufficiently strong penalties to deter owners from disobeying all regulations are an important component of enforcement. Penalties for non-compliance should be financial when the dog has not threatened or injured any animal or person, but may include removal of the dog where the dog has behaved in a dangerous manner. Imprisonment may be appropriate in some circumstances such as repeated dangerous dog offences, “setting” a dog on a person or use of a dog in the commission of a crime.

In addition to regulation of dangerous and potentially dangerous dogs, control measures that ensure effective restraint of all dogs must be enforced:

⁶ <http://www.calgary.ca/CSPS/ABS/Pages/School-and-educational-programs/Grades-K-6-PAWS-for-safety.aspx>

- **Fence laws** – all dogs must be confined to the owner’s property behind effective fencing except when the dog is being supervised by suitable individuals off the property.
- **Leash laws** – all dogs to be restrained by an effective collar or harness and leash or in an escape-proof restraint when off the property, except when in a designated off-leash area. Not all dogs are suitable to be off leash.
- **Safe off-leash exercise areas** – dogs in off leash areas should still be under the effective control of the person supervising the dog (“call back”) and the off-leash area should prevent dogs from escaping, and prevent ingress of unsupervised children.
- The **person in charge** of the dog when it is being walked on leash or in an off-leash exercise area must be of sufficient maturity, physical ability and proficiency to restrain the dog from being injured, or from menacing or attacking a person or animal.
- **Street patrols** by council officers to impound stray dogs, especially targeting areas and times of the day when attacks have been more common (van der Kuyt 2001).

References

Anon 1996 “Regulatory Impact Statement – Domestic (Feral and Nuisance) Animals regulations” Bureau of Animal Welfare, Department of Agriculture, Energy and Minerals, Victoria

Anon 2002 “UAM Position Statement on Dangerous Dogs” Urban Animal Management Conference, 2002, Australian Veterinary Association

Anon 2004 “Dog Aggression – Management and Minimisation – Urban Animal Management Position” Urban Animal Management Conference 2004, Australian Veterinary Association

Anon. 2004 NCCAW 34: Minutes of the 34th meeting of the National Consultative Committee on Animal Welfare, Canberra ACT

Anon. 2005 NCCAW 35: Minutes of the 35th meeting of the National Consultative Committee on Animal Welfare, Canberra ACT

Anon 2005 “Council Reports of Dog Attacks in NSW 2004/05”, Division of Local Government, Department of Premier and Cabinet

Anon 2011 “Council Reports of Dog Attacks in NSW 2005/06 to 2010/11”, Division of Local Government, Department of Premier and Cabinet

Anon 2011 Council Reports of Dog Attacks in NSW 2005/06-2009/10 Division of Local Government, Department of Premier and Cabinet, NSW

Anon 2012 “Council Reports of Dog Attacks in NSW 2010/11”, Division of Local Government, Department of Premier and Cabinet

Anon. 2011 RSPCA Information Paper: Preventing Dog Bites in the Community

Anon1991 “News and reports – public health survey of of dog bites reveals common causes” Vet rec 129:539

Bandow JH 1996 “Will breed-specific legislation reduce dog bites” Cav Vet j 37 478-481

Barnes JE, Boat BW, Putnam FW, Dates HF and Mahlman AR 2006 “Ownership of High-Risk (“Vicious” Dogs as a Marker for Deviant Behaviour: Implications for Risk Assessment” J Interpersonal Violence 21: 1616-1634

Beaver et al 2001 “A community approach to dog bite prevention – AVMA Task Force on Canine Aggression and Human–Canine interactions” JAVMA 281 (11) 1732 – 1749

Bergamasco L 2004 "Aggressive behaviour: mechanisms and function in animals" In: Heath S, Osella, C (eds) Proceedings of the 10th European Congress on Companion Animal Behavioural medicine, Cremona, Italy pp 36, 37

Bradshaw JW, Goodwin D, Lea AM, Whitehead SL. 1996 "A survey of the behavioural characteristics of pure-bred dogs in the United Kingdom" Vet Rec 138(19):465-8.

Chapman S, Cornwall J, Righetti J and Sung L 2000 "Preventing dog bites: randomised controlled trial of a educational intervention" British Medical Journal 320 1512-3

Chivers K 2010 "Hon.D.Boyle Kill Amstaffs Set Pit Bulls Free?" <http://www.dolforums.com.au/topic/200299-hondboyle-kill-amstaffs-set-pit-bulls-free/>

City of Calgary 2012 "Animal and bylaw services" <http://www.calgary.ca/CSPS/ABS/Pages/home.aspx>

Clifton 2006 "Dog attacks and maimings, US and Canada September 1982 – November 13, 2006 Animal People

Collier S 2006 "Breed specific legislation and the pit bull terrier: Are the laws justified? Journal of Veterinary Behaviour 1: 17-22

Coppinger R and Coppinger L 1996 "Biological Basis of Behavior of Domestic Dog Breeds" in Voith VL and Borchelt PL (eds) Readings in Companion Animal Behavior, Veterinary Learning Systems, Trenton NJ p 9-18

Cornelissen JMR and Hopster H 2010 "Dog bites in the Netherlands: A study of victim, injuries, circumstances and aggressors to support evaluation of breed specific legislation" The Veterinary Journal 186: 292-298

De Keuster T and Butcher R 2008 "Guest editorial: Preventing dog bites: Risk factors in different cultural settings" The Veterinary Journal 177: 155-6

De Meester, R 2004 "Critical review of current European legislation regarding the issue of dangerous dogs" In: Heath S, Osella, C (eds) Proceedings of the 10th European Congress on Companion Animal Behavioural medicine, Cremona, Italy pp 38-42

Duffy DL, Hsu Yuying and Serpell JA 2008 "Breed differences in canine aggression" Appl. Animal Behav. Science 114: 441-460

Fedderson-Petersen DU 2001 "Biology of aggression in dogs (abst.)" Dtsch Tierarztl Wochenschr 108:94-101

Gershman KA, Sacks JJ and Wright JC 1994 "Which dogs bite? A case-control study of risk factors" Pediatrics 93: 913 (cited in Overall and Love 2001)

Gershman KA, Sacks JJ and Wright JC 1994 "Which dogs bite? A case-control study of risk factors" Pediatrics 93:913-917

Gilchrist J, Sacks JJ, White D and Kresnow M-J 2012 "Dog bites: still a problem?" Injury Prevention 14: 296 – 3-1

Gladwell M 2006 "Troublemakers: What Pit bulls can teach us about profiling" Annals of Public Policy, the New Yorker http://www.newyorker.com/fact/content/articles/060206fa_fact

Grant D 2008 "Briefing document on dangerous dogs and their owners as experienced by the RSPCA Harmsworth Hospital Holloway London N7 7QD" Unpublished

Guy NC, Leuscher UA, Dohoo SE, Spangler E, Miller JB, Dohoo IR and Bate LA 2001 "Demographic and aggressive characteristics of dogs in a general veterinary caseload" Applied Animal Behaviour Science 71: 15-28

Harris D, Imperato PJ, and Oken B 1974 "Dog bites – an unrecognised epidemic" Bull NY Acad Med 50: 981 - 1000

Hart BL and Miller MF 1986 "Behavioral profiles of dog breeds." J Am Vet Med Assoc. 186(11):1175-80.

Hart BL, Hart LA. 1985 "Selecting pet dogs on the basis of cluster analysis of breed behavior profiles and gender." J Am Vet Med Assoc. 186(11):1181-5.

Hayward M 2008 "Companion Animals in Law – Animal Welfare and Animal Management" AAWS International Animal Welfare Conference, DAFF, Australian Government available at <http://www.qungahlinvet.com.au/petcare-info/publications/companion-animals-in-law.pdf>

Helman T, 2012 Personal communication (Bureau of Animal Welfare, Victoria).

Jalongo MR 2008 "Beyond a Pets Theme: Teaching Young Children to Interact safely with Dogs" *Early Childhood Educ.* 36: 39-45

Kahn A, Bauche P and Lamoureux J 2003 "Child victims of dog bites treated in emergency departments: a prospective survey" *European Journal of Pediatrics* 162:254-258

Kahn A, Robert E, Piette D, De Keuster T, Lamoureux J and Leveque A 2004 "Prevalence of dog bites in children: a telephone survey" *European Journal of Pediatrics* 163: 424

Kaspersson M 2008 "On Treating the Symptoms and not the Cause: Reflections on the Dangerous Dogs Act" papers from the British Criminology Conference 8:250-225

Kelly D 2001 "The need for a national policy direction for aggressive dogs" Urban Animal Management Conference, 2001, Australian Veterinary Association

King T, Marston Lc, Bennett PC 2012 "Breeding dogs for beauty and behaviour: Why scientists need to do more to develop valid and reliable behaviour assessments for dogs kept as companions" *Appl. Anim. Behav. Science* 137: 1-12

Kixer KW 1979 "Epidemiologic and clinical aspects of animal bite injuries" *JACEP* 8:134-141

Klaassen B, Buckley JR and Esmail A 1996 "Does the Dangerous Dogs Act protect against animal attacks: a prospective study of mammalian bites in the accident and emergency department" *injury* 27: 89-91

Kofterov J, Jakuba T, Marekpv J, Fejsmakov M, Kirsov J, Ondraksovi O and Ondraksovi M 2011 "Dog Aggression: Canine behaviour and factors contributing to aggression toward humans" *Journal of Veterinary Behaviour* 6 (1) 64

Korbelik J, Rand JS, Morton JM 2011 "Comparison of early socialisation practices used for litters of small-scale registered dog breeders and non-registered breeders" *Journal of the American Veterinary Medical Association* 239: 1090-1097

Kuhne F, Struwe R 2006 "Dangerous dogs in Berlin in comparison to the dog population--ways to reduce the dangerousness of dogs (abst.)" *Berl Munch Tierarztl Wochenschr.* 119(11-12):445-55.

Ledger RA, Orihel JS, Clarke N, Murphy S and Sedlbauer M 2005 "Breed specific legislation: Considerations for evaluating its effectiveness and recommendations for alternatives" *Can Vet J* 46 735-743

MacNeil-Alcock A, Clarke NM, Ledger RA and Fraser D 2011 "Aggression, behaviour and animal care among pit bulls and other dogs adopted from an animal shelter" *Animal Welfare* 20: 463-468

Maher, J and Pierpoint, H 2011 "Friends, status symbols and weapons: the use of dogs by youth groups and youth gangs" *Crime Law Soc Change* 55: 405-420

Messam LLM, Kass PH, Chomel BB and Hard LA 2008 "The human-canine environment: A risk factor for non-play bites" *The Veterinary Journal* 177: 205-215

Oswald M 1991 "Report on potentially dangerous dog program: Multnomah county, Oregon. *Anthrozoos* 4: 247-254

Ott SA, Schalke E, von Gaertner AM, and Hackbarth H 2008 "Is there a difference? Comparison of golden retrievers and dogs affected by breed specific-legislation regarding aggressive behaviour" *J Vet behave* 3: 134-140

Overall KL and Love M 2001 "Dog bites to humans-demography, epidemiology, injury and risk" *JAVMA* 218 (12) 1923-1934

- Ozanne-Smith J, Ashby K and Stathakis VZ 2011 "Dog bite prevention –analysis, critical review and research agenda" *Injury Prevention* 7 321-326
- Palacio J, León M, García-Belenguer S. 2005 "Epidemiological aspects of dog bites (abst.)" *Gac Sanit.* 19(1):50-8.
- Patronek GJ and Slavinski SA 2009 "Zoonosis updates – animal bites" *JAVMA* 234 (3) 336 – 345
- Patronek GJ, Slater M and Marder A 2010 "Use of a number-needed-to-ban calculation to illustrate limitations of breed-specific legislation in decreasing the risk of dog bite-related injury" *JAVMA* 237 (7) 788-792
- Podberscek, Anthony L. 1994. Dog on a tightrope: The position of the dog in British society as influenced by press reports on dog attacks (1988 to 1992). *Anthrozoös* 7(4): 232-241.
- Raghavan M 2008 "Fatal dog attacks in Canada, 1990-2007" *Canadian Veterinary Journal* 49 577-581
- Reisner IR and Shofer FS 2008 "Effects of gender and parental status on knowledge and attitudes of dog owners regarding dog aggression toward children" *JAVMA* 233 (9) 1412-1419
- Resiner IR, Mann JJ, Stanley M, Huan Y and Houpt KA 1996 "Comparison of cerebrospinal fluid monoamine metabolite levels in dominant-aggressive and non-aggressive dogs" *Brain Research* 714: 57-64
- Riemer S, Mueller C, Hubert L, Range F, Kersting E, and Vijanyi Z 2011 "Can early temperament tests predict behavioural tendencies in dog puppies?" *Journal of Veterinary Behaviour* 6:79
- Rosado B, Garcia-Beleunger S, Leon M and Palacio J 2007 "Spanish dangerous animals act: Impact on the epidemiology of dog bites" *Journal of Veterinary Behaviour* 2: 166-174
- Sacks JJ, Sinclair L, Gilchrist J, Golab GC and Lockwood R 2000 "Breeds of dogs involved in fatal human attacks in the United States between 1979 and 1998" *JAVMA* 217 (6) 836 – 840
- Schalke E, Ott SA, von Gaertner AM, Hackbarth H and Mittman A 2008 "Is breed-specific legislation justified? Study of the results of the temperament test of Lower Saxony" *J Vet Behave* 3: 97-103
- Schwebel DC, Morrongiello BA, Davis AL, Stewart J and Bell M 2011 "*The Blue Dog*: Evaluation of an Interactive Software Program to Teach Young Children How to Interact Safely with Dogs" *J Pediatric Psychology* advanced access
- Seksel 2002 "Report to the NSW Department of Local Government on Breed Specific Legislation issues relating to control of dangerous dogs
- Shuler CM, DeBess EE, Lapidus JA and Hedberg K 2008 "Canine and human factors related to dog bite injuries" *JAVMA* 232 (4) 542-546
- Snyder 2005 "Dangerous Dog Management" National Urban Animal management Conference, Canberra; Australian Veterinary Association
- Svartberg K 2006 "Breed-typical behaviour in dogs – historical remnants or recent constructs?" *Applied Animal Behaviour Science* 96: 293-313
- Takeuchi Y, Mori Y. 2006 "A comparison of the behavioral profiles of purebred dogs in Japan to profiles of those in the United States and the United Kingdom." *J Vet Med Sci.* 68(8):789-96.
- Thompson P 2004 "Aggression effects – from a human perspective + solutions" Urban Animal Management Conference 2004 Australian Veterinary Association
- Thompson PG 1997 "The public health impact of dog attacks in a major Australia City" *Medical Journal of Australia* 167: 129-132
- Twining H, Arluke A and Patronek G. (2000) "Managing the stigma of outlaw breeds: a case study of Pit Bull owners" *Society & Animals* 8:1

Villalbi JR, Cleries M, Bouis S, Perahco V, Duran J and Casas C 2010 "Decline in hospitalisations due to dog bite injuries in Catalonia, 1997-2008. An effect of government regulation?" *injury Prevention* 16: 408-410

Voith VL 2009 "The Impact of Companion Animal Problems on Society and the Role of Veterinarians" *Veterinary Clinics of North America* 39: 327-346

Voith VL, Ingram E, Mitsouras K and Irizarry K 2009 "Comparison of Adoption Agency Breed Identification and DNA Breed Identification of Dogs" *Journal of Applied Animal Welfare Science* 12: 253-262

Vucinic M, Dordevic M, Radenkovic-Damnjanovic B, Jankovic L and Mirilovic M 2008 "Bites to humans caused by stray and owned dogs in Belgrade" *Acta Veterinaria (Beograd)* 58: 563-571

Wilson F, Dwyer F and Benett PC 2003 "Prevention of dog bites: evaluation of a brief educational intervention program for preschool children" *J Community Psychology* 31 (1) 75-86

Yeon Sc, Golden G, Sung W, Erb HN, Reynolds AJ and Houpt KA 2001 "Comparison of Tethering and Pen Confinement of Dogs" *Journal of Applied Animal Welfare Science* 4: 257-270

Appendix 1 – Australian Veterinary Association model legislative framework for dangerous dog regulation

(Based on *The Humane Society of the United States Model Dangerous Dog Legislation as at May 2006*)

1. Definitions

At large (see 2. below)

Attack: in relation to the actions of a dog, means any incident where a dog rushes at in a manner that causes fear, attacks, bites, harasses or chases any person or animal (other than vermin), whether or not any injury is caused to the person or animal; includes *injure* and *menace*.

Dangerous dog means any dog that:

- (a) Causes a serious injury to a person or domestic animal; or
- (b) Has been designated as a potentially dangerous dog and engages in behavior that poses a threat to public safety as described in the “potentially dangerous dog” definition.
- (c) Inflicts a single (not serious) bite wound without provocation.
- (d) Inflicts multiple bite wounds in a situation where provocation of the dog has been established as a significant causal factor.
- (e) Inflicts multiple bite wounds without provocation
- (f) Inflicts a life threatening attack (potential grievous bodily harm)

Desexed means rendered permanently incapable of reproduction (spayed or neutered)

Dog means a domestic dog *Canis lupus familiaris* or dingo *Canis lupus dingo* which is not free-living or feral, and is reasonably believed to be owned.

Effective Control (see 3 below)

Guard dog means a dog that is kept on premises primarily for the purpose of guarding or protecting a person or property at those premises

Hunting dog means a dog used for hunting, whether principally or occasionally

Impound means taken into the custody of the Animal Control Authority or the organisation authorised to enforce the dangerous dog law of this jurisdiction.

Injure in relation to the actions of a dog, means any incident where a dog causes physical harm to a person or animal by biting, scratching, knocking down or causing the human to be injured while trying to escape from the dog.

Menace: in relation to the actions of a dog, means an action that creates a reasonable apprehension in a person that the dog is likely to *injure* the person or an animal owned or in the control of the person, and includes a reasonable apprehension that the dog may escape, or be released from restraint, to *injure* the person or animal

Occupier: of premises, includes a person who is, or is reasonably believed to be, in charge of the premises.

Owner: a person to whom the dog belongs in the sense of property

Patrol dog means a dog that, under the control of a person, patrols premises for the purpose of guarding or protecting a person or property at those premises

Person in charge: the person with whom the dog resides or who might reasonably be assumed to have responsibility for the dog at that time (includes the occupier of premises on which the dog has been kept or permitted to live)

Potentially dangerous dog means a dog that may reasonably be assumed to pose a threat to public safety as demonstrated by any of the following behaviours :

- (a) Causing an injury to a person or domestic animal that is less severe than a serious injury;
- (b) Without provocation, chasing or menacing a person or domestic animal in an aggressive manner;
- (c) Running at large and impounded or owners cited by the Animal Control Authority two (2) or more times within any 12-month period.
- (d) Acts in a highly aggressively manner within a fenced yard/enclosure and appears to a reasonable person able to jump over or escape.
- (e) Fails a temperament assessment test conducted by a person approved by the Authority
- (f) Exhibits unacceptable aggression without actually biting
- (g) Inflicts a single (not serious) bite wound in a situation where provocation of the dog has been established as a significant causal factor.

Proper enclosure means secure confinement indoors or secure confinement in a locked pen, fenced yard, or structure measuring at least [*dimensions and construction to be determined by the authority*], capped if there is a dog house inside or if dog can climb fence, with secure sides, which provides proper protection from the elements for the dog, is suitable to prevent the entry of young children, and is designed to prevent the animal from escaping while on the owner's property.

Public Place: a place open to or used by the public or to which the public is permitted to have access, whether on payment of a fee or otherwise, and includes a road and public vehicles such as trains, buses and taxis

Registered owner: the person whose name appears on a *[state or territory]* register as the owner of the dog; in the case of an unregistered dog, includes the person last specified in the register as the owner of the dog;

Restricted breed dog: means any dog of a breed, kind or description whose importation into Australia is prohibited by or under the *Customs Act 1901* of the Commonwealth

Sell includes transfer ownership of the property in an animal by any means, including by gift.

Serious injury means any physical injury that results in broken bones or lacerations that require multiple sutures or cosmetic surgery.

Veterinary practitioner means a veterinarian registered to practice in *[state or territory]*.

Working dog means a dog used principally for –

- (a) droving or tending livestock; or
- (b) detecting illegal substances and goods; or
- (c) searching, tracking or rescuing; or
- (d) working with police officers.

2. Dog at large

A dog is at large if –

- (a) it is not under the effective control of a person in a public place or in or on premises without the consent of the occupier; or
- (b) it is a dangerous dog in a public place and is –
 - i. in the charge of a person under the age of 18 years; or
 - ii. without a muzzle; or
 - iii. not on a lead; or
 - iv. without an approved collar.

3. Dog under effective control

- (a) A dog is under the effective control of a person in a public place if the dog is –
 - i. on a road or road-related area in a built-up area, or any other public place declared by the relevant council to be an area where a dog must be on a lead, and the dog is secured and restrained by means of a lead not more than 2 metres long held by hand by a person able to control the dog; or
 - ii. tethered to a fixed object by a lead not more than 2 metres long for a period not more than 30 minutes.
- (b) A dog is under the effective control of a person while not on a lead if the dog is –
 - i. a working dog engaged in working; or
 - ii. a hunting dog engaged in hunting; or
 - iii. engaged in racing or showing; or
 - iv. engaged in obedience or agility trials; or

- v. engaged in training for any activity referred to in paragraph (a), (b), (c) or (d); or
 - vi. engaged in training in a training area.
- (c) In an area where a dog is not required to be on a lead, the dog is under the effective control of a person if –
- i. it is in close proximity to the person; and
 - ii. it is in sight of the person; and
 - iii. the person is able to demonstrate to the satisfaction of an authorised person that the dog is immediately responsive to the person's commands.
- (d) A dog is under the effective control of a person on private premises if the dog is securely confined to those premises.
- (e) A person, at any one time, must not have in his or her charge more than –
- i. 2 dogs on a lead on a footpath; or
 - ii. 4 dogs in a public place.

4. Determination of a potentially dangerous dog

- (a) After an investigation, which must be initiated within *[xx number]* days after the situation becomes known to the Animal Control Authority, the Authority or his/her designee is authorised to make a determination whether a dog is potentially dangerous based on the factors listed in the definition above and shall notify the owner of the dog in writing by certified mail or hand delivery with signature of that status within five (5) days after the completion of the investigation.
- (b) Following notice to the owner, if the Authority or his/her designee has probable cause to believe that a dog is a potentially dangerous dog and may pose a threat to public safety, the Authority or his/her designee may obtain a search warrant pursuant to this jurisdiction's Rules of Civil Procedure and impound the dog pending disposition of the case or until the dog owner has fulfilled the requirements of Section 7. The owner of the dog may be liable to this jurisdiction for the costs and expenses of keeping the dog.
- (c) Upon notice, the owner may, within *[xx number]* business days after a determination that a dog is a potentially dangerous dog, bring a petition in this jurisdiction seeking review of the determination. A decision by this jurisdiction overturning the Authority or his/her designee's determination shall not affect the Authority or his/her designee's right to later declare a dog to be a potentially dangerous dog or a dangerous dog, or to determine that the dog poses a threat to public safety, for the dog's subsequent behavior.

5. Determination of a dangerous dog

- (a) After an investigation, which must be initiated within *[xx number]* days after the situation becomes known to the Animal Control Authority, the Authority or his/her designee is authorised to make a determination whether a dog is dangerous based on the factors listed in Section 1 and shall notify the owner of the dog in writing by certified mail or hand delivery with signature of that status within five (5) days after completing the investigation.
- (b) Following notice to the owner and prior to the hearing, if the Authority or his/her designee has probable cause and believes the dog to be a dangerous dog and that the animal poses an imminent threat to public safety, the Authority or his/her designee may obtain a search warrant pursuant to this jurisdiction's Rules of Civil Procedure and impound the dog pending disposition of the case or until the dog owner has fulfilled the requirements of Section 7. The owner of the dog shall be liable to this jurisdiction for the costs and expenses of keeping the dog if the dog is determined to be a dangerous dog.
- (c) The owner may, within *[xx number]* business days after a determination that a dog is a

dangerous dog, bring a petition in this jurisdiction seeking review of the determination. A decision by this jurisdiction overturning the Authority or his/her designee's determination shall not affect the Authority or his/her designee's right to later declare a dog to be a dangerous dog or to determine that the dog poses a threat to public safety, for the dog's subsequent behavior.

6. Exceptions

No dog shall be declared a dangerous or potentially dangerous dog if:

- (a) The dog is currently used by a law enforcement official for legitimate law enforcement purposes;
- (b) The threat, injury, or damage was sustained by a person:
 - i. Who was committing, at the time, a willful trespass or other tort upon the premises lawfully occupied by the owner of the dog;
 - ii. Who was provoking, tormenting, abusing, or assaulting the dog or who can be shown to have repeatedly, in the past, provoked, tormented, abused, or assaulted the dog; or
 - iii. Who was committing or attempting to commit a crime; or
- (c) The dog was:
 - i. Responding to pain or injury, or was protecting itself, its offspring; or
 - ii. Protecting or defending a human being within the immediate vicinity of the dog from an attack or assault.

7. Consequences of a dangerous or potentially dangerous dog determination

- (a) If the Authority or his/her designee determines that a dog is a potentially dangerous dog under Section (4), the owner shall comply with the provisions of Section (7), Section (9) and any other special security or care requirements the Authority or his/her designee may establish.
- (b) If the Authority or his/her designee determines that a dog is a dangerous dog under Section (5), the owner shall comply with the provisions of Section (7), Section (8) and any other special security or care requirements the Authority or his/her designee may establish.
- (c) The Authority or his/her designee may require impoundment of the dog until the owner of the dog has satisfied all the requirements of the certificate of registration holding permit. The requirements must be met within thirty (30) days. If, after thirty (30) days, the owner has not satisfied all the requirements of the holding permit, the animal may be humanely euthanased on the thirty-first (31st) day.

8. Dangerous dog registration and handling requirements

- (a) The Authority or his/her designee shall issue a certificate of registration to the owner of a potentially dangerous dog if the owner establishes to the satisfaction of the Animal Control Authority that:
 - i. The owner of the potentially dangerous dog is 18 years of age or older;
 - ii. A valid license has been issued for the potentially dangerous dog pursuant to jurisdiction;
 - iii. The dog wears a collar identifying it as a potentially dangerous dog or dangerous dog, as prescribed by the Authority
 - iv. The owner has a proper enclosure to prevent the entry of any person or animal and the escape of said potentially dangerous dog as described in Section 1;

- v. The owner has paid an annual fee in an amount to be determined by the Authority or his/her designee, in addition to regular dog licensing fees, to register the potentially dangerous dog;
 - vi. The potentially dangerous dog has been desexed;
 - vii. The potentially dangerous dog has been implanted with a microchip which can be linked to owner identification information via an accredited open access database. The microchip information must be registered with the animal control authority of the jurisdiction;
 - viii. The potentially dangerous dog owner shall enter the dog in a socialisation and/or behaviour program approved or offered by the jurisdiction;
 - ix. The owner of the dangerous dog has written permission of the property owner or homeowner's association where the dangerous dog will be kept if applicable;
 - x. The owner will maintain the dangerous dog exclusively on the owner's property except for medical treatment or examination; and
 - xi. The owner of the dangerous dog has posted on the premises a clearly visible written warning sign that there is a dangerous dog on the property with a conspicuous warning symbol that informs children of the presence of a dangerous dog. The sign shall be very visible from the public roadway or 15 metres, whichever is less.
- (b) The Authority or his/her designee may order the immediate impoundment or humane euthanasia of a dangerous dog if the owner fails to abide by the conditions for registration or confinement or handling of a dangerous dog.

9. Potentially dangerous dog registration and handling requirements

- (a) The Authority or his/her designee shall issue a certificate of registration to the owner of a potentially dangerous dog if the owner establishes to the satisfaction of the Animal Control Authority that:
- i. The owner of the potentially dangerous dog is 18 years of age or older;
 - ii. A valid license has been issued for the potentially dangerous dog pursuant to jurisdiction;
 - iii. The dog wears a collar identifying it as a potentially dangerous dog or dangerous dog, as prescribed by the Authority
 - iv. The owner has a proper enclosure to prevent the entry of any person or animal and the escape of said potentially dangerous dog as described in Section 1;
 - v. The owner has paid an annual fee in an amount to be determined by the Authority or his/her designee, in addition to regular dog licensing fees, to register the potentially dangerous dog;
 - vi. The potentially dangerous dog has been desexed;
 - vii. The potentially dangerous dog has been implanted with a microchip which can be linked to owner identification information via an accredited open access database. The microchip information must be registered with the animal control authority of the jurisdiction; and
 - viii. The potentially dangerous dog owner shall enter the dog in a socialization and/or behaviour program approved or offered by the jurisdiction.
- (b) If any dog previously determined to be a potentially dangerous dog has not exhibited any of the behaviors specified in the definition of 'potentially dangerous dog' within the thirty-six (36) months since the date of the potentially dangerous dog determination, then that

dog is eligible for a review of the determination with the potential for lifting the requirements of this section; provided, however, then that same dog may again be declared a dangerous dog if it again exhibits any of the specified behaviours. The dog and owner/person in charge must have completed an approved socialisation and behaviour program, and the dog must have passed a temperament test approved by the Authority.

10. Dangerous or potentially dangerous dog owner responsibility

It shall be unlawful to:

- (a) Keep a dog determined to be dangerous or potentially dangerous without a valid certificate of registration issued under Section (7);
- (b) Permit a potentially dangerous dog to be outside a proper enclosure unless the potentially dangerous dog is under the effective control of a responsible person as defined in Section 1, muzzled, and restrained by a lead not exceeding 1.3 metres in length; The muzzle shall be made in a manner that will not cause injury to the dog or interfere with its vision or respiration but shall prevent it from biting any human being or animal;
- (c) Fail to maintain a dangerous dog exclusively on the owner's property as required except for medical treatment or examination. When removed from the owner's property for medical treatment or examination, the dangerous dog shall be caged or under the effective control of a responsible person as defined in Section 1, muzzled and restrained with a lead not exceeding 1.3 metres in length. The muzzle shall be made in a manner that will not cause injury to the dog or interfere with its vision or respiration but shall prevent it from biting any human being or animal;
- (d) Fail to notify the Animal Control Authority immediately upon escape if a dangerous or potentially dangerous dog is on the loose, is unconfined, has attacked another domestic animal, has attacked a human being; within five (5) business days if the dog has died;
- (e) Fail to notify the Animal Control Authority within twenty-four (24) hours if a potentially dangerous dog has been sold or has been given away. If the potentially dangerous dog has been sold or given away, the owner shall also provide the Authority or his/her designee with the name, address, and telephone number of the new owner of the dangerous or potentially dangerous dog;
- (f) Fail to seek permission from the Animal Control Authority before selling, giving away or otherwise disposing of a dangerous dog. The owner shall provide the Authority or his/her designee with the name, address, and telephone number of the prospective new owner of the dangerous dog. The prospective owner must obtain a licence from the Authority before taking possession of or responsibility for the dangerous dog;
- (g) Fail to surrender a dangerous or potentially dangerous dog to the Authority or his/her designee for safe confinement pending a disposition of the case when there is a reason to believe that the dangerous or potentially dangerous dog poses an imminent threat to public safety;
- (h) Fail to comply with any special security or care requirements for a dangerous or potentially dangerous dog the Authority or his/her designee may have established pursuant to the finding that the dog was potentially dangerous or dangerous; or
- (i) Purchase or otherwise obtain, or take responsibility for, a dog which has been designated potentially dangerous or dangerous in any jurisdiction in Australia or overseas, unless the potential purchaser has sought and obtained a potentially dangerous or dangerous dog permit, having fulfilled all the requirements of said permit. Such provision does not apply to a registered veterinarian in whose charge the dog is temporarily residing.

11. Guard, Patrol and Hunting Dogs

The Authority or his/her designee shall issue a certificate of registration to the owner of a

Guard, Patrol and Hunting dog if the owner establishes to the satisfaction of the Animal Control Authority that:

- (a) The owner of the Guard, Patrol or Hunting dog is 18 years of age or older;
- (b) The dog wears a collar identifying it as a Guard, Patrol or Hunting dog, as prescribed by the Authority;
- (c) The owner has a proper enclosure to prevent the entry of any person or animal and the escape of said dog as described in Section 1;
- (d) Warning signs are erected on the property advising of the presence of the said kind of dog or dogs. Such signs to be approved by the Authority and visible and legible from the street frontage and any other entrance to the property;
- (e) The owner has paid an annual fee in an amount to be determined by the Authority or his/her designee, in addition to regular dog licensing fees, to register the Guard, Patrol or Hunting dog; and
- (f) The dog has been implanted with a microchip which can be linked to owner identification information. The microchip information must be registered with the animal control authority of the jurisdiction.

12. Guard, Patrol and Hunting Owner responsibilities

It shall be unlawful to:

- (a) Keep a Guard, Patrol or Hunting dog without a valid certificate of registration issued under Section 6;
- (b) Permit a Guard, Patrol or Hunting dog to be outside a proper enclosure unless the Guard, Patrol or Hunting dog is under the effective control of the person in charge as defined in Section 1, and restrained by a lead not exceeding 2 metres in length; in the case of a Guard Dog, the "proper enclosure" may be the environment that it is guarding, so long as the environment to be guarded is fenced or has other barriers to prevent a person including a child from entering, and is appropriately signed; or
- (c) Allow a Guard, Patrol or Hunting, or a Working dog, into an off-leash dog exercise area

13. Penalties

(a) An owner of a dangerous or potentially dangerous dog who violates the provisions of Sections 7, 8, and 9 shall be guilty of a misdemeanour, and, upon conviction, shall be punished by a fine not to exceed \$XXXX or imprisonment, or both, for a first offense and not more than \$XXXX or imprisonment, or both, for a second offense.

(b) An owner of a dangerous or potentially dangerous dog that causes serious injury to or kills a human being or a domestic animal without provocation shall be fined up to \$XXXX.

(c) Civil fines, penalties, and fees may be imposed as alternative sanctions for any infraction of the provisions of this act, or the rules issued under authority of this act.

14. Offences where a dog attacks a person or animal

If a dog attacks a person or an animal (other than vermin),

- (a) the owner of the dog or
- (b) the person in charge

is guilty of an offence.

Penalty

- First offence – XX penalty units
- Second offence, or for a potentially dangerous dog – 2 x XX penalty units
- For a dangerous dog – 4 x XX penalty units.

It is not an offence under this section

- if the dog was being teased, mistreated, attacked or otherwise provoked
- if the incident occurred as a result of the person or animal trespassing on property on which the dog was being kept
- if the dog was acting in reasonable defence of a person or property
- in the course of lawful hunting
- in the course of working stock or the training of the dog in working stock.

These mitigating factors do not apply if a potentially dangerous dog or dangerous dog was not being kept in accord with the conditions of their registration.

15. Dog must not be encouraged to attack

A person who sets on or urges a dog to attack any person or animal other than vermin is guilty of an offence.

Penalty:

- First offence – XX penalty units (min \$10,000)
- Second offence, or for a potentially dangerous dog – 2 x XX penalty units + imprisonment
- For a dangerous dog – 4 x XX penalty units + imprisonment.

It is not an offence under this section if:

- The person was acting in the reasonable defence of a person or property
- In the course of lawful hunting
- in the course of working stock or the training of the dog in working stock.

16. Disqualification from owning a dog

A person who is convicted of offences of:

- failing to keep a potentially dangerous dog or a dangerous dog according to the provisions of the permit or
- keeping or using a dog in the process of a crime or
- keeping or using a dog for fighting or
- encouraging any dog to attack or
- keeping a dog which they know to be dangerous without declaring it to the authority, which attacks a person or animal

can be disqualified by a court from owning a dog for a period set by the Court.

17. Owner to declare/reveal a dangerous dog

- (a) An owner who should reasonably be expected to recognise that their dog might be dangerous must declare the dog to the Authority within 7 days
- (b) The Authority must assess the dog and either declare the dog a potentially dangerous dog, a dangerous dog, or not declare the dog at that time.
- (c) The Authority must reassess the dog within 12 months if it is not declared at the first instance.

18. Responsibilities of breeders, dog trainers, behaviourists and veterinarians

- (a) A breeder, dog trainer, behaviourist, veterinarian or other person with knowledge of dog temperament and behaviour who suspects a dog might be dangerous must advise the owner of their concerns.
- (b) If the owner, in the opinion of the said person, fails to take measures to reduce the risk of the dog behaving dangerously, the said person must report the dog to the Authority.
- (c) The making of a report under this section:
 - i. does not constitute a breach of professional etiquette or ethics or a departure from accepted standards of professional conduct;
 - ii. does not constitute liability for defamation; or
 - iii. does not constitute a ground for civil proceedings for malicious prosecution or for conspiracy.

19. Appeals

- (a) The owner of a dog, or the person in charge, may appeal a decision to declare a dog a potentially dangerous dog or a dangerous dog.
- (b) The initial appeal shall be to the Authority. If refused, a second appeal can be made through an independent assessor, appointed by the Court, or by the Court. Costs of such secondary appeal, including expert assessment etc, to be borne by the plaintiff.
- (c) The dog subject to the potentially dangerous or dangerous declaration must be kept according to the conditions of their declaration/registration unless and until the declaration is nullified. If the dog is unable to be kept in its original environment until the determination, the dog shall be kept by the Authority.
- (d) A first appeal must be determined by the Authority within one month, and an appeal through the courts within 3 months.
- (e) It shall be an offence to sell or otherwise dispose of a dog (except by euthanasia) subject to an appeal against a potentially dangerous or dangerous dog declaration without the permission of the authority. It shall not be an excuse that the dog escaped or was stolen and is missing. It is the owner's or person in charge's responsibility to keep the dog secure. If the owner or person in charge suspects they are unable to keep the dog secure, it must be surrendered to the Authority.

20. Dogs not to be allowed to wander at large

The owner or person in charge of a dog is guilty of an offence if the dog is at large.

Penalty:

- First offence X penalty units

- First offence – potentially dangerous dog – 4 x X penalty units
- First offence -dangerous dog – 8 x X penalty units
- Subsequent offences 2 x X penalty units
- Subsequent offences – potentially dangerous dog – 8 x X penalty units
- Subsequent offences -dangerous dog – 16 x X penalty units, and the dog may be seized.

21. Power to seize and detain dogs

- (a) A dog management officer may seize and detain a dog in any of the following circumstances:
- i. if the dog is wandering at large;
 - ii. if the officer reasonably believes it necessary to seize the dog in order to prevent or stop the dog attacking, harassing or chasing a person or an animal or bird owned by or in the charge of a person (whether or not actual injury has been or may be caused);
 - iii. if the officer reasonably believes that the dog is unduly dangerous;
 - iv. if the officer reasonably believes it necessary to detain the dog in order to ensure that an order under this Act for the destruction or disposal of the dog is carried out.
- (b) If a dog management officer reasonably believes that it is dangerous or impracticable to seize a dog because of its savagery or other sufficient cause, the dog may be injured or destroyed and the dog management officer may not be held liable.
- (c) If a dog is injured or destroyed under subsection (b), the dog management officer must take reasonable steps to inform a person who owns or is responsible for the control of the dog.
- (d) An inspector under the relevant State/Territory animal welfare legislation may exercise the powers of a dog management officer under this Division in relation to a dog found wandering at large while the inspector is acting in the ordinary course of his or her duties under that Act.

22. Procedure following seizure of dog

- (a) If a dog is seized under this Division, it must either—
- i. be returned to a person who owns or is responsible for the control of the dog; or
 - ii. be detained in a facility approved by the Authority for the purpose of detaining dogs.
- (b) If a dog is detained, the person causing it to be detained must—
- i. cause notice of the detention to be given to members of the public by causing a notice to be displayed at the office of the council for the area in which the dog was seized (or if the dog was seized outside municipal and district council areas, at the police station nearest to where the dog was seized) and on an Internet site provided for that purpose by the council or tate containing—
 - (a) a photograph and general description of the dog; and
 - (b) the day and time it was seized; and
 - (c) the place at which the dog is being detained; and
 - ii. if a person who owns or is responsible for the control of the dog is known to the dog management officer or is readily ascertainable—cause notice of the detention to be

given, as soon as practicable, to the owner or other person in the manner and form required by the Board.

- (c) A notice under subsection (b)(i) must remain displayed for at least 72 hours.
- (d) If a dog is seized in order to prevent or stop it attacking, harassing or chasing a person or an animal or bird or because it is unduly dangerous—
 - i. the council must, as soon as practicable, proceed to consider making an order in relation to the dog or applying to the Magistrates Court for an order in relation to the dog; and
 - iii. if notice of an intention to make an order in relation to the dog has not been given, or an application to the Magistrates Court has not been made, within 7 days after the dog was seized, the dog must be returned to a person entitled to its return under this Division.
- (e) If a Control (Dangerous Dog) Order is made or in force in respect of a dog detained under this section, the person responsible for the dog while so detained may—
 - i. in the case of a dog not identified in the manner specified in the order—cause the dog to be so identified;
 - iv. in the case of a dog not desexed—cause the dog to be desexed.
- (f) The cost of taking action under subsection (D)(i) may be recovered from the person who owns or is responsible for the control of the dog as a debt due to the council incurring the cost.
- (g) A person aggrieved by the continued detention of a dog under this Division may apply to the Magistrates Court for release of the dog.

Appendix 2 – Comparison of state and territory legislation on dog and cat management

(Current at April 2012)

	Legislation	Dogs			Cats			Board
		Registration	Identification	Desexing (spay/neuter)	Registration	Identification	Desexing (spay/neuter)	
ACT	<i>Domestic Animals Act 2000</i>	Compulsory over 8 weeks	Registration collar and compulsory microchip	Compulsory (except with permit)	Not compulsory	Compulsory microchip	Compulsory (except with permit)	No
NSW	<i>Companion Animals Act 1998</i>	Compulsory	Compulsory	Reduced registration fee for desexed animals	Compulsory	Compulsory	Reduced registration fee for desexed animals	No
NT	Nil							
QLD	<i>Animal Management (Cats and Dogs) Act 2008</i>	Compulsory	Mandatory microchipping at point of sale	Not compulsory	Compulsory	Mandatory microchipping at point of sale	Not compulsory	No
SA	<i>Dog and Cat Management Act</i>	Compulsory from 3 mth	Mandatory collar	Must be desexed if given or sold from a pound	Not required	Collar or microchip	Must be desexed if given or sold from a pound	Yes
TAS	<i>Dog Control Act 2000</i>	Compulsory over 6 mth	Compulsory	Not compulsory	Not compulsory	Compulsory	Compulsory	No
VIC	<i>Domestic Animals Act 1994</i>	All over 3 mth	Compulsory microchipping	Must be desexed if given or sold from a pet shop, breeder or pound	All over 3 mth	Compulsory microchipping	Must be desexed if given or sold from a pet shop, breeder or pound	No
WA	<i>Dog Act 1976</i> <i>Cat Act 2011</i> (* the Cat Act 2011 has not yet commenced and will do so progressively over 2012-13)	Compulsory over 3 mth	Registration collar		Compulsory over 6 mth*	Compulsory tag and microchipping over 6 mth*	Compulsory over 6 mth (exemptions possible)*	No

Appendix 3 – Classification of dangerous dogs in Australian jurisdictions

Jurisdiction	Classes	Declaration	Conditions
Australian Capital Territory	Dangerous	Where the dog has attacked or harassed a person or animal	<p>Mandatory</p> <ul style="list-style-type: none"> • Muzzle in public • Someone in charge in public • Warning signs on premises <p>Variable conditions</p> <ul style="list-style-type: none"> • Confinement • Restrictions on leaving premises • Behavioural or socialisation training
New South Wales	Dangerous	<p>Where the dog:</p> <ul style="list-style-type: none"> • has, without provocation, attacked or killed a person or animal (other than vermin), or • has, without provocation, repeatedly threatened to attack or repeatedly chased a person or animal (other than vermin), or • has displayed unreasonable aggression towards a person or animal (other than vermin), or • is kept or used for the purposes of hunting. 	<ul style="list-style-type: none"> • Effective control in public • Muzzled in public • Spayed or neutered • Not in sole charge of a minor • Prescribed enclosure • Warning signs • Prescribed collar • Notification of Council if the dog attacks, is missing, died, moved address • Prohibition on selling or accepting ownership
	Restricted	Breed specific	<ul style="list-style-type: none"> • Spayed or neutered • Prescribed enclosure • Not in sole charge of a minor • Prescribed enclosure • Warning signs • Prescribed collar • Notification of Council if the dog attacks, is missing, died, moved address • Prohibition on selling or accepting ownership • Prohibition on breeding

Jurisdiction	Classes	Declaration	Conditions
Queensland	Restricted	Breed specific	<ul style="list-style-type: none"> • Owner permit • Spayed or neutered • Prohibition on breeding • Microchip • Prescribed collar • Muzzle in public • Under effective control in public • Secure enclosure at home • Signage • Notification of change of address
	Dangerous	Where the dog: <ul style="list-style-type: none"> • has seriously attacked, or acted in a way that caused fear to, a person or another animal; or • may, in the opinion of an authorised person having regard to the way the dog has behaved towards a person or another animal, seriously attack, or act in a way that causes fear to, the person or animal. 	<ul style="list-style-type: none"> • Spayed or neutered • Prohibition on breeding • Microchip • Prescribed collar • Muzzle in public • Under effective control in public • Secure enclosure at home • Signage • Notification of change of address
	Menacing	Where the dog: <ul style="list-style-type: none"> • has attacked, or acted in a way that caused fear to, a person or another animal; or • may, in the opinion of an authorised person having regard to the way the dog has behaved towards a person or another animal, attack, or act in a way that causes fear to, the person or animal. 	<ul style="list-style-type: none"> • Microchip • Prescribed collar • Muzzle in public • Under effective control in public • Secure enclosure at home • Signage • Notification of change of address

Jurisdiction	Classes	Declaration	Conditions
South Australia	Dangerous	<ul style="list-style-type: none"> the dog is dangerous, menacing or a nuisance; and the dog has attacked, harassed or chased a person or an animal or bird owned by or in the charge of a person in circumstances that would constitute an offence against this Act. 	<ul style="list-style-type: none"> Spayed or neutered Microchip While on home premises to be kept indoors or in an enclosure that is constructed so as to prevent the dog escaping from it Warning signs on home premises Prescribed collar Outside of home premises it is to have a muzzle and be under the effective control of a person by means of physical restraint; and Person responsible for the dog to undergo approved training program Reasonable steps to be taken to prevent the dog repeating the behavior that gave rise to the order.
	Menacing	<ul style="list-style-type: none"> the dog is dangerous, menacing or a nuisance; and the dog has attacked, harassed or chased a person or an animal or bird owned by or in the charge of a person in circumstances that would constitute an offence against this Act. 	<ul style="list-style-type: none"> Microchip While on home premises to be kept indoors or in an enclosure that is constructed so as to prevent the dog escaping from it Warning signs on home premises Prescribed collar Outside of home premises it is to have a muzzle and be under the effective control of a person by means of physical restraint; and Reasonable steps to be taken to prevent the dog repeating the behavior that gave rise to the order.
	Nuisance	<ul style="list-style-type: none"> the dog is dangerous, menacing or a nuisance; and the dog has attacked, harassed or chased a person or an animal or bird owned by or in the charge of a person in circumstances that would constitute an offence against this Act. 	<ul style="list-style-type: none"> While on home premises to be kept indoors or in an enclosure that is constructed so as to prevent the dog escaping from it Outside of home premises it is to be under the effective control of a person by means of physical restraint; and Reasonable steps to be taken to prevent the dog repeating the behavior that gave rise to the order.

Jurisdiction	Classes	Declaration	Conditions
Tasmania	Dangerous	<ul style="list-style-type: none"> the dog has caused serious injury to a person or another animal; or there is reasonable cause to believe that the dog is likely to cause serious injury to a person or another animal. 	<ul style="list-style-type: none"> Microchip Spayed or neutered Muzzle in public On lead in public (2m) Under control of adult in public Home enclosure as per regulations Warning signs Notification is missing, dying etc Approval prior to transfer of ownership
Victoria	Dangerous	<ul style="list-style-type: none"> if the dog has caused the death of or serious injury to a person or animal if the dog is a menacing dog and its owner has received at least 2 infringement notices if there has been a finding of guilt or the serving of an infringement notice for any other reason prescribed. 	<p>Home premises</p> <ul style="list-style-type: none"> Confined A person cannot enter the dwelling unless admitted by an occupier of the premises who is of or over 17 years of age; and Warning signs Prescribed collar <p>Public</p> <ul style="list-style-type: none"> Muzzle Effective control (chain, leash, cord)
	Menacing	<ul style="list-style-type: none"> the dog has rushed at or chased a person; or the dog bites any person or animal causing injury to that person or animal that is not in the nature of a serious injury. 	<p>Owner must notify Council if the dog rushes at or chases a person; is missing; address changes; ownership changes</p> <p>Public</p> <ul style="list-style-type: none"> Muzzle Effective control (chain, leash, cord)
Western Australia	Dangerous	<ul style="list-style-type: none"> the dog has caused injury or damage by an attack on, or chasing, a person, animal or vehicle; the dog has, repeatedly, shown a tendency — <ul style="list-style-type: none"> to attack, or chase, a person, animal or vehicle even though no injury has been caused by that behaviour; or to threaten to attack; or the behaviour of the dog meets other criteria prescribed for the purpose of this section. 	<p>Mandatory</p> <ul style="list-style-type: none"> Muzzled in public <p>Local Govt determine other control measure that may include:</p> <ul style="list-style-type: none"> Chain or leash Continuous supervision Confinement Restricted from access to children Prescribed collar Signage

Appendix 4 - UAM Aggression Incident Severity Scale

Description	Consequence
1. Dog that exhibits unacceptable aggression without actually biting	<ul style="list-style-type: none"> a. Dog must be identified using an Australian Standard microchip with data on an accredited registry b. Owner and dog must undergo approved training courses c. Dog must be on leash and under control at all times when off the owner's property d. Must not have access to the area between the driveway and the front door of the owner's property.
2. Dog that inflicts a single (not serious) bite wound in a situation where provocation of the dog has been established as a significant causal factor	<ul style="list-style-type: none"> a. Dog must be identified using an Australian Standard microchip with data on an accredited registry b. Owner and dog must undergo approved training courses c. Dog must be on leash and under control at all times when off the owner's property d. Must not have access to the area between the driveway and the front door of the owner's property.
3. Dog that inflicts a single (not serious) bite wound without provocation.	<ul style="list-style-type: none"> a. Dog must be identified using an Australian Standard microchip with data on an accredited registry b. Owner and dog must undergo approved training courses c. Dog must be on leash, under control and muzzled at all times when off premises d. Must not have access to path between the front gate of the property and the front door of the residence and with an approved warning sign must be posted e. Dog must be spayed or neutered at owner's expense f. Must wear an approved identifying collar g. Owner must obtain public liability insurance to keep the dog.
4. Dog that inflicts multiple bite wounds in a situation where provocation of the dog has been established as a significant causal factor.	<ul style="list-style-type: none"> a. Dog must be identified using an Australian Standard microchip with data on an accredited registry b. Owner and dog must undergo approved training courses c. Dog must be on leash, under control and muzzled at all times when off premises d. Must not have access to path between the front gate of the property and the front door of the residence and with an approved warning sign must be posted e. Dog must be spayed or neutered at owner's expense f. Must wear an approved identifying collar g. Owner must obtain public liability insurance and produce the certificate of insurance to keep the dog.
5. Dog that inflicts multiple bite wounds without provocation	<ul style="list-style-type: none"> a. Euthanasia of the dog unless owner prepared to make exceptional efforts including all of the above for levels 3 and 4 plus confinement to a child/dog proof enclosure.
6. Life threatening attack (potential grievous bodily harm)	<ul style="list-style-type: none"> a. Euthanasia of the dog b. Prohibition order for owner on owning another dog.

UAM Aggression Incident Severity Scale (Anon, UAM 2004)