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Part 1 - Animal welfare principles and philosophy


**1.1 Philosophy on animal welfare and the veterinarian**

**Policy**

Veterinarians by virtue of their training, skill and knowledge promote animal welfare at all levels of activity and interactions with humans or animals.

**Background**

When humans make use of animals, or alter in any way their natural environment, a level of care should be established that befits human dignity as rational and compassionate beings.

Such care should be humane, which implies empathy with the animal, an avoidance of unnecessary stress, and the demonstration of compassion towards a fellow creature.

Veterinarians have particular skills and professional responsibility to ensure that animals owned by and/or controlled by people receive adequate care. This responsibility should be exercised in all the human–animal relationships, from animals in the wild making brief contact with humans to farmed, flock and herd animals, companion animals, and animals used in sport, entertainment, education and research.

Veterinarians will, on occasion, find themselves called on to give an expert opinion about the adequacy of an owner’s care in different management systems if for example, in relation to imposed behaviour patterns and environments where the owners’ financial rewards, entertainment or self-glorification are the prime objectives. The veterinarian’s expert opinion should be based on an objective assessment of animal welfare concerns.

**Guidelines**

The ‘Five Freedoms’ should be used as the basis for all animals in human care. These are well understood and used by governments and animal welfare organisations worldwide.

Freedom from hunger and thirst
Freedom from pain, injury and disease
Freedom from discomfort
Freedom to express normal behaviour
Freedom from fear and distress

The ‘Five Freedoms’ ensure good welfare as defined by good physical and mental health.

Although a veterinarian’s judgement about the adequacy of an owner’s care can be subject to personal opinion, such opinion should be based on knowledge of the scientific literature on animal behaviour and welfare. Advice can be sought from veterinarians with a proven special interest or specialisation in animal welfare. Known cases of abuse and neglect should be reported to the relevant authorities.

Veterinarians should become familiar with objective scientific methods of measuring and defining terms such as stress, cruelty, pain, boredom, unwarranted mutilation and undue confinement.

**Other relevant policies and position statements**

1.2 Animal abuse

15.12 Livestock production

Date of ratification by AVA Board: January 2010
1.2 Animal abuse

Policy
Veterinarians should report suspected animal abuse to the relevant authorities. Veterinarians should not be required by law to report instances of suspected animal abuse as this may discourage owners from seeking essential treatment for their injured animals.

Background
Cruelty to animals is an offence in all jurisdictions. The ethical obligation to report abuse is made not only for the animal's welfare but because of the well-researched connection between animal and child abuse and domestic violence and sociopathic tendencies. It has been demonstrated that there is a complex interrelationship between animal and child cruelty and a correlation between animal harm and other forms of psycho-social distress. Veterinarians because of their training and expertise are uniquely placed to identify cases of animal abuse.

Guidelines
The first priority of veterinarians attending these animals should be the welfare of the animal. The duty of care the veterinarian has for the patient should also extend beyond the immediate injury and include prevention of further abuse. This may include veterinarians seizing animals if allowed to do so under animal cruelty legislation. The relevant authorities should be contacted so that they deal with the suspected perpetrator directly to protect the animal and the veterinarian.

Protection of the personal safety of the reporting veterinarian and veterinary staff is important as animal abusers could be a danger to them.

Other recommendations
Legislation should be developed to give statutory protection against litigation and other reprisals towards veterinarians who report animal abuse is encouraged.

The profession and community should be educated in recognising cases of potential animal abuse and its relevance to violence against people.

Other relevant policies and position statements
1.1 Philosophy on animal welfare and the veterinarian

References


Date of ratification by AVA Board: December 2013
1.3 Animal welfare societies

Policy

The Australian Veterinary Association (AVA) encourages liaison and involvement of AVA members with local animal welfare societies. This is in the best interests of the AVA, the veterinary profession, the societies involved and the animals that the welfare societies have been established to assist.

Background

The AVA contributes to animal welfare in the community at the policy and strategic levels, as well as at practice level. Practices treat injured strays and wildlife pro bono for ethical reasons. The AVA also works with animal welfare societies at the shelter level and in strategic alliances to press for legislation that supports animal welfare. As well, the AVA provides input into policy, including through participation in the Australian Animal Welfare Strategy.

Date of ratification by AVA Board: 1 Jan 1997
Part 2

Use of veterinary medicines
2.1 Responsible use of veterinary immunobiologials in cats and dogs

Policy

Immunobiological products (vaccines) should only be administered to dogs and cats by a registered veterinarian or under the direct supervision of a veterinarian.

Background

The correct use of immunobiological products in animals requires a high level of veterinary expertise, knowledge of the immune process in animals and an understanding of the associated hazards for humans and animals.

Vaccination is one of the most common veterinary procedures undertaken in small animal practice. It is important in preventing and controlling infectious diseases in cats and dogs in Australia.

Veterinarians must maintain a highly professional approach to all aspects of the use of vaccines. This includes ensuring that vaccines are not used unnecessarily, ensuring that the latest techniques are adopted as appropriate and appreciating that the profession will be held responsible for the correct use of immunobiologials.

Guidelines

Immunobiologials should be used according to the manufacturer’s instructions, which includes recommendations on storage, handling, administration, dosing and safety. Owner consent should be obtained if veterinarians deviate from these recommendations or from commonly accepted veterinary practice.

The safety of the animals, the person administering the product and other animals and people should be considered, including providing therapy for adverse reactions.

The risks of exposure to infectious diseases, possible adverse reaction and the benefits of vaccination should be discussed to allow clients to give informed consent or refusal. Veterinarians should advise clients that vaccination is part of the overall approach to health management of their pet. Vaccination does not always provide protection from infection or clinical signs of disease. While vaccines are generally recognised as controlling disease, they do not always confer protective immunity. The client’s informed decision should be recorded.

An understanding of the interaction of the immunobiological with the particular animal is essential. The choice of product (e.g. live or inactivated vaccine, booster vaccine, antiserum or toxoid) will depend on:

- the likely immune status of the animal before vaccination
- the timing of vaccination (e.g. the animal’s age, date of previous vaccination, the degree of challenge expected, other diseases or physical stressors to the animal)
- the interaction of immunobiologicals that may be administered simultaneously or close together, and
- the degree of exposure to infection.

Vaccination protocols should be tailored for the individual patient according to age at initial examination, breed, risk assessment, general health status and vaccine manufacturer’s guidelines.

Good record keeping and accurate identification of the animal are both essential for effective vaccination programs and a legal requirement. The date of vaccination, veterinarian
administering the vaccine, vaccine batch number, manufacturer and site of vaccination should be recorded in the patient’s records.

Veterinarians should have expert knowledge of correct hygiene procedures, storage and procedures for use of immunobiologicals (including route and site of administration).

Veterinarians should appreciate the importance of the animal’s state of health, age, pregnancy and nutrition. Vaccines are recommended for use in healthy animals, following a physical examination. Consideration should be given to the appropriateness of vaccinating animals that are suffering from concurrent disease, chronic disease, immunodeficiency, debilitation or concurrent drug administration that may affect the immune response.

Veterinarians should assess the likelihood and nature of adverse experiences to an immunobiological so that adequate arrangements can be advised for the aftercare of the animal.

Other relevant policies and position statements

6.6 Vaccination of dogs and cats

References


Date of ratification by AVA Board: 27 July 2012
2.2 Use of antimicrobial drugs in veterinary practice

Policy

Antimicrobial drugs (antibiotics) should only be administered, dispensed or prescribed when the veterinarian has made a reasonable assessment that bacterial disease has been confirmed or can reasonably be suspected as the cause of the animal’s clinical signs. This assessment should be based on clinical history, physical examination and, if necessary, appropriate laboratory tests. However, the Australian Veterinary Association (AVA) recognises that physical examination of every individual in a herd or flock is often not possible.

Antimicrobial drugs may also be used to prevent overgrowth of bacteria following viral illnesses, during anti-tumour therapy, in immunocompromised patients, in patients receiving steroids and in cases of penetrating wounds where decontamination or disinfection is not fully effective. It is better to use antimicrobials in this manner than to allow bacterial infections to develop that subsequently require extensive treatment and/or supportive therapy.

Veterinarians should stress to owners the importance of routine prophylaxis, such as dental care, parasite control, hygiene, animal husbandry, vaccination and adequate nutrition and exercise, to reduce the risk of clinical bacterial disease and therefore reduce the need for antimicrobial therapy.

Background

Antibiotics are used in farm animals to improve performance for example, by preventing diseases such as necrotic enteritis in poultry, which is very common when birds are fed wheat-based diets.

Exposure of bacteria to antibiotics can lead to the development of resistant strains. Some bacteria are capable of passing on resistance genes to other bacteria. Bacterial resistance to antibiotics can be passed from animals to humans via bacteria that do not cause disease themselves but are able to pass on resistance genes to disease-causing bacteria.

Concern has been raised over the use of antibiotics in food-producing species. Usually, proper food preparation and cooking of animal products will remove the risk of transfer of bacterial resistance from this source.

The other way in which antibiotic use in animals could lead to antibiotic resistance in humans is through contact with treated animals. Farm workers and owners of pet animals being treated with antibiotics need to pay particular attention to hygiene during and after handling the treated animals.

Guidelines

Rational drug selection

When use of antimicrobial drugs is indicated, the clinician should consider the following when selecting an antimicrobial drug:

The likely infecting pathogens

If infection has not been confirmed by microbial examination or culture and sensitivity testing, drug selection should be based on an assessment of the likely infecting pathogens for the disease or tissue in question. The pharmacokinetic properties of the drug, which will influence tissue penetration, routes of excretion, etc, should also be considered.

Specificity of antimicrobials
Drugs that are more selective are generally preferred, as they are less likely to disrupt the normal microflora. Use of broad-spectrum products may be warranted if several pathogens could be involved, or there is a need to achieve a rapid effect before culture and sensitivity results become available. However, reliance on broad-spectrum drugs in place of sound diagnosis is not recommended.

**Bactericidal versus bacteriostatic activity**

Bactericidal drugs are often favoured because they may be more effective when host defences are impaired. However, there may be little difference in efficacy between bactericidal and bacteriostatic drugs when treating noncritical infections in otherwise healthy patients.

**Toxicity**

Most of the antibacterial drugs in common use are nontoxic when used at the correct dose. However, veterinarians should be aware of potential adverse effects of any drug, even when used at the recommended dose.

**Intercurrent disease**

The presence of kidney or liver disease may increase toxicity risk with some drugs, either because they damage these organs or because impaired excretion or metabolism allows the drug or its metabolites to accumulate to toxic levels.

When treating diseases of these organs, the use of antibiotics would only be indicated in the first instance if there were a pyrexia of suspected bacterial origin.

**Pregnant or neonatal patients**

Particular care may be necessary in these patients because of known or suspected adverse effects.

**Off-label use**

Antimicrobial drugs should only be used off label (altered dose, treatment interval or use of a human pharmaceutical) when there is no appropriate registered veterinary drug available. The veterinarian should consider the efficacy and safety of the drug and determine an appropriate withholding period by referring to published literature or data provided by the manufacturer or the Australian Pesticides and Veterinary Medicines Authority. The veterinarian should provide the client with written advice regarding withholding periods and may be liable for any residue violations that occur when antimicrobial drugs are used off label under their instruction. Use of human antimicrobials in food animals is not allowed in some states.

Antimicrobial drugs registered only for use in humans (i.e. not registered for use in animals) should only be used in non-food animals and only when there is compelling evidence from culture and sensitivity testing that there is no suitable veterinary-registered antimicrobial drug available to treat the patient.

Under such circumstances, particular care must be taken to ensure that:

- the animal is monitored regularly until completely recovered
- the prescription is complied with and the full course is completed
- as far as possible, the animal is kept isolated from other animals and in limited contact with people, especially children.
A veterinary practitioner should not use human antimicrobials in food-producing animals except in special circumstances and in accordance with relevant state legislation.

**Feed additives**

Antibacterial compounds used as feed additives to target gastrointestinal microorganisms should not be absorbed in significant amounts from the gastrointestinal tract of the species being treated. Where products are absorbed to some extent, withholding periods for milk, meat, eggs, etc must be observed. Some products are not recommended for use in animals that provide products for human consumption, but may be used in breeding animals.

**Antimicrobials in production animals**

Antimicrobials should only be used in production animals following extensive research and evaluation. They should only be used when they result in improved animal welfare, higher animal productivity, and lower environmental contamination. The benefits to consumers must be weighed against the risks of the possible development of microbial resistance, including cross-resistance.

**Quality assurance programs**

Veterinarians should be aware of quality assurance (QA) programs relevant to antimicrobial use in the specific industry in which they are working. Where veterinarians are not familiar with an industry, they should inquire about the existence of QA restrictions relating to antibiotic (and other drug) use.

**Prophylactic antimicrobial use in surgery**

Prophylactic use of antimicrobial drugs in surgery is not indicated for routine, aseptic surgery of less than 90 minutes duration where:

- no pre-existing inflammation is present
- the gastrointestinal, female reproductive or respiratory systems have not been invaded
- aseptic technique is maintained.
- However, the prophylactic use of antibiotics may be justified in situations such as:
  - operative procedures in the field
  - dental procedures with associated bleeding
  - patients with leucopenia
  - contaminated surgery
  - where the consequences of sepsis would be disastrous, potentially irreversible, life-threatening or likely to cause prolonged pain or suffering.

For antibacterial chemoprophylaxis, drugs should be administered before the procedure so that adequate concentrations are present in vivo at the time of surgery. For best effect, the drug must be present in the wound before contamination occurs.

The likely contaminating pathogens should be considered when selecting the appropriate antibacterial drug to use prophylactically.

Antimicrobial prophylaxis is less effective if the contamination of the surgical site includes certain particulate matter.

If contamination has been present for 3 or more hours, the benefits of antibiotics may be reduced.

**Responsibility**
Veterinarians must document in patient records any adverse reactions that are observed or a decline in efficacy of a previously effective antimicrobial. Such adverse drug reactions should also be reported to the Australian Pesticides and Veterinary Medicines Authority.

All antimicrobials must be labelled, used and stored correctly and be in date. Full records must be kept in accordance with statutory requirements.

Consideration must always be given to the health of the person administering the products, to the extent that this could be affected by antibiotic-resistant microorganisms, and they must understand the necessary hygiene precautions. Any necessary warning should be issued.

Ultimately, responsibility and accountability are individual matters, and education (of producers, owners and veterinarians) will be the best way to address any shortcomings in veterinary antibiotic use. The owner of the animals needs to be as accountable as the veterinarian who prescribes and administers antibiotics.

**Other recommendations**

It is desirable that innovative methods of using antimicrobials are developed so that the development of cross-resistance is minimised or eliminated.

Research and development of production systems that minimise the need for antibiotics is essential. The aim should be an alternative technology that maintains animal welfare and productivity without causing environmental contamination, or other undesirable side effects of antimicrobial use.

Registered antibiotics go through stringent peer-reviewed tests. Proposals for alternatives to antibiotics must consider the safety, quality, efficacy and environmental impact of any product, compared with available antibiotics.

Date of ratification by AVA Board: 17 Oct 1999
2.3 Complementary and alternative veterinary medicine

Position statement

The Australian Veterinary Association (AVA) recommends that veterinarians make informed and judicious decisions regarding the use of complementary and alternative veterinary medicine (CAVM) modalities. The AVA recognises the interest in and use of CAVM by some members. The primary objective in veterinary medicine is patient welfare and to 'first do no harm'. Ideally, veterinary medicine is effective, safe, proven and holistic in terms of the consideration of all aspects of the animal patient in the context of its environment and individual circumstances. Practices and philosophies that are ineffective or unsafe should be discarded.

Treatment programs are developed within the client–veterinarian–patient relationship with informed consent, which is recorded in the patient notes.

The AVA believes that all veterinary medicines, including CAVM, are to be held to the same standards. Claims for safety and efficacy ultimately should be proven by the scientific method and evidence-based principles. Circumstances commonly require that veterinarians extrapolate information when formulating a course of therapy, but veterinarians should exercise caution in such circumstances.

Background

This position statement does not attempt to determine or describe the relative value of the individual CAVM modalities.

The theoretical basis and techniques of CAVM may be divergent from veterinary medicine routinely taught in Australian university veterinary science courses or may differ from current scientific knowledge.

The quality of studies, evidence and reports pertaining to CAVM varies and therefore a veterinarian must critically evaluate the literature and other sources of current information. Practitioners using CAVM are encouraged to seek evidence-based research to establish proof of safety and efficacy.

Guidelines

A veterinarian should examine an animal and establish a preliminary diagnosis before any treatment is initiated. A diagnosis should be based on sound, accepted principles of veterinary medicine.

All treatment options should be offered and discussed with the owner or authorised agent prior to selection of a proven treatment modality.

Following advice from their veterinarian, clients will often choose a medical course of action. Recommendations for effective and safe care should be based on available scientific knowledge and the medical judgment of the veterinarian.

Veterinarians should be aware that animal nutritional supplements and botanicals typically are often not subject to pre-marketing evaluation by the Australian Pesticides and Veterinary Medicines Authority (APVMA) for purity, safety or efficacy and may contain active pharmacologic agents or unknown substances.

Users of CAVM should take into consideration registration, labelling requirements and also consider maximum residue limits (MRLs) in production animals. State and territory laws must be understood and adhered to by veterinarians in relation to CAVM.

If a human health hazard is anticipated in the course of a disease or as a result of therapy, it should be made known to the client.
Date of ratification by AVA Board: 27 July 2012
2.4 Responsible use of veterinary medicines on farm

Policy

Veterinarians should engage with their farmer clients to promote the responsible use of veterinary medicines on farms.

Farmers should observe appropriate precautions when using veterinary medicines in their animals to ensure the safety of farm personnel and animals, to protect the environment and to ensure food quality standards are met.

Guidelines

To ensure the safety of farm personnel and animals, protect the environment and ensure food quality standards are met, the following guidelines on the use of veterinary medicines on farms should be followed.

Avoid unnecessary treatments.
Use only legally obtained products.
Use products according to their registered label and/or written veterinary directions, paying particular attention to dose rates and withholding periods.
Use prescription medicines only in accordance with veterinary directions.
Ensure in-feed and in-water medication is used only for the intended animals, at correct rates, with appropriate safeguards against contamination.
Follow all label first aid and safety directions and ensure all users are adequately trained.
Store products in accordance with label directions.
Do not use products which are out of date.
Dispose of unwanted product in accordance with label instructions and local requirements.
Identify all treated animals sufficiently to ensure residue-affected animals, milk, honey or other food products are not sold.
Record all animal treatments and keep the records for at least three years.
Contact the manufacturer and the Australian Pesticides and Veterinary Medicines Authority (APVMA) in the case of observed adverse reactions, including apparent treatment failures (www.apvma.gov.au/use_safely/adverse/veterinary.php).
If using pesticide, herbicides and fungicide treatments in the environment of animals ensure that they do not contaminate stock, feed, equipment, housing, yards or soil.

Date of ratification by AVA Board: August 2010
2.5 Code of practice for the use of prescription animal remedies (Schedule 4 substances) in the pig industry

Policy

Veterinarians who provide services to the pig industry must observe relevant state legislation and the other responsibilities detailed below when prescribing prescription animal remedies (PARs; Schedule 4 substances). This applies to veterinarians employed by companies that own pigs or that manufacture drugs used in the pig industry as well as to veterinarians outside the industry.

Background

With the increased intensification of the pig industry, the role of the veterinarian is evolving to one of herd health management. This often involves providing treatment or preventive measures on a mass basis. Legal and ethical constraints apply to the supply and use of PARs in the pig industry.

The PARs drug supply chain between manufacturer and end user includes wholesalers, feed mills, pharmacists and veterinarians.

Wholesalers

The wholesaler may purchase PARs directly from a manufacturer and subsequently supply to a veterinarian; a pharmacist; another licensed, authorised or permitted wholesaler; or an authorised receiver as outlined in the state Poisons Act (or equivalent) and Regulations. Authorised receivers include government departments, universities and hospitals, overseas countries and interstate distributors.

In all states except South Australia, a wholesaler may not supply PARs directly to an end user, and cannot be authorised to do so by a veterinarian. Thus, in all states except South Australia, a licensed or authorised wholesale dealer is not permitted to dispense a prescription under any pretext. In some states (including Queensland), under exceptional circumstances, direct supply to an end user can be authorised by the Director General of Health.

In South Australia, registered wholesalers may supply to an end user directly, but only on the authorisation of a veterinarian responsible for, and with a knowledge of, the end user’s pig herd. Authorisation in such cases can be given by telephone but must be followed by written confirmation within 3 days.

Feed mills

The feed miller can supply feedstuffs containing PARs under specified conditions. Feed mills do not usually conform with the definition of a wholesaler, but may be registered or authorised by a state Poisons Act (or equivalent) and regulations as wholesalers, able to supply:

PARs, as stock medicines, to a veterinarian, pharmacist or another wholesaler

under certain conditions, as outlined below, feedstuffs containing therapeutic substances at exempt or Schedule 6 levels (S6, for unrestricted sale; this may include substances that would be S4 if incorporated into feed at higher concentrations) or at S4 level (prescription only). The conditions of supply of restricted substances at S4 level to an end user specify that such supply must only be in a feedstuff, and must be on, and in accordance with, the full written instructions of a veterinary surgeon, and on his/her behalf, to the holder of such an order from a veterinarian.
The authorisation or registration of a feed mill under the Poisons Act (or equivalent) and Regulations does not permit that feed mill to supply PARs for open retail sale with or without veterinary authority. Thus feed mills may not, under any circumstances, supply S4 medicines to the public other than when incorporated in feed, and then only after a veterinary prescription has been issued by the veterinarian (and copied to the food mill).

Where a person who mixes his/her own feed requires PARs for his/her herd, it must be acquired from a veterinary surgeon, a pharmacist (on a veterinary prescription), or from a feed mill as a feed concentrate (in accordance with full written instructions from a veterinarian). The concentrate may contain a therapeutic substance at such a level that it can be further mixed to produce medicated feed containing that drug at a specified lower therapeutic level.

There is no restriction on the supply of premixes or concentrates at levels not exceeding those set out in Schedule 6. Such premixes may be in the form of registered stock medicines or made to order by a feed mill.

**Pharmacists**

The pharmacist may dispense PARs to an end user, but only on veterinary prescription, with one exception: in Western Australia, a pharmacist may supply certain PARs in limited quantity (as specified in Regulation 39 Appendix H of the Western Australian Poisons Act) without a prescription in an emergency under certain specific conditions.

Emergency supply of PARs by a pharmacist is permitted in all states on the oral order of a veterinary surgeon, who must forward written confirmation by prescription within 24 hours.

**Veterinarians**

The veterinarian accepts professional responsibility for the supply and use of PARs in the animals under their care. Veterinarians can possess PARs only for the lawful practice of their profession. They are not permitted to merchandise them—that is, they cannot sell them without proper professional involvement in their use and can only supply them when they have made a diagnosis or have planned a medication program.

**Guidelines**

**Legal obligations for veterinarians supplying PARs**

Veterinarians supplying PARs must meet the obligations imposed on them by relevant state Acts and Regulations. These include Poisons Acts (or equivalent), the Veterinary Surgeons Act, and Stock Foods and Medicines Acts (or equivalent).

Contrived arrangements between veterinarians and wholesalers that attempt to circumvent legislation must be avoided, since they jeopardise both the wholesaler’s authority and the veterinarian’s registration.

**Responsibilities of the veterinarian**

Responsibilities of veterinarians supplying PARs within the pig industry are detailed below.

Veterinary care and supervision of recipient livestock
Before pig veterinarians can supply PARs, they must be practising their profession. To do this, the veterinarian must meet the following criteria:
- The pig herd must be under the care and supervision of the veterinarian; this care and supervision should be real and not merely nominal.
- The treatment recommended and the drugs supplied must be recorded.
- The client must be advised of the correct usage of the drugs.
When given responsibility for the health of the animal or herd in question by the agent or owner, the veterinarian demonstrates care and supervision by at least either:

- having seen the animal or herd for the purpose of diagnosis or prescription immediately before supply; or
- having visited the farm or other premises on which the animal or herd is kept, sufficiently often and recently enough to have acquired from personal knowledge and inspection an accurate picture of the current health state of the farm or premises; this must be sufficient to enable him/her to diagnose and/or prescribe for the animal or herd in question.

**Areas of responsibility**

In situations where a veterinarian is called on to prescribe or supply PARs, responsibilities to be taken into account (in addition to legal obligations) are:

- the care and welfare of the pigs that are the subject of the proposed drug supply
- the professional responsibility of the veterinarian as described by the Code of Ethics of the Australian Veterinary Association.

**The PARs drug supply chain**

Veterinarians should carefully analyse the drug supply chain and distinguish wholesale from retail activities. They should also check the bona fides of persons to be supplied. All veterinarians involved in the supply chain of PARs should continually update their knowledge of individual or corporate entities that are registered as authorised or licensed veterinary wholesalers. State departments of health maintain current lists of wholesale dealers authorised, licensed or permitted under regulations of their state's Poisons Act (or equivalent).

**Professional intervention**

Veterinarians should meet the definition of ‘professional intervention’ in the supply chain for PARs. ‘Professional intervention’ can be defined as intervention between the drug wholesaler and the end user of the substance, in such a way as to ensure that the drug is necessary, appropriate and will be used correctly.

Veterinarians must not act as ‘rubber stamps’ for transactions between wholesalers and end users, but should be fully involved in the disease treatment and/or control program requiring the use of PARs.

**Documentation of professional intervention**

The involvement of the veterinarian in the supply of PARs must be fully documented. Professional intervention should include the use of:

- the veterinarian’s own stationery or their stamp on invoices, prescriptions, authorisations and orders
- the veterinarian’s obvious recorded direction to supply.

When supply is made, the veterinarian must ensure that each pack or bottle of the PAR bears labelling as required by law, including the name and address of the veterinarian and the name of the pig farmer or farm manager.

Instructions on drug usage should be given to the end user by the veterinarian, with clear details of the method of administration, dose rate, withdrawal times and so on. These instructions can refer to specific disease control literature provided by the veterinarian.
Records of the names and quantities of PARs supplied, together with the name and address of the pig owner, must be kept for 2 years.

**Drug ownership during supply**

There is no obligation for the veterinarian to own the drugs he/she is supplying or is responsible for supplying.

**Supply of PARs as part of a forward-planned medication program**

Veterinarians are permitted to supply PARs to end users according to a forward-planned medication program under the full professional control of the veterinarian. Use of medication in such a program must be a routine and not at the discretion of the end user.

Under such a forward-planned medication program, PARs from farm-held stocks, prescribed by the veterinarian, can be used by a designated person in the veterinarian’s absence. This must be done with the veterinarian’s knowledge. The designated person can be a piggery owner, manager or contract grower, who can demonstrate that they have received clear instructions, in writing, from the responsible veterinarian on the use of these PARs. Such a program must be kept under continual review by the veterinarian, whose written instructions are valid for a period of no more than 6 months.

In the case of a routine preventive program, the date of supply, the drug used, the farmer’s name and the volume of supply must be regularly recorded as required by law. Supply by the veterinarian must be accompanied by an invoice bearing the veterinarian’s name, and the drugs must be labelled and recorded as outlined above.

In a disease outbreak, PARs may be administered according to a forward-planned emergency medication program only when the veterinarian is confident that the correct drug, from stocks they have supplied, will be used (if diagnosis is made from a distance). When prescribing in this manner, the veterinarian’s responsibility for the diagnosis is not diminished.

**Stocks of PARs on farms**

The supply of PARs for animal use to an end user, other than by a veterinary surgeon or by a pharmacist on a veterinary prescription, is illegal (see above). PARs stocks legally dispensed by a veterinarian for use on a pig farm are commonly stored in a central drug store. The storage of non-dispensed PARs on farms remote from the veterinarian (for example, the storage of unlabelled or unprescribed PARs in a locked area with access exclusive to the veterinarian), is considered outside the spirit of the Poisons Act and a contravention of the Veterinary Surgeons Act, in that the veterinarian would have difficulty in demonstrating that they maintain absolute control over these stocks.

**Emergency supply of PARs**

In cases of emergency where PARs are urgently required, delays may occur if drugs have to be sent to the veterinarian by the wholesaler before being dispatched to the end user. However, only in South Australia is there legal provision for a wholesaler to despatch directly to the end user on authorisation (oral, followed by written) from the veterinarian ordering the drugs.

**Feed mills**

The veterinarian (including those in the employ of a feed mill) must show professional intervention in the supply chain of the PARs to the end user via a feed mill. In effect, the feed mill acts as an agent for the veterinarian by acting on his/her order or authorisation; this is similar to a pharmacist refilling a prescription for a veterinarian.
**Veterinarians employed by a company**

Companies may be directly involved with the pig industry, either by direct ownership of livestock, or manufacture of PARs likely to be used within the industry, or both. Such companies may employ veterinarians whose responsibility may be either the health care of company-owned livestock or to provide technical expertise in the use of PARs in pigs.

Veterinarians employed by a company that is directly involved in ownership of pigs, and/or is an authorised, licensed or permitted wholesaler of PARs, have the same obligations as any other veterinarian. They must still meet their obligations under the various state Acts and Regulations pertaining to the use of substances and to their own professional activity.

Veterinarians have an obligation to point out to their employers any contravention of the Regulations affecting the supply or use of PARs and should make every effort to have these contraventions eliminated.

The existence of a wholesale drug purchasing arm in a company does not allow that company to indulge in retail supply to end users (including its own stock). There should be neither direct supply nor appearance of direct supply of PARs by the wholesale arm of a company to outside customers, franchises (unless they also hold a wholesale authority, licence or permit), the company’s own piggeries or contract growers. All are end users and can be supplied only by a veterinarian, who must intervene in the supply chain of PARs and demonstrate professional intervention as described above.

When the company’s wholesale arm supplies a company veterinarian, the veterinarian takes on the obligation to record transactions. PARs supplied to the company veterinarian (or any other veterinarian) must be held physically separated from the company’s wholesale drug supplies. They should be kept in a locked cupboard or room that is accessible only to the veterinarian. The veterinarian is required by law to keep a record of drugs they subsequently supply.

**Other relevant policies and codes of practice**

2.4  Responsible use of veterinary medicines on farms

Date of ratification by AVA Board: 1 Jan 1997
2.6 Code of practice for the use of prescription animal remedies (Schedule 4 substances) in the poultry industry

Policy

Veterinarians must be familiar with federal and state legislation, as it applies to their obligations as a registered veterinarian in the state(s) in which they practise, relating to the purchase, storage, supply and use of prescription animal remedies (PARs, Schedule 4 medications).

Practices of supply and usage of PARs and other antibiotics in the poultry industry have legal and ethical restraints. Company or consultant veterinarians in the poultry industry have a responsibility to ensure that their actions maintain the commercial viability of the company for which they work, but this should not override their legal or ethical obligations as a veterinarian.

Background

Organisation of the Australian poultry industry

The structure of the Australian poultry industry differs significantly from that of other livestock industries. This greatly influences the provision of veterinary services and the supply of PARs and other antibiotics.

In the chicken meat industry, a limited number of companies own most of the production phases, including breeding and commercial flocks, and these companies also employ veterinarians. Some chicken meat companies rely on contract broiler growing and provide veterinary services as part of that contract.

In the egg layer industry, flock ownership is largely restricted to the commercial layer chicken companies. Stock is supplied by the breeding companies, sometimes accompanied by veterinary services. Veterinary services to egg producers (and some smaller independent poultry meat producers) may be obtained from veterinarians in private employment, government veterinarians, poultry company veterinarians or independent consultant veterinarians.

In many of these situations, the role of the veterinarian has evolved into one of flock health management, often necessitating treatment or preventative measures on a flock basis.

The PAR medication supply chain

The PAR medication supply chain between manufacturer and end user comprises the following:

The wholesaler may purchase medications directly from a manufacturer and subsequently supply to a veterinarian, a pharmacist, another licensed or authorised wholesaler, or an authorised receiver such as a feed mill or premix manufacturer. All wholesalers supplying PAR medications must be either licensed or authorised to do so. A wholesaler may not supply directly to an end user and cannot be authorised to do so by any person. Poultry companies can maintain a wholesale drug operation independent of veterinary involvement, but must meet their obligations under state health legislation to purchase, hold, record and supply to authorised persons or companies only.

The feed mill can be authorised or licensed to receive and hold PAR medications, but cannot supply feedstuffs containing PAR medications except on the written order of the veterinarian supervising the birds to be treated.

The pharmacist may only dispense a PAR medication to an end user on veterinary prescription.
The veterinarian accepts responsibility for the supply and use of PAR medications for the animals under their care. Veterinarians involved in the supply chain of PARs should continually update their understanding of those individuals or corporate entities that are registered as authorised veterinary wholesalers and ensure that they know that the PARs authorised are correctly registered for sale or use in food-producing animals.

The veterinary assistant is a responsible person nominated by a veterinarian and can administer that medication to a flock under the directions of the veterinarian. In many instances, the assistant may also be a serviceperson or farm manager. Assistants need not be veterinarians.

The end user is the person who actually administers the medication, usually the farm manager or broiler grower.

**Background to specific guidelines**

Practices of supply of PARs in the poultry industry could contravene the requirements of the Australian Pesticides and Veterinary Medicines Authority (APVMA) or state control-of-use and health legislation. Such practices may involve:

- failure of a veterinarian to provide adequate ‘professional intervention’ in the ordering, storage, supply and use of a PAR
- failure to comply with withholding periods
- failure to comply with requirements for ‘veterinary care and supervision of recipient stock’

In an integrated poultry company, the supply of a PAR from the wholesale or purchasing section of the company— including premix supplier and/or feed mill to the end user (the farm manager or broiler grower) is illegal without ‘professional intervention’ by a veterinarian.

Veterinarians, whether in an integrated poultry company or in private practice, have legal obligations under state and federal legislation to provide ‘professional intervention’ in the supply of a PAR to stock under their care and supervision.

The use of antibiotics is under increasing public scrutiny, particularly in food-producing animals, because of the potential for human health hazards due to antibiotic residues or antibiotic-resistant bacteria or resistance genes in food. Veterinarians are the trained professionals who are expected to oversee the prudent use of antibiotics in birds and animals.

**Guidelines**

**Responsibilities of the veterinarian in the supply of a PAR antibiotic within the poultry industry**

The Australian Veterinary Association (AVA) has developed Guidelines for Prescribing, Authorising and Dispensing Veterinary Medicines and a Code of Practice for the Use of Antimicrobial Drugs in Veterinary Practice. Some relevant points of these policies are included in the following sections.

**Professional intervention**

Veterinarians should fulfil the definition of ‘professional intervention’ in the supply chain of PAR medications. ‘Professional intervention’ can be defined as intervention by a registered veterinarian between the drug wholesaler, premix supplier or feed mill and the end user of the substance, in such a way as to ensure that the drug is necessary and appropriate and will be used (and withheld) correctly.
Veterinarians must keep a record of the drugs held in their possession in a secured area. The date of supply, the drug used, the farmer’s name and volume of supply must be recorded and authorised.

When supply is undertaken by the veterinarian, each container of the PAR must bear labelling as required by law, including the name and address of the veterinarian and the name of the animal owner. It is desirable that the PAR be in the labelled container in which it was purchased.

Written instructions on drug use must be given to the end user by the veterinarian, with clear details of method of administration, dose rate, frequency and duration of treatment, precautions and withholding period. Batch number and expiry information is desirable but not mandatory. These instructions can be part of specific disease-control literature developed by the poultry company and delivered with the PAR medication by the serviceperson undertaking dose calculations or physically administering the PAR.

**Veterinary care and supervision of recipient stock**

The veterinarian must not only be involved in the supply of a PAR, but must also demonstrate due care and supervision of the recipient flock. This care and supervision should be real and not merely nominal. When veterinary board investigations are undertaken because of alleged improper PAR supply, evidence will be required that the birds or flocks supplied with the PAR are under the care of the veterinarian being investigated.

When given the responsibility for the health of the flock in question by the agent or owner, the veterinarian demonstrates care and supervision by at least:

- having seen the flock for the purpose of diagnosis or prescription immediately before supply;
- or
- having visited the farm or other premises on which the flock is kept sufficiently often and recently enough to have acquired an accurate picture of the current health status of the flock; this must be sufficient to enable the veterinarian to make a diagnosis requiring a PAR.

Supply in the physical absence of a veterinarian can only be done by an assistant when the veterinarian is involved and is confident by consultation that the correct drug and dose will be used. In such circumstances, the veterinarian’s responsibility is undiminished. Records must be maintained and the supply must be accompanied by advice bearing the veterinarian’s name.

When dealing with stock not owned by their employer, veterinary surgeons must practise in their own name. Company veterinarians must order the PAR medications they are prescribing and supplying, or are responsible for supplying, in their own name, even though the company pays for the medications. The veterinarian must always assume responsibility for control of PAR medications.

Veterinarians have an obligation to point out to their employer any activities in contravention of the legislation affecting the supply of PAR medications, and should make every endeavour to have these activities eliminated.

**Other areas of responsibility**

In situations in which a veterinarian is called on to prescribe or supply a PAR, responsibilities additional to the legal obligations include:

- the care and welfare of the poultry flock that is the subject of the proposed drug supply
- the professional responsibility of the veterinarian as described by the AVA Code of Professional Conduct.
**The PAR medication supply chain**

Veterinarians should carefully analyse the drug supply chain in which they are involved and delineate wholesale from retail activities. They should also check the bona fides of suppliers and persons to be supplied. Veterinarians must prescribe and/or supply only PAR (and other) medications registered by APVMA.

**Supply of PAR medications within a poultry company**

There is no distinction between supply to outside customers of a poultry company or to farms on which the company’s own poultry is grown. All are recognised as end users and can only be supplied by a veterinarian (company or consultant). They cannot be supplied directly by the wholesale or purchasing section of the company.

When supply is made from the wholesale or purchasing section to a company veterinarian, obligations to record transactions must be taken over by the veterinarian at that point. A veterinarian must authorise the purchase of all PAR medications.

PAR medications supplied to the company veterinarian must be held physically separated from the wholesale drug supplies of the authorised wholesale/purchasing section of the company. This can be at the same location, but the PARs supplied to the company veterinarian must be in a lockable cupboard or room accessible only to the veterinarian or the assistant. Veterinarians are required by law to keep a record of the drugs in their possession.

In the case of a routine preventative program under the control of the veterinarian, the date of supply, the drug used, the farmer name and volume of supply must be recorded and authorised. A stocktake must be undertaken often enough to reconcile incoming and outgoing medications.

The use of depots to hold drug stocks on farms remote from the veterinarian may be permitted if veterinarians can demonstrate that they maintain absolute control over these depots. This must be done by limiting access, appointing an assistant to be responsible in the absence of the veterinarian, maintaining an inventory of stocks in and out, auditing that inventory regularly, and ensuring that no supply occurs without the authority of the veterinarian. A similar situation must apply to a serviceperson’s car. In addition, PAR medications held in a serviceperson’s car should be stored out of public view in a suitable container and be limited to the medications that have been authorised by the veterinarian. The veterinarian remains accountable for the quantity of each PAR in the serviceperson’s possession. The medications held by the serviceperson can only be obtained from a veterinarian’s stock and must be correctly labelled as outlined above.

Out-of-state veterinarians supplying PAR medications must comply with professional intervention and veterinary care and supervision of recipient stock requirements as described above and must adhere to relevant state legislation.

**Obligations of government veterinarians**

All veterinarians, including government veterinarians, can only receive PAR medications:

- from a pharmacist, following the issuing of a prescription,
- from a veterinarian, or
- on an order from an authorised wholesale supplier.

**Feed mills/premix suppliers**
Feed mills and premix suppliers may be authorised or licensed to receive and store PAR medications (as wholesalers) and must comply with the conditions attached to the licence. The feed mill/premix supplier may supply feed/premix in which antibiotics are incorporated at registered S6 or exempt levels for unrestricted sale without veterinary intervention. Where the feed/premix contains PAR medications, it may only be supplied on and in accordance with the full written instructions of the veterinarian supervising the birds to be treated.

Feed mills/premix suppliers may not, under any circumstances, supply PAR medications other than incorporated in feed or premix.

Persons mixing their own feed who require a PAR medication for their flock must acquire the PAR from a pharmacist (on a veterinary prescription), from a veterinarian, or from a feed mill as a feed concentrate (in accordance with full written instructions from the veterinarian responsible for the stock to be treated). The concentrate may contain a PAR at such a level that it can be further mixed to produce medicated feed containing that drug at a specified therapeutic or prophylactic level.

The veterinarian (including those in the employ of a feed mill if they have direct supervision of birds to be treated) must comply with the requirements of professional intervention and veterinary care and supervision of recipient stock as given above to be involved in the supply of PAR medications to the end user. Such supply by veterinarians must be done in their own names and requires the recording of receipt and supply as would normally apply to PAR (S4) medication usage.

**Responsibilities of the veterinarian in the supply of a non-PAR antibiotic**

Veterinarians are not legally required to be involved in the supply and use of non-PAR medications.

However, veterinarians are professionally trained in the diagnosis of bacterial conditions and the requirements for antibiotic use. They are therefore usually involved in the decision-making process for use of non-PAR antibiotics, including growth promotants, in the poultry industry.

With the increasing public debate about the use of antibiotics in food-producing animals and the possibility that human health hazards can be created via the occurrence of antibiotic-resistant bacteria or resistance genes that develop in animals veterinarians should ensure that Prudent Use Guidelines for Antibiotics (whether PAR or non-PAR antibiotics) are understood, and should encourage adherence to these guidelines.

**‘Off-label’ use of antibiotics**

*Off-label* use of both PAR and non-PAR antibiotics by registered veterinarians should be confined to situations in which medications used according to label instructions have been ineffective and there is scientific evidence, including residue data, supporting the *off-label* use pattern.

Control-of-use legislation relating to *off-label* use of antibiotics currently differs between states. Veterinarians should be familiar with the requirements of the state(s) in which they are registered to practise. However, all states have agreed to *harmonisation conditions* for control-of-use legislation. Agreed conditions include:

- only a registered veterinarian may vary the label instructions for antibiotic use
- off-label use in poultry flocks will be permitted only if the antibiotic is registered in another major food-producing animal species
- veterinarians will not be able to vary label instructions contrary to a *label restraint* for antibiotic use in poultry (e.g. *Not to be used in poultry producing eggs for human consumption*)
- veterinarians must supply written instructions for use and withholding periods
veterinarians may be liable if violative residues occur.

**Prudent use guidelines for antibiotic use**

Guidelines have been produced by international organisations and various countries to assist with the proper management of antibiotic use and particularly to limit the occurrence of antibiotic resistance. The Guideline jointly developed in 1999 by the World Veterinary Association (WVA), the International Federation of Agricultural Producers (IFAP/FIPA) and the World Federation of the Animal Health Industry (COMISA), titled Prudent Use of Antibiotics: Global Basic Principles, is an example of an appropriate guideline for the poultry industry.

**Other relevant policies and codes of practice**

2.4 Responsible use of veterinary medicines on farms

Date of ratification by AVA Board: 1 January 2005

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1. [http://www.worldvet.org/manuals/T-3-2.pdf#search=%22prudent%20use%20of%20antibiotics%20world%20veterinary%20association%22](http://www.worldvet.org/manuals/T-3-2.pdf#search=%22prudent%20use%20of%20antibiotics%20world%20veterinary%20association%22)
2.7 Veterinary use of compounded pharmaceuticals

Policy

Compounded medications can be used if there is no alternative registered veterinary product available or if the veterinarian considers use of such compounded medications is scientifically justified. Use of compounded drugs in food producing species should be avoided unless information exists to assure avoidance of illegal drug residues.

Background

Compounding refers to the process by which tailored medications are produced to suit individual circumstances. Compounding allows a veterinarian to achieve optimal clinical outcomes in cases where registered preparations are not appropriate or are not available.

Registered veterinary products must undergo a rigorous assessment by the Australian Pesticides and Veterinary Medicines Authority (APVMA) as part of the registration process. The APVMA’s registration process involves an assessment of the product to ensure that it works as intended and the scientific data confirms that ‘when used as directed on the product label it will have no harmful or unintended effects on people, animals or the environment’ APVMA registration indicates that the product has undergone a quality assurance assessment, is manufactured to strict GMP guidelines and should be effective and safe when used as directed.

Products that are compounded by a veterinarian or by a pharmacist on the prescription of a veterinarian are exempt from registration by the APVMA and are therefore not subject to the testing regimens and registration process that registered veterinary medicines must adhere as required by the APVMA. While pharmacists and veterinarians are not overseen by the APVMA, they are regulated under state legislation and bound by professional codes of conduct. Compounded medications have not been reviewed by the regulatory authority for efficacy and safety. There will also have been no review by the regulatory authority of the manufacturing and production standards or the materials and methods used to produce the compounded product. Refer to APVMA document: Requirements for compounding veterinary chemical products.

Compounding may only be performed by registered veterinary surgeons or registered pharmacists. The compounding of medications is permitted under the current poisons/therapeutic goods legislation in all states, which allows veterinarians to prescribe products which are not registered or in forms which are not registered. See Table 1 for guidance on relevant state legislation.

A decision to use a compounded product should be based on general principles of prescribing medications as contained in AVA Prescribing and Dispensing Drugs Guidelines, and must comply with individual state legislation relating to the supply and use of veterinary medicines. As with all veterinary medicines, compounded products may only be prescribed for the treatment of a specific condition in an animal under the veterinarian’s care.

When recommending the use of any medication, a veterinarian should provide the client with information about treatment options, including advice on what product options would best suit the patient. In most cases the reason that a veterinarian will choose to have a product compounded is that there is no equivalent registered product available.

Manufacturers of registered products would ordinarily insure against product liability claims. Producers of veterinary medicines, whether registered or unregistered, should maintain an appropriate level of product liability insurance. Many pharmacies also have appropriate insurance arrangements in place. A veterinarian using a compounded veterinary pharmaceutical must have a clear understanding of when insurance will and will not cover liability claims for use of a compounded pharmaceutical, as there are no registered label...
indications on which an insurance company can base their decision on whether a product was used in accordance with best practice.

It is recommended that veterinarians considering using compounded products maintain a professional relationship with a compounding pharmacist to continue to develop their knowledge and understanding of compounding pharmaceuticals.

Compounding of a pharmaceutical by a veterinarian or pharmacist may potentially infringe current patents. A veterinarian prescribing compounded medications should have an understanding of the potential legal implications of such infringement.

Table 1: State and territory legislations relating to control of use of veterinary chemicals.

<table>
<thead>
<tr>
<th>Vet Chemical Control</th>
<th>QLD</th>
<th>NSW (DPI)</th>
<th>ACT</th>
<th>VIC</th>
<th>TAS</th>
<th>SA</th>
<th>WA</th>
<th>NT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of unregistered products (including compounded) permitted in major FPS by vets only (or persons under vet direction)?</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes*</td>
</tr>
<tr>
<td>But Single animal only</td>
<td>But Single animal only</td>
<td>Permit only</td>
<td>But Single animal only</td>
<td>Permit only</td>
<td>But Single animal only</td>
<td>Permit only</td>
<td>But Single animal or low risk or CVO approved chemical</td>
<td>Permit only</td>
</tr>
<tr>
<td>Use of compounded products by vets permitted in companion animals and other FPS?</td>
<td>Yes</td>
<td>Yes</td>
<td>No^</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes*</td>
</tr>
<tr>
<td>But Single FPS animal</td>
<td>But Single FPS animal</td>
<td>Contact Dept. of Environment</td>
<td>But Single FPS animal (unless label or Order prohibits)</td>
<td>Contact Dept. of Environment</td>
<td>But Single FPS animal (unless label or Order prohibits)</td>
<td>Contact Dept. of Environment</td>
<td>But Single FPS animal or low risk or CVO approved chemical</td>
<td>Contact Dept. of Environment</td>
</tr>
<tr>
<td>Use of compounded products by vets permitted in companion animals and other FPS even if suitable registered product available?</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes*</td>
</tr>
<tr>
<td>But Single FPS animal</td>
<td>But Single FPS animal</td>
<td>Contact Dept. of Environment</td>
<td>But Single FPS animal (unless label or Order prohibits)</td>
<td>Contact Dept. of Environment</td>
<td>But Single FPS animal (unless label or Order prohibits)</td>
<td>Contact Dept. of Environment</td>
<td>But Single FPS animal or low risk or CVO approved chemical</td>
<td>Contact Dept. of Environment</td>
</tr>
</tbody>
</table>

FPS = food producing species.

*Single is defined in the legislation of each jurisdiction.
References

APVMA website: www.apvma.gov.au

To search for registered product http://services.apvma.gov.au/PubcrisWebClient/welcome.do


State and Territory Control of Use legislation

Most jurisdictions also use Orders and Notices to give effect to their controls.

QLD  Chemical Usage (Agricultural and Veterinary) Control Act 1988
      Chemical Usage (Agricultural and Veterinary) Control Regulation 1999
      Agricultural Chemicals Distribution Control Act 1966
      Agricultural Chemicals Distribution Control Regulation 1998

NSW  Pesticides Act 1999
      Pesticides Regulation 1995
      Stock Medicines Act 1989
      Stock Medicines Regulation 2005

ACT  Environment Protection Regulation 2005 (clauses 54 & 55)

VIC  Agricultural and Veterinary Chemicals (Control of Use) Act 1992
      Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007

TAS  Agricultural and Veterinary Chemicals (Control of Use) Act 1995
      Agricultural and Veterinary Chemicals (Control Of Use) Order 2001 (Refers to the Code of Practice for the Supply and Use of Veterinary Chemical Products)

SA  Agricultural and Veterinary Products (Control of Use) Act 2002
      Agricultural and Veterinary Products (Control of Use) Regulations 2004
      Livestock Act 1997
      Controlled Substances (Pesticides) Regulations 2003

WA  Biosecurity and Agricultural Management Act 2007
      Health (Pesticides) Regulations 1956
      Veterinary Chemical Control and Animal Feeding Stuffs Regulation 2006

NT  Agricultural and Veterinary Chemicals (Control of Use) Act 2004
      Agricultural and Veterinary Chemicals (Control of Use) Regulation
2.8 Acupuncture

Position Statement

There is significant diversity of opinion within the veterinary profession regarding scientific evidence in support of the efficacy of veterinary acupuncture. The AVA encourages appropriately designed and conducted studies to help identify those situations and applications of acupuncture that may benefit veterinary patients.

Veterinarians have a duty to provide the best available care for their patients and to be aware of all treatment options. They also have a duty to select treatment options based on the best available evidence.

Veterinarians may choose to use or refer a patient for acupuncture as an adjunctive treatment on animal patients after a full diagnostic workup and informed owner consent. Acupuncture on animals involving skin penetration using needles or the injection of substances should only be performed by registered veterinarians who have appropriate training.

Background

Acupuncture by definition is the insertion of needles into specific points on the body. In addition to the insertion of acupuncture needles, other methods of stimulating acupuncture points are acupressure, aquapuncture, gold bead implants, and laser or electro-acupuncture. It is incumbent upon veterinarians practising acupuncture that they follow sound principles of evidence-based medicine.

Training of veterinarians to perform acupuncture is available through several programs and teaching institutions. The AVA encourages veterinarians who utilise acupuncture in their clinical practice to undertake appropriate training programmes as recommended by the Australian Veterinary Acupuncture Group.

Guidelines

These guidelines form the minimum requirements of veterinary acupuncture practitioners:

Acupuncture should not be used to the exclusion of routine clinical treatments that are indicated in the individual case and the owner should be informed of all possible treatment options before a course of acupuncture is given.

A full patient history should be obtained.

Acupuncture treatment should only be given after a veterinary diagnostic investigation has been completed. This process should include any other diagnostic procedures deemed appropriate.

Owner’s consent should be recorded in the patient record.

The patient should be re-evaluated at each subsequent treatment taking into consideration the owner’s observations and the patient’s response.

Acupuncture can be used in conjunction with veterinary medical or surgical procedures.

Veterinarians performing acupuncture must use sterile single use acupuncture needles for each animal.

Animals being treated with acupuncture should not routinely be sedated.

Animals being treated with acupuncture should not be left unattended with needles in situ. At the end of the treatment all needles should be accounted for as they are removed and disposed of appropriately in sharps containers.

Veterinarians should not use or advertise acupuncture as one of their services unless they are suitably trained.

Veterinary acupuncturists accepting referrals from other veterinarians should follow the AVA policy on veterinary referrals.
Other relevant policies or position statements

17.1 Veterinary referrals

19.4 The diagnosis and treatment of animals by non-veterinarians.

References


Date of ratification by AVA Board: November 2010
Part 3- Surgical and other veterinary procedures
3.1 Surgical alteration to the natural state of animals

Policy

Surgical alteration to the natural state of an animal is acceptable only if it is necessary for the health and welfare of the animal concerned. Performance of any surgical procedure for other than legitimate medical reasons is unacceptable.

Background

Many surgical procedures are performed on animals for valid health, welfare and management reasons. Surgical procedures that may be performed on animals which not only do not benefit the health and welfare of the animal but may actually be detrimental, include but are not limited to declawing of cats, dogs and ferrets, routine dewclaw removal in dogs, tail docking in dogs, ear cropping, debarking of dogs, venomoid surgery in snakes, tail docking in cattle and demusking of ferrets.

Some of these procedures have been traditionally carried out by lay operators without due regard to the health and welfare of the animal. All these procedures are painful, and the consequences of the procedure may adversely affect the animal’s health and welfare.

Surgical procedures should be reviewed frequently by the profession, based on veterinary, scientific and ethological considerations. Reviews should not be based solely on sentiment or economics, or be influenced by personal bias and should consider:

- the probability of undesirable events occurring without surgical prophylaxis;
- the prognosis regarding the success of the prophylactic procedure; and
- use of alternative non-surgical procedures that may provide superior or equivalent outcomes.

When surgical intervention is necessary, but is a result of adverse physical characteristics produced by breeding, the veterinary profession has an obligation to:

- notify breeders;
- strongly recommend desexing of these affected animals;
- encourage breeders to use their skills to return animals to a natural physiognomy; and
- attempt to change factors, such as breed standards, that encourage propagation of undesirable traits.

Previous policies now incorporated in this policy

6.8 Tail docking and ear cropping of dogs
6.9 Debarking of dogs
6.10 Claw removal in dogs, cats and ferrets
6.11 Demusking of ferrets
14.15 Venomoid surgery in snakes

Other relevant policies and position statements

8.2 Tail docking of cattle
10.1 Pizzle dropping

6.7 Desexing (surgical)

10.6 Surgical Mulesing

12.1 Beak trimming of commercial poultry

Date of ratification by AVA Board: February 2009
3.2 Pain and analgesia

Policy

Pain in animals should be relieved whenever possible.

Euthanasia is indicated where an animal is suffering, or is likely to suffer, unmanageable pain.

Background

There is sound scientific evidence that animals feel pain (Le Bars et al 2001). Injuries, disease conditions and many procedures cause pain in animals.

Pain is understood to have survival value. Where analgesics are unavailable (as in the wild), acute pain can change behaviour and prevent further damage, but if pain is unrelieved, it can lead to destructive behaviour and suffering.

Because pain cannot be directly measured in animals, it is necessary to rely on physiological measurements and behavioural observations for indirect evidence of their pain.

Acute pain results from a traumatic, surgical, or disease process that is abrupt in onset and relatively short in duration. The pain generally does not outlast the healing process; it can generally be alleviated by analgesics.

Chronic pain results from long-standing physical disorders or emotional distress; it is usually slow in onset and has a long duration. Chronic pain is often more difficult to treat than acute pain and may require extensive diagnostic investigation and multiple therapeutic approaches.

Guidelines

If an animal is suffering pain, or painful procedures are to be carried out, the veterinarian responsible for its care should recommend or use appropriate methods— including drugs, behavioural and physical therapy—to relieve pain and ensure the effectiveness of the pain relief and quality of life.

Therapeutic strategies should be aimed at improving an animal’s ability to cope with pain, thereby decreasing suffering. Complete alleviation of an animal’s pain may not be achievable.

Treatment of pain can be considered successful if the animal is able to engage in relatively normal activities, such as eating, sleeping, ambulating, grooming and interacting with other members of its species or its care-givers.

References


Date of ratification by AVA Board: January 2006
3.3 Code for infection control

Policy

The Australian Veterinary Association (AVA) supports practices that:

ensure the safety and welfare of all animals under veterinary care
provide a safe and healthy working environment for owners, veterinarians and staff.

Animal hospitals and practitioners have a duty of care and must take reasonable action to safeguard animals, staff and the public from infection. Employers must establish procedures and provide information, training and supervision, especially for infection control.

Veterinarians must be conscious of the potential for zoonoses to present as inapparent infections in animals and of their responsibilities regarding cross infection among animal patients. They must recognise the potential for pyrogens and pathogens to be introduced through inadequate infection control during administration of medication.

Background

The guidelines below set a minimum standard for infection control in animal hospitals and in the field. They provide broad principles and a framework for developing infection control procedures to prevent spread of diseases between animals and from animals to staff. Appropriate procedures will vary according to the size and nature of the practice and the facilities.

The attention of practitioners to infection control may be an issue in any proceedings, civil or public, relating to questions of liability.

Guidelines

General precautions

Universal precautions have been adopted in human medicine to reduce the risk to health care workers from blood borne pathogens such as human immunodeficiency virus (HIV), hepatitis B virus and hepatitis C virus.

Australia has adopted a broad definition of universal precautions to cover procedures involving all blood and body substances. These precautions are applied universally to all patients, regardless of their infectious status. They include:

- the appropriate handling and disposal of contaminated sharps and waste
- the use of protective barriers (such as gowns and gloves)
- practices to protect patients and health care workers from parenteral, mucosal and non-intact skin exposure to blood and body substances.

Similar precautions are appropriate for veterinary practices. Additional disease-specific precautions may be required for animals known or suspected to be infected with pathogens that are transmitted by contact, airborne or droplet routes.

Veterinary practice may involve surgical interventions being undertaken in field or other non-theatre situations and with lay assistance. In these situations, professional judgment about potential risks must be used when deciding on the appropriate procedures to use.
Specific precautions

Infection control practices for all parenteral procedures should incorporate the following precautions:

Hand washing

Hand washing is the most important measure in infection control. This may present problems in field situations, and special arrangements may be necessary.

Hands or other skin surfaces that are contaminated with blood or body substances should be washed as soon as practicable. Hands should be washed and dried before and after patient care, except where treatment is urgent or washing facilities are not readily available. Hands should also be washed after removal and disposal of gloves.

Hand-washing facilities should be equipped with soap, running water and hand-drying facilities. An alcoholic hand rub may be used in emergencies or when hand-washing facilities are not readily accessible.

Protective barriers

Protective barriers (eye shields, gloves, gowns and masks) should be used when there is potential for exposure of the operator to blood or body substances (depending on the risk and nature of the exposure) and when there is a risk of infection to the animal or to the operator. In field situations, the animal patient may need to be protected from infection from the environment. However, some procedures may not warrant the use of barriers.

Gloves should be worn when handling potentially infected blood and body substances and especially when the skin of the hands has been broken (e.g. small cuts or abrasions). Cuts and abrasions on exposed skin should be covered by a water-resistant dressing. Where lesions cannot be covered, medical advice may be required, depending on duties.

Gloves should be changed and discarded if torn or punctured or where there is a risk of transferring infection from one animal patient to another or to the operator. General purpose utility gloves (rubber household gloves) should be used for housekeeping tasks, including:

- instrument cleaning
- decontamination procedures
- handling chemical disinfectants
- tasks involving potential blood contact or gross microbial contamination that may lead to nosocomial or zoonotic conditions, regardless of origin or degree.

General purpose utility gloves should be washed in detergent after use, or discarded if they are peeled, cracked, discoloured, torn, punctured or have other evidence of deterioration. Consideration should also be given to treatment of clothing, depending on the level of risk.

Sharps

Sharps must not be passed between veterinarians and other persons unless the surgical procedure requires this.

Needles should not be removed from disposable syringes for disposal, or be deliberately broken or otherwise manipulated by hand, unless it is necessary to remove the needle for technical reasons or to bend needles for a particular procedure.
Needles should not be resheathed, particularly if there is a potential zoonotic risk, except in special circumstances (such as when a sharps bin is not available and the zoonotic risk is low). Where resheathing is required, the needle must be properly recapped, the sheath must be held in the fingers and either a single-handed technique, forceps or a suitable protective guard must be used.

Syringes with or without needle must not be submitted to pathology laboratories for examination. It may be illegal to do so and puts laboratory workers at risk. Samples must be placed in appropriate containers.

A puncture-resistant tray should be used to transfer sharps.

Non-reusable sharps must be disposed of in a puncture-resistant sharps container immediately after use.

Reusable sharps must, immediately after use, be placed in a puncture-resistant container especially kept and labelled for that purpose. Reusable sharps containers must be cleaned before reuse.

**Contaminated waste**

Contaminated waste may include cadavers, body parts or tissues, microbiological waste or pathological waste, or any material or item (for example, sharps, dressings or disposable linen) that is soiled or contaminated with blood or other body substances and that is likely to cause infection or injury to people. Contaminated waste must be segregated, placed in a suitable leak proof bag or container and contained at the place where it was generated, before being disposed of in an appropriate manner. Packing should be adequate to protect waste handlers who may not be aware of the nature of the waste. Contaminated waste storage facilities should be covered and lockable. Access should be restricted to personnel involved in the disposal process.

Staff should avoid exposure to contaminated waste by wearing protective clothing, careful handling, and use of trolleys for transporting bags and containers wherever practicable. Gloves should be worn when handling contaminated waste bags and containers.

**Special clinical precautions**

Aseptic techniques must be used for invasive procedures and the administration of sterile medications and solutions. Veterinary surgeons should ensure that they and persons under their supervision take appropriate occupational health and safety and clinical precautions.

**Sterile medications and solutions**

A medication or solution should be taken from a multidose vial or ampoule only when necessary. Precautions must be taken to prevent the injection of contaminated material or fluid into multidose vials or ampoules. These precautions include use of sterile needles, decontamination of surfaces, and storage away from potential contaminants. After withdrawing a solution from a multidose vial or ampoule, the needle and syringe should be discarded, and surfaces should be decontaminated.

The use of multidose sterile diluent for reconstitution of vaccines is strongly discouraged for single dose extraction. Therapeutic products and diluents used must be manufactured for the purpose. Tap water (autoclaved or not) must not be used as a diluent for vaccines or for other parenterally administered products. In field and herd or flock situations, procedures should be based on analysis of potential risks.
**Anaesthetic procedures**

Where anaesthetic machines are used, anaesthetic products should comply with the following requirements:

The circuit tubing should be cleaned, disinfected, rinsed and dried at least daily. Endotracheal tubes should be cleaned, disinfected and rinsed between patients.

Animals with a contagious respiratory disease should not be placed onto an anaesthetic machine unless absolutely necessary. Veterinarians should consider the use of bacterial filters if infectious animals must be anaesthetised.

If there is known contamination with an infectious agent that requires high-level disinfection, the CO2 absorbers and hardware should be cleaned and decontaminated.

**Patients with communicable diseases**

Veterinarians should consider the order of placement on the operating list of patients with known communicable diseases or zoonoses. If a patient has a communicable disease or zoonosis that is transmitted by contact, airborne or droplet routes, additional precautions may be required. Disinfection procedures, including space and surface disinfection, may need to be adjusted to meet the circumstances.

**Instruments and equipment**

Best surgical practice and quality assurance should be used.

Instruments and equipment that come into contact with intact skin (eg stethoscopes) may need to be cleaned before they are used.

Instruments that come into contact with nonsterile tissue (other than intact skin) must be disinfected before they are used. These instruments include laryngoscopes, one-way breathing valves, pneumotachograph screens, mouth shutters, oesophageal balloons, respiratory therapy equipment and temperature probes.

Instruments and equipment that enter, or are capable of entering, tissue that would be sterile under normal circumstances, or the vascular system, must be sterilised before they are used. This includes surgical equipment, catheters, laparoscopes, arthroscopes and injection needles. Where such equipment is to be reused, it should also be free from pyrogens and biological and chemical contaminants.

In field and herd or flock situations, procedures should be based on analysis of potential risks.

All thermometers should be appropriately cleaned and disinfected between patients.

All endoscopes should be appropriately cleaned and disinfected before use and between patients.

Resterilisation of disposable single-use syringes for administration of parenteral injections is strongly discouraged.

**Cleaning, disinfection and sterilisation of instruments and equipment**

All mechanical equipment used for disinfection and sterilisation will require validation. Validation should meet statutory requirements and manufacturers’ specifications.
The manufacturer’s instructions should be checked for compatibility of the instrument or equipment with the method of disinfection/sterilisation.

**Cleaning**

All instruments and equipment must be cleaned before disinfection or sterilisation to remove organic matter and other residue, including pyrogens or toxins. Cleaning must involve water, mechanical or physical action such as ultrasonic cleaners, and a cleaning agent such as detergent or proteolytic enzyme. All channels or bores of instruments or equipment such as rigid or flexible endoscopes must be cleaned. Equipment should be cleaned before being sent for servicing by the supplier, manufacturer or service organisation.

**Disinfection**

Disinfection may be achieved by a number of methods. Thermal disinfection should be used in preference to chemical disinfection. Other methods such as radiation are appropriate for some materials (see **Sterilisation** below).

The standard minimum surface temperature/time relationship for disinfection is as follows:

<table>
<thead>
<tr>
<th>Surface temperature (°C)</th>
<th>Minimum disinfection time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>2</td>
</tr>
<tr>
<td>75</td>
<td>10</td>
</tr>
<tr>
<td>70</td>
<td>15</td>
</tr>
</tbody>
</table>

Chemical disinfection must be used only when:

- thermal sterilisation is unsuitable or unavailable
- thermal disinfection is unsuitable or unavailable
- low-temperature chemical sterilisation is unavailable or is not recommended by the instrument or equipment manufacturer.

Glutaraldehyde is suitable for disinfection. To disinfect with glutaraldehyde:

- immerse the item for the period of time, recommended by the manufacturer, to reliably kill *Mycobacterium tuberculosis*
- ensure all surfaces and channels are in contact with the solution for the stated time
- rinse after disinfection by a method that will not recontaminate the instrument or equipment
- dry by a method that will not recontaminate the instrument or equipment
- renew the solution according to the manufacturer's recommendations.

When using glutaraldehyde, workers must wear protective attire to minimise skin sensitisation and prevent splashing of the eyes. Use of glutaraldehyde must be restricted to a controlled area in a well-ventilated room that has an adequate mechanical exhaust system.

**Sterilisation**
All packaged and wrapped sterile instruments and equipment should be appropriately stored to ensure that sterility is maintained for the acceptable shelf life.

Sterilisation can be achieved by four methods:

Steam under pressure (moist heat) sterilisation

Ensure that the recommended temperature/pressure/holding time is reached when processing items.

<table>
<thead>
<tr>
<th>Temperature (°C)</th>
<th>Pressure, kPa (psi)</th>
<th>Holding time plus safety factor (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>121</td>
<td>103 (15)</td>
<td>15</td>
</tr>
<tr>
<td>126</td>
<td>138 (20)</td>
<td>10</td>
</tr>
<tr>
<td>132</td>
<td>186 (27)</td>
<td>4</td>
</tr>
<tr>
<td>134</td>
<td>206 (30)</td>
<td>3</td>
</tr>
</tbody>
</table>

Manufacturers’ instructions for effective and safe use of steam sterilisation must be followed.

Dry heat sterilisation

Maintain instruments and equipment in a dry air oven (dry heat steriliser — hot air type) at 160°C for a minimum of one hour holding time. Manufacturers’ instructions for effective and safe use of dry heat sterilisation must be followed.

Low temperature chemical sterilisation

Chemicals are used mostly for heat-sensitive items. They are toxic and irritant, and sterilised equipment should be rinsed with sterile water before contact with tissues. Glutaraldehyde (2%) is the most widely used liquid sporicidal chemical suitable for this task. Most bacteria and viruses are killed within 10 minutes, but several hours contact is required to kill most spores, and up to 10 hours is required to kill all spores. These times assume the removal of all organic matter prior to contact with glutaraldehyde. The label directions should be followed because these products can be dangerous. The following table provides contact times for low-temperature chemical sterilisation.

Sterilisation times using chemicals at room temperature

<table>
<thead>
<tr>
<th>Chemical sterilising agent</th>
<th>Exposure time (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8% formaldehyde, aqueous</td>
<td>10</td>
</tr>
<tr>
<td>8% formaldehyde in 17% alcohol</td>
<td>10</td>
</tr>
<tr>
<td>2% glutaraldehyde</td>
<td>10</td>
</tr>
<tr>
<td>2% glutaraldehyde, alkaline</td>
<td>10</td>
</tr>
</tbody>
</table>
a Special equipment is required for sterilisation with ethylene oxide gas.

*Gamma irradiation*

This requires special facilities.

*General cleaning*

Cloths, mops and mechanical washing devices should be clean and should be stored dry between use. Work surfaces should be cleaned regularly and when soiling or spills occur, or when visibly soiled. A neutral detergent is recommended, but the choice of disinfectant will depend on the material to be disinfected.

*Additional precautions*

*Strict isolation*

Strict isolation is designed to prevent transmission of highly contagious or virulent organisms that may be spread by airborne contact transmission. Strict isolation requires a separate room with appropriate air flow. Masks, gowns and gloves should be worn by people entering the room. Design of facilities, including air flow, drainage, feeding systems and method of human access, is important.

*Contact isolation*

Contact isolation is designed to prevent transmission of highly transmissible infections or colonisations that do not warrant strict isolation and are not transmitted by airborne droplets. Conditions or diseases included in this category are spread primarily by close and direct contact. Contact isolation should be used for young animals with acute respiratory infections or skin infections that are discharging and cannot be adequately covered with dressings. Contact isolation requires a separate room, if available. Gowns and gloves should be available.

*Respiratory precautions*

Respiratory precautions are designed to prevent transmission of communicable diseases over short distances through the air (droplet transmission) and may involve careful design, location and choice of stables, animal cages or rooms.
Quality management

Where legislation sets minimum standards, quality assurance is based on continuous improvement and best practice through the use of documented standard operating procedures. Adequate quality management is essential to the practice of good infection control. Animal hospitals should incorporate infection control in their quality management programs. A manual suited to the size, complexity and nature of the establishment should be developed and used for training and practice management.

References


Date of ratification by AVA Board: 17 Oct 1999
3.4 Use of projectile syringe equipment

Policy

Systems for the remote injection of drugs in livestock, wild animals or companion animals can be used safely and humanely, provided that the people involved in the procedure have required licensing, skills, competencies and knowledge. Licensing is a necessary legal requirement. Non-veterinarians who need to use projectile syringe equipment must be under the direct supervision of a veterinarian.

Background

Significant developments have been made in the design and use of systems for the remote injection of immobilising drugs, vaccines and other medications.

Veterinarians and non-veterinarians must have specialised skills and knowledge before any attempt is made to use such equipment on an animal. New South Wales has an accreditation course to ensure that people are appropriately trained. Other states are encouraged to adopt a similar program.

It is recognised that non-veterinarians may be required to use or deploy remote injection devices when veterinarians may lack fire-arms skills or when a veterinarian may not be readily available in an emergency situation. Human safety issues must also be considered in the use of projectile syringes, particularly when immobilising drugs are being used, including the retrieval of projectile syringes.

Permits must be obtained where appropriate from the relevant authorities before using projectile firearms. All precautions should be taken to minimise risks to human safety or to the animal’s welfare when using remote injection devices.

The selection of appropriate immobilising drugs and drug dosages requires careful consideration of a range of variables, including species, the individual animal (age, gender, mental state, health status), and the effect required. The Australian Veterinary Association’s special interest group Australian Veterinary Conservation Biologists (AVCB) can provide advice and assistance on the selection and use of projectile syringe equipment, and on drugs appropriate for the chemical restraint of a range of species.

Date of ratification by AVA Board: 8 July 2011
3.5 Electroimmobilisation

Position Statement

Electro-immobilisation for veterinary interventions should only be used for animal restraint purposes where there is no feasible alternative. Use of the instrument should take into account the welfare of the animal and the safety of the operator. The Australian Veterinary Association (AVA) recommends that electro-immobilisation be conducted by veterinarians as it involves complex aspects of animal welfare.

Background

Electroimmobilisation involves passing a pulsed, low-voltage electrical current through the body of an animal. Usually, electrodes are applied to two parts of the animal’s body and the electric current is delivered along the animal’s spine. The electrical current induces contraction of the muscles supplied by the nerves of that segment of the spine, preventing voluntary movement of the animal. Movement is regained as soon as the current is switched off.

Electro-immobilisation devices have been used to immobilise animals in order to perform animal husbandry procedures when there are perceived risks to the safety of the handler or the animal with other forms of restraint. Electro-immobilisation should not be used as a substitute to an effective holding and restraining facilities.

Producers should be encouraged to select for good temperament in their livestock breeding programs to reduce the need for such devices. At present, there is no evidence to suggest that electro-immobilisation induces analgesia. There is evidence that it does produce avoidance behaviour in some animals, which indicates that it may cause pain and suffering.

Other relevant policies and position statements

3.2 Pain and analgesia

References


Ratified by the AVA Board: October 2010
3.6 Embryo collection and embryo transfer

Policy

Embryo collection and embryo transfer in animals should only be conducted by registered appropriately trained, veterinarians or persons under the direct and immediate supervision of a registered veterinarian.

Background

Embryo collection and transfer should only be performed by appropriately trained registered veterinarians for the following reasons:

The surgical procedures involve anaesthesia and penetration of the abdominal cavity and non-surgical techniques requiring sedation and penetration of internal organs, demand a knowledge of anatomy, a high level of skill, competence and responsibility (as expected of registered veterinarians). (Including transvaginal ultrasound-guided oocyte collection). Collection also involves professional assessment of the disease status of the donor animal/s. In addition, both surgical and nonsurgical procedures depend on obtaining and using restricted prescription drugs for multiple ovulation and synchronisation embryo transfer. Embryo transfer is an act of veterinary science for the following reasons: Surgical procedures involve anaesthesia and penetration of the abdominal cavity. In addition, nonsurgical procedures, which have reached an advanced stage of development, frequently involves tranquillisation, epidural anaesthesia and oestrus synchronisation depend on obtaining and using restricted drugs.

Other relevant policies and position statements

7.4 Artificial breeding of horses and related species

Date of ratification by AVA Board: August, 2010
3.7 Collection of semen from animals by electroejaculation

Policy

To ensure animal welfare, electroejaculation should be used only by, or under the supervision of, a veterinarian with:

- appropriate training in the use of the equipment
- an understanding of, and ability to recognise and manage, potential adverse outcomes.

Electroejaculation is used as a normal management procedure for collecting semen.

The equipment and procedures used should be appropriate for the species and size of the animal.

Background

Electroejaculation is necessary for evaluating the reproductive status of animals and for collecting semen. Electroejaculators achieve their effect by localised electrical stimulation of the nerves controlling ejaculation and emission. Inappropriate use of the procedure by unskilled persons may cause significant stress and trauma to animals. Operators therefore require training in achieving appropriate stimulation without causing adverse effects on the animal’s welfare.

Guidelines

Comprehensive information on the collection of semen from bulls may be found in the publication of the Australian Cattle Veterinarians, Evaluating and Reporting Bull Fertility Entwistle K and Fordyce G (2003).2

Date of ratification by AVA Board: 15th February, 2008

Part 4 - Euthanasia
4.1 Marine mammal euthanasia

Policy

Veterinarians attending a whale stranding or other emergency affecting free-living marine mammals (such as injury to animals or oil spills) have a duty of care to take all reasonable measures to ensure the survival and welfare of the animals.

Veterinarians may euthanase an animal if:

in their opinion, the animal is injured or diseased or otherwise suffering, and there is reasonable belief that the injury, disease or other abnormality will cause the animal continued and excessive pain and suffering.

The method chosen for euthanasia should be at the discretion of the veterinarian, and must be rapid and humane. If this is not possible (for example, as is the case in some circumstances with large whales), then these animals should be left to die rather than have their suffering increased by inappropriate attempts to kill them.

This policy applies to all species of marine mammals — cetaceans (whales and dolphins) and pinnipeds (seals and sea lions).

Background

At various stages of marine mammal emergencies, the euthanasia of individual animals may be appropriate for one or more reasons:

- disabling injuries or gross impairment of physiological function
- dependency
- abandoned newborn calves and orphaned suckling juveniles
- just one or two survivors of a large, socially-interdependent group
- where many or most of a herd have died, and the health status of a few survivors must be suspect
- strategic situations
- a compromised, socially significant individual (i.e. the lead animal) has precipitated a mass stranding
- some individuals harmed by stranding are deteriorating despite treatment and rehabilitation, and their continued presence prejudices the survival of the remainder
- poor weather, lack of facilities or isolation prevents a rescue
- species considerations — for example, where an individual of a tropical species has strayed far outside its normal range.

Other indications include the following.

Where a key (socially significant) animal precipitated the stranding and can be identified (i.e. the first animal ashore) and is found to be unfit, it may be euthanased to remove any possibility of its remaining a focus for the other animals and thereby compromising the rescue operation for those animals.

A group of animals prepared for release to sea should not contain any individuals whose fitness has been compromised by the stranding experience, as these animals may be likely to come ashore again and jeopardise the survival of the remainder. Euthanasia may be the
only humane option for unfit individuals, and, for animal welfare reasons, the sooner this is carried out the better.

Those animals that repeatedly strand after release may need to be euthanased.

Veterinary ethics dictate that no veterinarian shall allow an animal to suffer unnecessary, unreasonable or unjustifiable pain. This is supported by animal welfare legislation in most jurisdictions. However, despite the clarity of the guidelines for euthanasia of marine mammals, situations arise in which the decision to euthanase an animal is questioned.

**Guidelines**

The following guidelines should be observed for emergencies affecting marine mammals.

The Australian Veterinary Association (AVA) recommends the guidelines for euthanasia presented by Warneke (see references below) as a useful basis for making decisions about euthanasia at whale strandings.

The decision to euthanase an animal must be made by the veterinarian. The decision is based on evaluation of all the circumstances, including a clinical appraisal of the animals involved. The incident controller and other relevant advisers should be consulted before the decision is made to euthanase an animal.

The veterinarian who concludes that euthanasia of an animal is necessary should seek approval from the responsible state authority. In some jurisdictions, this may be mandatory.

The veterinarian must ensure that only those animals with a reasonable chance of survival are treated for return to the sea. Every attempt must be made to alleviate the suffering of all other animals, including arranging for their prompt euthanasia.

In some circumstances, healthy animals may need to be euthanased—for example, where a large number of animals have come ashore in an isolated location and there is no hope for their rescue, or dependent young are stranded.

The AVA supports the use of lethal injection and/or a brain shot for euthanasia of small whales. It also supports an informed decision not to treat large whales if their situation is hopeless and no suitable method of euthanasia is available. It does not condone the use of asphyxiations or drenching for euthanasia of any cetacean species.

The attending veterinarian should give appropriate professional advice and support to the state official responsible for management of the stranding event (the incident controller).

If possible, animals should be physically identified in some way before their release, so that they can be monitored after release. This will be particularly useful if individuals come ashore again.

As many as possible of those animals that die, including key animals, should be subjected to necropsy, to determine the cause of the stranding or of death.

Attending veterinarians must collect sufficient records (including photographs) to report, publish and disseminate information, findings and experiences from each stranding event.
References


Date of ratification by AVA Board: August, 2010
4.2 Use of euthanasia drugs by non-veterinarians

Policy

Pentobarbitone or similar drugs registered for the euthanasia of animals should only be administered by a registered veterinarian.

Veterinarians should not supply euthanasia drugs.

Background

Legislation in some jurisdictions allows non-veterinarians to obtain and administer these drugs. This is not supported by the AVA. If health authorities authorise or license persons to obtain and use euthanasia drugs, those persons must also be authorised to obtain them directly from veterinary wholesalers or pharmacists to protect veterinarians from liability for their supply and use.

Animals require euthanasia for different reasons. Veterinary oversight is essential to protect the welfare of animals being euthanased. In the case of sick and injured animals it is essential that an appropriate diagnosis is made and an expert prognosis given prior to any decision to euthanase.

Veterinary expertise is also required because some euthanasia drugs are extremely irritant and can cause considerable pain or distress to an animal if they are not injected correctly. Pre-euthanasia tranquilisation may also be necessary in some cases and these tranquillisers are not available to non-veterinarians.

In the case of unwanted animals, such as pound animals or those being culled in remote communities, using an experienced veterinarian will ensure appropriate consideration is given to the welfare of the animals at all times.

When wild/native animals are injured, immediate access to veterinarians with experience in handling and assessing them may be limited. The nearest available veterinarian should be contacted and the best course of action determined in consultation with the animal carer or wildlife staff.

Veterinarians need to be involved with the euthanasia of zoo animals, laboratory animals, animals in breeding establishments or wild animals killed as part of research projects or museum collections. Animal research and feral animal control are special areas where the interests of affected animals are covered by other legislation or Codes of Practice and where personnel are required to be experienced to undertake any euthanasia with or without the use of injectable euthanasia drugs.

Date of ratification by AVA Board: January 2010
4.3 Humane destruction of animals

Figure 1 Humane destruction of cattle. Recommended position for frontal method (suitable for firearm or captive-bolt pistol). Frontal: Midline of the forehead on an imaginary horizontal line drawn between the base of the ears which matches the intersection of imaginary lines drawn from the lateral canthus of the eye to the opposite side horn-base.

Figure 2 Human destruction of horned sheep and rams

A. Recommended position and direction of fire for captive-bolt pistol. The top of the head position may not be suitable, in which case the instrument may be placed behind the poll and aimed in the direction of the animal's muzzle.

B. Recommended position and direction of fire for firearm.
Figure 3 Humane destruction of hornless sheep and rams — recommended position and direction of fire of captive-bolt pistol or firearm

Figure 4 Human destruction of goats — recommended position and direction of fire for captive-bolt pistol or firearm
Figure 5  Humane destruction of deer δ recommended positions and direction of fire for captive-bolt pistol or firearm

Figure 6  Humane destruction of pigs

A  Recommended position for temporal method (suitable for firearm only)
B  Recommended position for frontal method (suitable for firearm or captive-bolt pistol)
Humane destruction of horses—recommended position for frontal method (suitable for firearm or captive-bolt pistol)

The site for penetration of the skull is usually described as the point of intersection of a diagonal line taken from the base of each ear to the medial canthus of the opposite eye. The optimum site is thought to be a little above this point in the midline.
4.4 Euthanasia

Policy

The attending veterinarian must recommend euthanasia for an animal if the animal is suffering and that suffering is not able to be adequately minimised or managed. Euthanasia is the act of inducing humane death with the minimum of pain, fear or distress to the animal involved. It is most often used with terminally unwell or injured animals, where the prognosis is considered hopeless, and should also be considered for animals with intractable behaviour problems.

Background

Suffering of an animal

The veterinary surgeon is in a unique position in being able to express an informed opinion of animal suffering and in being able to assess and advise on the relief of pain and suffering in animals. Veterinary surgeons should have empathy for animals and are trained to recognise signs of disease in animals. Furthermore, through our knowledge of comparative biology and animal behaviour, we are able to compare and evaluate the significance of various signs of pain and distress exhibited by different species. (Nuffield Council on Bioethics, December 2003.)

What is euthanasia?

Euthanasia has a number of definitions, including:

- the process of inducing a painless death (ANZCCART 2001)
- the humane killing of an animal, in the interests of its own welfare, to alleviate pain and distress (NHMRC 2004)
- a gentle death è regarded as an act of humane killing with the minimum of pain, fear and distress (European Commission 1996).

The necessary killing of animals for other reasons (see below) should not be confused with euthanasia, although the methods used and the principles to apply are the same.

When is euthanasia used?

Euthanasia is used:

- when pain, distress or suffering are likely to exceed manageable levels
- when the health or welfare of animals is irredeemably compromised; this can include animals affected by drought or other natural disasters.

Humane killing for other reasons

Human killing is also used:

- for research animals, at the end of studies
- in research, to provide tissues for scientific purposes
- when animals are no longer required for breeding or other specific purposes
for control of vertebrate pests
for slaughter of stock at abattoirs
for strays and unwanted pets that cannot be rehomed.

**Guidelines**

**Essential animal welfare issues**

To maximise animal welfare, the method used for euthanasia must:

- avoid distress and produce rapid loss of consciousness until death occurs
- be reliable, reproducible and irreversible
- be appropriate for the age, species and health of the animal
- require minimal restraint of the animal.

Euthanasia must also:

- be simple to administer
- be safe for the operator and any bystanders
- if possible, be aesthetically acceptable to the operator and any bystanders
- in research, be compatible with the objectives of the study.

**Factors involved in the choice of euthanasia methods**

Factors to consider when choosing the method of euthanasia include:

- species
- age
- size
- temperament
- health status
- number of individuals
- availability of materials and apparatus
- reason for euthanasia
- fate of the carcase
- operator preferences
- technical proficiency of the operator
- compliance with regulatory requirements (e.g. approval may be needed for research projects).

**Post-euthanasia indicators of death**

Indicators of death after euthanasia are:

- no heart beat
- no respiratory activity
- no corneal reflex of the eye
- lack of a blood pressure reading
- involuntary urination or defecation.
Other relevant policies and position statements

4.1 Marine mammal euthanasia

4.2 Use of euthanasia drugs by non veterinarians

4.3 Humane destruction of animals

References


Date of ratification by AVA Board: 10 Aug 2007
4.5 Collection, euthanasia and disposal of the cane toad, *Rhinella marina*

**Position statement**

The great environmental damage caused by the cane toad, *Rhinella marina*, and the potentially harmful nature of this pest species is well recognised in Australia. While accepting the need to eliminate cane toads, the method chosen to kill them should be the most humane available. It is also mandatory that collection and disposal of toads by the general public are carried out in a humane and safe manner.

**Background**

**Collection**

The long-term social impact of training the public to kill wildlife has not been investigated. However, it could have a negative effect on the public's treatment of other animals and lead to a disregard for the value of all Australian wildlife. As well, misidentification could result in the killing of protected amphibians (species other than cane toads) by untrained people. Further information is available in Taylor and Edwards (2005).

**Euthanasia**

Increasingly, veterinarians, environmental organisations and government stakeholders are asked to comment on the most humane method of killing cane toads.

**Disposal**

Procedures are required for members of the public to dispose of cane toads.

**Guidelines**

Toads should be anaesthetised before any physical means of euthanasia is implemented.

The following anaesthetic agents can be used to render the toad unconscious before it is pithed (Wright 2001, HACC 2004, Baier 2006, Mader 2006):

- immersion in iso-eugenol (310–318 mg/L, commercially available as Aqui-S)
- immersion in 10% ethanol.

Acceptable physical means of euthanasia are stunning followed by decapitation, or stunning followed by pithing (Warwick 1986, ANZCCART 2001). These methods are only acceptable if the operator is well trained and experienced in the method.

A sedated toad can be placed in 70% ethanol for euthanasia.

Decapitation alone does not produce rapid unconsciousness in the amphibian and thus its use in conscious animals is not acceptable.

Freezing is not considered an appropriate method of euthanasia (Schaffer 1997, ANZCCART 2001, Wright 2001).

**Other recommendations**
The Australian Veterinary Association recommends that designated stations are created for members of the public to drop off cane toads for euthanasia. Such centres could operate from veterinary clinics, offices of parks and wildlife services, or the premises of other relevant statutory and government departments.

Other relevant policies and position statements

4.3 Humane destruction of animals

13.1 Control of native and introduced animals causing damage to agriculture or habitat

References


Date of ratification by the AVA Board: 15th February 2008

(Bufo marinas, now revised to Rhinella marina, March 2010)
Part 5 - Identification of animals
5.1 Electronic identification of animals

Policy

Radiofrequency identification (RFID) is the preferred method of permanently identifying animals. RFID includes microchips and other electronic tags.

Efficient, practical and functional RFID systems and accredited registries that identify animals and their owners for the purposes of animal recovery, control, management and tracing are essential in the event of a natural disaster, an exotic disease outbreak or biosecurity incident.

It is recognised that there are four integrated components of electronic identification: the identification device, the reader, the registry and the operational procedures for implantation and scanning.

Overview

Standards and procedures for the application of this policy in different situations are described in the suite of Protocols for Electronic Identification of Animals, developed to underpin this policy.

The Australian Veterinary Association (AVA) will develop additional protocols for other categories/species and uses as the need arises.

Background

RFID uses a radiofrequency signal transmitted between an electronic device (transponder or microchip) and a reading device (scanner). The information provided by the transmitted signal identifies the transponder and, by cross-reference to stored data (in a database or registry), identifies the animal carrying that transponder.

There are many types of RFID, as well as different requirements for different categories of animals, industries, species and uses. The effective functioning of these systems involves specific technical and operational considerations.

The AVA is working with regulatory authorities, industry bodies and other interested parties to develop efficient national RFID systems. For some categories of animals, organisations or bodies other than the AVA will be a more appropriate source of animal identification standards.

In all other cases, the AVA protocols for electronic identification of animals shall apply.

AVA members should comply with industry guidelines or standards for animal identification that have been formally endorsed by the AVA.

The AVA has identified four essential elements that must be integrated and controlled in order to provide effective and reliable RFID systems.

The identification device (i.e. the microchip implant or transponder).
The reader (scanner) network.
Database (registry) operation and management.
Defined operational procedures for implantation and scanning.

THE IDENTIFICATION DEVICE (MICROCHIP IMPLANT)
The identification device (microchip) is a small, glass-encapsulated transponder designed to pick up energy from the electrical field created by a scanner. The transponder uses the energy to power an integrated circuit attached to its antenna. The integrated circuit (the actual microchip) creates a signal of specific characteristics, including the transponder's identification data, and transmits it using the same antenna. This signal can be read by a suitable scanner.

All RFID devices for animals must conform to the following criteria.

The lifespan of the device and the transponder must be compatible with the expected maximum lifespan of the animal being identified.

Only ISO-compliant full duplex (FDX)-B technology should be used.

The transponder must carry a unique, unalterable identification number (bits 27–64 of the data stream as defined in the International Standards Organization (ISO) 11784) and an International Committee of Animal Recording (ICAR) issued manufacturer code number (bits 17–26). Thus, the unique number is made up of a 15-digit number of which the first 3 digits are the manufacturer’s code, or in the case of (ICAR) shared manufacturer codes, the first 6 digits comprise the code. If 999 are the first 3 characters of the 15-digit number, it indicates a non-unique test chip that should not be distributed or implanted in animals for identification purposes.

Devices that can be reprogrammed after implantation must not be used for identification purposes.

Microchip implants must also conform to the following criteria as detailed in the Australian Standard AS 5019-2001.1

The implant and transponder shall be robust enough to withstand the anticipated traumas at its implantation site (maximum acceptable failure rate 0.1%) and shall have a lifespan compatible with the expected maximum lifespan of the species being implanted.

The implant shall be biologically inert and come pre-sterilised and individually packaged ready for implantation via a delivery system that maintains the sterility of the device and the implantation process.

Microchips shall be designed and manufactured to minimise migration once implanted.

The instrument used for implantation should be designed in such a way that the sterility of the implant and implantation process is not compromised.

All adverse reactions should be reported to the AVA and the manufacturer.

THE READER (SCANNER) NETWORK

When the scanner is activated it creates an energy field that powers the transponder. The scanner simultaneously receives the signal transmitted by the transponder, either by the same antenna that created the energy field or by a separate receiving antenna. The scanner

interprets the signal, converting it from binary data to decimal or other format, and then
sends it to a display, a computer or other device.

The following general requirements apply to the reader system for microchip implants.

The reader/transponder interface must be responsive enough to enable the identification
details to be read when the reader is passed over the site of implantation. Only backwards
compatible multireaders that read both ISO-compliant FDX-B microchips and all types of
FDX-A microchips should be supplied in Australia until FDX-A microchip implants have been
out of use for at least 20 years (i.e. 2021). The reader should display the complete unique
identification number (i.e. the manufacturer code followed by the microchip identification
number).

Suppliers of readers should have readily available replacement equipment and an efficient
repair service.

Reader systems for microchip implants must also meet the requirements as detailed in the
AS 5019.

Standards for Australian RFID systems should be based on ISO 11784 and ISO 11785, with
significant modifications to suit Australian conditions. The Australian Standards are AS 5018
and AS 5019, with an Informative Annex ZB relating to registry function.

**DATABASE (registry) OPERATION and MANAGEMENT**

Electronic identification of animals is a national concern and, while recognising local
legislative requirements, the AVA believes a national perspective must be maintained at all
times.

The database registry has a central role in all aspects of management, security and
accountability of electronic identification systems. Proper registry management is the only
assurance of the uniqueness of the number of each RFID device and it includes the
management of records of transponders in the country and audit trails of installed devices.

The AVA will only endorse database registry systems2 that comply with AVA protocols for
the species involved and if identification and listing in the database system are for the life of
the animals involved.

To ensure maximum effectiveness, there must be strict adherence to defined operational
procedures and protocols for implantation and application of devices, recording of
information and scanning procedures.

RFID (microchip) distributors must supply all accredited database registries with an
electronic skeleton list, in acceptable format, of all microchip numbers imported into Australia
for implantation and identification purposes, together with the entity name, suburb and state
that has been supplied a particular microchip for implantation in animals kept as pets,
including but not limited to dogs, cats, birds, reptiles or amphibians and non-Thoroughbred
horses.

**OPERATIONAL PROCEDURES FOR IMPLANTATION and SCANNING**

The Operator

In respect of the person implanting the microchip:
The operator should preferably be a veterinarian, because of the knowledge of sterility, anatomy and pain relief required. The accountability of registered veterinarians fosters accuracy, confidentiality and expertise in record keeping.

If state legislation permits implantation by laypersons, this should only be permitted after a suitable training course and under the supervision of a registered veterinarian.

If implantation requires accompanying certification of identification, this must be performed by a registered veterinarian.

Implantation Procedure for All Animal Species

When implanting a microchip the operator must adopt the following procedure:

Prior to implantation with a microchip the animal should be thoroughly scanned to ensure a microchip is not already in place. If a microchip is detected the details should be recorded and the owner advised that the animal has already been identified. The incident should be followed up with the appropriate authorities.

The microchip to be implanted should be scanned to ensure it is functioning and that the number corresponds to its accompanying documentation.

The microchip implant must be implanted in the animal at the correct site (see below).

An appropriate sterile technique for each species should be used to implant the microchip.

Following implantation, the animal should be scanned for the presence of the microchip to ensure implantation has been successful and that the microchip continues to function.

Using the approved application form, the operator should complete animal, owner and transponder details. The microchip number labels provided should be used to avoid transcription errors. Both the operator and the owner or agent must sign the form and the information is then forwarded to the registry.

The operator should forward the identification forms to AVA Accredited Registries.

All adverse reactions should be reported to the APVMA.

Scanning of Animals for Microchip Implants

Scanning of animals for the presence of implanted microchips should follow a standard procedure that takes into account the reader's design and function, scanning pattern, implantation sites and the scanning environment.

All stray animals and those of uncertain ownership should be scanned for the presence of a microchip as an essential part of the initial examination.

Protocols for Electronic Identification of Animals

Introduction

1 See AVA Policy Compendium 5.5 Domestic Animal Registries Inc.
The objective of these protocols is to facilitate the establishment of efficient, practical and functional RFID systems that permanently identify animals and establish ownership.

To provide secure permanent identification of an animal.
To enable the prompt reunion of lost animals with their owners.
To serve as a tool in urban animal management.
To assist in the event of a biosecurity or emergency animal disease risk.
To assist with tracing animals and animal products as they enter the food chain.

Appendix A

Dogs and Cats

THE IDENTIFICATION DEVICE (MICROCHIP IMPLANT)

All RFID devices for small animals must conform to the following criteria.

Only ISO-compliant full-duplex (FDX)-B technology should be used.

The transponder must carry a unique, unalterable identification number (bits 27–64 of the data stream as defined in ISO 11784) and an International Committee of Animal Recording (ICAR) issued manufacturer code number (bits 17–26). Thus, the unique number comprises a 15-digit number of which the first 3 digits are the manufacturer’s code or, in the case of (ICAR) shared manufacturer codes, the first 6 digits are the manufacturer’s code. If 999 are the first 3 characters of the 15-digit number, it represents a non-unique test chip and should not be distributed or implanted into animals for identification purposes.

Microchip implants must also conform to the following criteria as detailed in the AS 50191.

Transponders in implants for use in animals must not use HDX technology, irrespective of whether the implant is compatible with ISO 11784.

The transponder shall have an effective real-life situation minimum (worst orientation) read range of 50 mm with the appropriate reader.

The instrument used for implantation should be designed in such a way that the sterility of the implant and implantation process is not compromised.

All adverse reactions should be reported to the APVMA.

THE READER (SCANNER) NETWORK

Microchip implants will not be detected in animals unless there is a network of functional and compatible readers installed in pounds and shelters, animal welfare agencies, veterinary clinics and other places where animals are handled.

The following general requirements apply to the reader system for microchip implants.

Pounds and shelters, animal welfare agencies, veterinary clinics and other places where animals are handled must have readers with the capacity to detect all non-encrypted types of acceptable implants used in animals.

The reader/transponder interface must be responsive enough to enable the identification details to be read when the reader is passed over the site of implantation. Only backwards
compatible multireaders that read both ISO-compliant FDX-B microchips and all types of FDX-A microchips should be supplied in Australia until FDX-A microchip implants have been out of use for at least 20 years (i.e. 2021). The reader should display the complete unique identification number, namely, the manufacturer code followed by the microchip’s identification number. Suppliers of readers should have readily available replacement equipment and an efficient repair service.

Reader systems for microchip implants must also meet the following requirements as detailed in AS 5019

For dogs, cats and other small animals with microchip implants the reader/transponder interface must be able to respond to a scan involving two steady sweeps along the long axis of the animal and two sweeps perpendicular to the long axis from elbow to elbow, at a distance of 50 mm from the skin surface and at a speed of 0.5 m/s. It should be able to produce the identifying number in that time, or at least identify the presence of a microchip and register the need for further scanning.

Capability of reading the following types of transponders used in microchip implants:

FDX-A implants used in Australia (Destron 125 kHz, AVID 125 kHz non-encrypted, and Trovan 128 kHz)

FDX-B implants compatible with ISO 11784.

Pounds and shelters, animal welfare agencies, veterinary clinics and other places where animals are handled can achieve this by using an ISO multireader that reads both ISO-compliant FDX-B microchips and all types of FDX-A microchips. Dogs and cats must be implanted subcutaneously using sterile technique in the dorsum between the scapulae with the chip lying at an angle to the skin plane. Use of local anaesthetic is at the discretion of the implanting veterinarian.

Scanning

In general the following procedure should be used.

Prior to scanning the animal, check that the scanner is working properly by running it across a known functional microchip on a bench or held in the hand at a distance of at least 50 mm from the scanner and at a speed of 0.5 m/s.

For dogs, cats and other small animals with microchip implants the scan should include two steady sweeps along the long axis of the animal and two sweeps perpendicular to the long axis from elbow to elbow, at a distance of 50 mm and a maximum speed of 0.5 m/s.

For other animals with microchip implants, the reader/transponder interface must be able to respond to a scan involving two steady sweeps along the area of the animal that implantation takes place at a distance of 50 mm and a maximum speed of 0.5 m/s. It should be able to produce the identifying number in that time, or at least identify the presence of a microchip and register the need for further scanning.

Appendix B

Horses
For Thoroughbred horses, only microchips supplied by the Australian Stud Book must be used.

Veterinarians identifying Thoroughbred horses must first be registered with the Australian Stud Book.

The implantation site is into the nuchal ligament, 3 cm below the crest and approximately half-way between the poll and the withers on the left-hand (near) side. Use of sedation and local anaesthetic is at the discretion of the veterinarian.

Non-Thoroughbred Horses

Veterinarians identifying non-Thoroughbred horses should use the same implantation site as applies to Thoroughbred horses, and the RFID devices, scanners and registry recording requirements are the same as required for dogs and cats.

Appendix C

Reptiles, Birds and Small Mammals

The microchipping of all captive or companion reptiles, birds and small mammals is recommended. Routine scanning of all stray reptiles, birds and small mammals by veterinarians and animal shelters is recommended.

Implantation Procedure

Birds should be implanted intramuscularly in the left pectoral muscle. Small avian species are to be implanted subcutaneously in the same region.

Implant sites for reptiles vary according to classification. Crocodiles are implanted just rostral to the nuchal cluster. All other Orders are implanted on the left side at varying sites. Turtles are implanted in the hindlimb fossa and most lizards and snakes subcutaneously in the caudal body. Lizards smaller than 12.5 cm SNV (snout/vent length) are implanted intracoelomically.

Appendix D

Fish and Other Aquarium Species

Frogs should be implanted intracoelomically in the left caudal body or subcutaneously in the left dorsal lymph sac. Only frogs greater than 50 mm SVL should be implanted.

Appendix E

Alpacas

Alpacas should be implanted subcutaneously midway on the left neck or on top of the head, behind the left ear.

Ratified by the AVA Board: 18 June 2009
5.2 Branding of horses

Policy

Horses must be permanently identified, and preferably by radiofrequency identification (i.e. microchip), for management, registration and identification purposes. If branding is considered necessary in addition to, or instead of, electronic identification, the use of freeze branding is recommended. It is recognised that there are circumstances in which fire branding is the only practical option and in such cases appropriate analgesia should be used to minimise distress and/or pain.

Background

Some breed and sporting organisations still require branding of horses, with or without microchipping, because it enables visual identification of horses and is permanent. Branding is still favoured by station managers as an easy and practical form of identification. In addition, not all sites will have scanners for microchips.

Freeze branding is less painful than fire branding, but freeze brands are not easily read under some circumstances and in horses of some colours.

Guidelines

The following guidelines should be observed for branding of horses.

The operator must ensure compliance with relevant state laws.

Branding should be done by a competent operator.

Adequate restraint, and if required, sedation and analgesia, should be used to minimise distress and/or pain and thus ensure the best welfare outcome for the animal.

Other relevant policies and position statements

5.1 Electronic identification of animals

Ratified by the AVA Board 18 June 2009
5.3 Identification of cattle

Policy
A national system enabling individual identification and traceability of cattle is strongly supported as it is a critical tool for effective farm management, food safety, disease control and international trade.

Background
Radiofrequency identification device (RFD) ear tags and rumen implants are the most humane methods of accurately identifying cattle. Where branding is necessary in many situations, the use of freeze branding is recommended in preference to hot-iron branding for permanent identification.

Further research into the development of new methods for permanently identifying cattle which are practical, humane, easy to use, affordable, and enable unique animal identification, is recommended.

Unique identification of cattle can currently be provided by using either the National Livestock Identification Scheme (NLIS) or a combination of unique animal numbers within statutory property identification schemes.

NLIS is Australia’s system for the identification and tracking of cattle. It is a national scheme that is designed to record ownership of cattle and the history of their movements between properties. The federal, state and territory governments work with cattle industry organisations to implement the scheme. It is a valuable tool for the control of disease and tracing chemical residue detections and gives consumers in Australia and overseas confidence in Australia’s beef and dairy products. NLIS helps to protect the Australian cattle industry’s credibility as a supplier of wholesome beef and dairy products and gives it an advantage in domestic and export markets.

There are currently some shortcomings in the practical implementation of electronic identification methods in the extensive pastoral areas of Australia. In addition, some states currently require permanent identification of cattle using branding for legal transactions and sales. Until this changes, branding will need to be used as a practical method for the permanent identification of cattle and should comply with the following guidelines.

Guidelines

Recommended procedures for freeze branding

Liquid nitrogen and dry ice are satisfactory sources of freezing medium for freeze branding. It is advisable to freeze brand when cattle are over 6 months of age, in order to minimise distorsion of the brand.

Because the application of the irons is for a limited time (less than 20 seconds) and the procedure involves limited pain, no anaesthetic is required.

Suitable facilities should be provided to comfortably restrain cattle so that only minimal body movement is possible during application of branding irons. The area to be branded should be clipped free of hair to provide close contact between the branding iron and the skin. The branding iron should be clean and free from organic material and oxidisation.

Recommended procedures for hot-iron branding
Cattle may be branded at the same time as ear marking, dehorning, castration or application of prophylactic or production-themed medication, including vaccines. Only healthy and fit animals should be branded.

Provision of suitable anaesthesia or analgesia is often impracticable or impossible for hot-iron branding under extensive pastoral management systems, where large numbers of cattle are handled. In such cases, hot-iron branding should be performed as efficiently and as humanely as possible to minimise pain in the cattle.

Cattle should not be branded if their hair is wet. Branding should not be conducted if animals are expected to get wet within 24 hours.

Animals to be branded must be comfortably restrained to allow minimal body movement so that the site to be branded is stationary and easily accessible. The animal should be released into an open yard immediately after branding and then within 6 hours to a normal grazing environment.

The branding site should be dry and clean skin, preferably pre-clipped if the hair is long. The branding area should have minimal dust. Sites posterior to a perpendicular line through the tubal coxa, and above the hock, but not within 100 mm of the knee or hock joint, of the anus or vagina, or of the midline, are recommended. Alternatively, sites posterior to the shoulder, above the elbow, and anterior to a perpendicular line through the posterior edge of the scapula, but not within 100 mm of the midline or shoulder or elbow joints, are acceptable.

The branding iron should provide contact surface all in one plane with a width of contact surface of at least 2.5 mm. The iron must be free of organic matter and oxidised metal. Branding should be performed by, or under the direct supervision of, an experienced competent operator. Cattle of any age can be hot-iron branded. Hot irons should be heated to, and not beyond, a dull-red colour immediately prior to application. The iron’s flat surface should be held firmly against the skin until the hair and superficial skin under the contact surfaces are burnt, and not longer than three seconds, whichever is shorter.

References
Animal Health Australia

Meat and Livestock Australia

Other relevant policies and position statements
5.1 Electronic identification of animals

Date of ratification by AVA Board 15 February 2013
5.4 Domestic Animals Registries Inc

Position statement

Where state governments enact laws or regulations to control microchip identification systems for domestic animals, the Australian Veterinary Association (AVA) hopes that they will institute similar protocols to those of Domestic Animal Registries Inc (DAR) or subcontract DAR to perform registry control and auditing functions.

Background

DAR is a registry watchdog organisation comprising representatives from the AVA, RSPCA Victoria, Cat Protection Society Victoria, and the Dog and Cat Management Board of South Australia. It is a separate legal entity set up for the specific purpose of supervising microchip registries on behalf of the community.

DAR has developed protocols to ensure the performance of registries of data on owners and their domestic animals that have been permanently identified by implanted radio frequency identification (RFID) technology ('microchipping') and to inspire public confidence in these registries.

Registry service providers (RSPs) agree to enter into a legally binding contract with DAR to abide by the DAR protocols. DAR monitors and enforces the protocols via regular auditing of all operations.

The DAR protocols have become the industry standard for RFID registry operation and management in Australasia. They form the basis for the Informative Annex ZB, Companion Animal Registry Considerations, of the Australian Standard AS 5019: Electronic Animal Identification & Radiofrequency Methods; the Quality Assurance Programme for Companion Animal Microchipping associated with the New Zealand standard; the Urban Animal Management group's position paper on microchips; and the proposed state government RFID schemes in Victoria and South Australia.

The specific objectives of DAR are:

- to ensure registry performance so that RFID technology can be used to enable the prompt reunion of lost pets with their owners and as a tool for urban animal management
- to help guarantee uniqueness of transponder numbers in conjunction with management of transponder skeleton records and audit trails
- to protect owners' rights regarding recorded data where no specific legislation has been enacted
- to guarantee RSP performance and ensure continuity of registry activity if an RSP defaults
- to address confidentiality and privacy issues and prevent commercial exploitation of the data
- to ensure an RSP does not favour one technology or commercial entity over another.

Guidelines

The following requirements apply to information recorded in microchip registers.

General considerations

The registry is to accept and record information regarding owners and animals identified by implanted RFID.
Information is only accepted on the basis of recording this data for the life of the animal.

The registry must accept data from any approved implanter using appropriate microchips, provided that the relevant fee is paid.

In the case of ISO-compliant FDX-B microchips, the registry must only accept registration of microchips where the numbering sequence complies with AS 5018: Electronic Animal Identification § National Coding Scheme and commences with a manufacturer code.

The registry must only accept linking data about microchips where relevant distributors maintain skeleton records of their products in Australia and provide details to the RSP of audit trails through sales outlets and implanting centres to registries.

The cost of recovery of data is at the expense of the RSP and should be built into registry fees for data recording.

The registry must interface with, accept information from and provide information to all other DAR-approved registries.

Ownership of information

Unless there is relevant legislation to the contrary, information in the database registry is owned by the animal owner and is held only in trusteeship by the RSP.

No information is to be sold or passed on to other parties other than for individual animal retrievals.

Security of information

Only authorised persons with security codes (personal identification numbers) can be given information, and only for individual pet retrieval.

All data security and control (data entry, amendment) are the responsibility of the RSP.

Effective and approved multilevel security systems must be in use at all times.

Retrieval of information for other purposes is permissible only after special written instructions from DAR.

Apart from the situations detailed above, no person or organisation is to be permitted access to the data without specific written consent from DAR.

Updating of recorded information

All details submitted must be on the approved forms and signed by the animal owner and the implanter.

Data must be recorded onto the database within two working days of receipt.

Minimum data fields on the animal, the owner and the implanter are specified in the protocols and must be completed.

Crosslink provisions of owners and animals must be maintained.

There must be provision for changes to recorded information.
Changes in ownership of the animal must only be effected on receipt of a signed form.

Confirmation of recorded information or changes must be provided to owners.

**Access to information**

The registry must be staffed 24 hours per day, 365 days per year for retrieval of information on individual animals by authorised persons (local government authorities, animal welfare organisations, scanning and implanting centres— including veterinarians, and police).

**Accuracy of information**

The accuracy of recorded information is critical.

All efforts must be employed to minimise errors of any kind.

A multilevel validation process on microchip numbers, telephone numbers, addresses, etc must be in use to ensure accuracy.

**Backup**

The RSP must maintain an approved electronic and hardcopy backup of the entire system.

The RSP must maintain backup communication systems when normal channels fail.

The RSP must deposit a monthly electronic backup of the total database in a bank deposit box and make it available for DAR audit as required.

DAR does not have access to registry records except to ensure continuity of registry activity in the event of termination of contract with the RSP as detailed in the contract/agreement.

**Integration with other systems**

The registry must communicate and interface with other registries approved/endorsed by DAR.

The registry must use DAR-approved communication technologies via computer, by telephone or the internet.

**Difficulties and complaints relating to service providers**

The RSP must have a reporting mechanism listing failures to link to owner details from microchip number, and identifying implanters and/or distributors with problems.

The RSP must have a system for recording and addressing complaints about registry activities both from the general public and from users, such as implanters and those accessing the registry for data retrieval.

DAR must be kept fully appraised by the RSP of complaints and difficulties arising from the two points above and will act in conjunction with the RSP to attempt to resolve them.

Directors of the RSP must be of proven integrity, with no criminal record or breach of Australian Stock Exchange guidelines.
The RSP must have proven technical competence in the areas of information storage and distribution and RFID technology.

The RSP must have computer hardware and software and procedures adequate to the task.

The RSP must comply with all protocols, performance criteria and guidelines prescribed by DAR

**Other relevant policies and position statements**

5.1 Electronic identification of animals

Date of ratification by AVA Board 1 January 2007
Part 6 - Companion animals

General health and welfare issues
6.1 The benefits of pets and the human–animal bond

Policy

The community as a whole benefits from the ownership of companion animals, i.e. the human–animal bond.

These benefits include companionship, assistance for people with special needs, education, health and social improvements for individuals.

References


Ratified by the AVA Board: 18 June 2009
6.2 Pet insurance

Policy

Pet insurance can contribute to optimal health and welfare outcomes for all Australian pets.

Pet insurance should be available to all Australian pets regardless of age or condition.

Background

The cost of veterinary services can be of concern for many clients. The provision of insurance against veterinary treatment costs of illness and accident may provide a means for some clients to finance veterinary fees. Insurance against accident and illness may result in more appropriate and comprehensive veterinary care for patients.

It is advised that people contemplating this insurance need to read all terms and conditions to understand the scope of the coverage, for example, typically pre-existing conditions, vaccinations and desexing are not covered.

References


Date of ratification by AVA Board: August, 2010
6.3 Animal shelters and municipal pounds

Policy
Animals kept in pounds and shelters must be housed under appropriate conditions that ensure their health and welfare, meeting the animals’ physiological, behavioural and social needs. All animals must be cared for humanely but only animals with suitable health and behaviour should be re-homed. Veterinarians should be involved in assessing an animal’s behaviour and suitability for rehoming.

Background
All animals should be scanned for a microchip immediately on entering the pound or shelter and the number checked against all relevant microchip databases. If a microchip is not present, any other form of identification must be checked to try and locate the animal’s owner.

Veterinarians have a role in:

- assisting with the ongoing training of animal welfare officers in subjects including
  - animal health and welfare
  - nutrition and housing
  - reproduction control
  - zoonoses, infectious diseases and biosecurity (including early recognition and methods of control of these diseases)
  - injuries and first aid
  - issues associated with euthanasia
  - relevant state and territory legislation
  - public relations
  - early recognition of behavioural traits not compatible with successful rehousing.

- encouraging municipal authorities and animal welfare societies to disseminate information about socially responsible pet ownership through animal adoption centres, pet shops and schools

- promoting close working arrangements between veterinary practitioners and animal shelters and pounds to monitor for animal hoarders, suspected abusers and cases of neglect

- counselling officers to accept that, if animals are not suitable for re-homing, euthanasia may be needed to protect the welfare of that animal

- advocating for all states and territories to introduce uniformity in the management and legislative controls that govern animal shelters and municipal pounds through relevant codes of practice or standards and guidelines.

The municipal pound or animal shelter plays an important role in reuniting lost animals with their owners, the control of surplus dog and cat populations, and the provision of veterinary services. It is important that the pound or shelter is owned by a municipality rather than by individuals or private organisations so that solutions to unwanted companion animal problems are recognised as a responsibility of the whole community.

Guidelines

Design of facilities
- A veterinarian should be engaged to advise on design requirements for animal shelters and pounds.
- Pens should be constructed to house up to two adult animals as a maximum, even at peak usage.
Housing design should ensure that the animals' health, welfare, physiological, behavioural and social needs are met.

All pens should be secure against accidental escape. Ideally, there should be a second barrier between the enclosure area and the outside environment.

Pens should be designed to reduce transmission of disease, taking into consideration air flow, cleaning and other factors relating to hygiene and potential for disease spread.

Drop-off boxes for animals after hours need to be adequately monitored to prevent injured animals being deposited, with subsequent delays in treatment that would negatively affect that animal's welfare.

The building and individual cages and runs should be constructed of impervious material with a rounded contour at the wall–floor junction to facilitate cleaning and disinfection.

The following facilities also should be provided:

- heating and cooling that are appropriate for the needs of the animal
- hot and cold running water
- appropriate air quality, ventilation, lighting and noise control
- facilities for sanitary disposal of animal wastes, cadavers, food scraps and similar material, with a regular pick-up of such waste from the facility (at least three times per week)
- facilities for feed storage for at least 5 days' supply of dry food feeding and stable drinking utensils that are either disposable or able to be disinfected
- four types of housing areas - general holding pens, quarantine pens, exercise areas and isolation pens
- first-aid treatment area with:
  - table that can be disinfected
  - lighting and shelving
  - first-aid materials, including dressings and disinfectants to treat open wounds.

**The role of the veterinarian**

Municipal pounds and shelters should develop and continually update a manual of procedures covering operational routines such as those for maintenance and hygiene, capture, transport, record keeping and the role of a veterinarian in shelter management. Veterinarians and staff who work at the shelters should have basic husbandry and medical knowledge for all of the species that are accepted by the shelter/pound.

A veterinarian should be retained to:

- examine all animals on admission and immediately euthanase any animal when it is in the best interests of the animal and is necessary for the welfare of the animal
- provide first aid and other animal treatment, early recognition of infectious and zoonotic diseases, and disease control
- provide advice on nutrition
- ensure that the facilities meet suitable standards for holding animals
- consult with management on the conduct of the pound, the maintenance of facilities and the design of transport vehicles
- consult with management on capture techniques
- be responsible for health and behavioural assessments of resident animals before they are re-homed
- vaccinate, desex and permanently identify all animals being sold, preferably by microchip
- be responsible for euthanasia procedures and practice.
**Maintenance procedures**

Maintenance procedures should ensure that:

- animals are fed at least once per day
- animals have access to clean fresh drinking water at all times
- daily checks are made for eating, drinking, urinating, defecating, behaviour and general health
- animals suspected of having infectious disease are isolated from other animals
- first aid to preserve life and relieve pain is readily available
- facilities and equipment to euthanasia of animals, when required, is easily accessible
- exercise and socialisation opportunities available daily.

**Capture**

Capture methods should be as humane as possible with minimal risk to animal, operator and bystander. The behavioural characteristics of the species concerned should be taken into account when deciding on the method to be used. In general, the use of tranquilliser guns to capture companion animals is not supported unless all other avenues of capture have been exhausted.

**Animal transport**

Vehicles for the transport of animals require:

- separate compartments to allow isolation of animals
- a design that allows for effective cleaning
- adequate controlled ventilation and temperature when the vehicle is stationary or in motion
- adequate space for each individual animal to be comfortable, and
- conditions that meet the animals' physiological and biological needs.

**Recovery and rehoming of animals**

The fees charged for the recovery of dogs or cats from pounds should be set so that the facility is self-funding and there is a realistic financial penalty to the owner.

Only suitable animals should be re-homed. Potential owners should be interviewed and counselled before being accepted and all animals should have a comprehensive behavioural assessment before being re-homed.

The pound must be accessible to the public. The statutory holding period should be 7 to 14 working days on which the pound or shelter is open for at least 4 hours per day.

**Wildlife**

Knowledge of wildlife is also necessary. Networking with other agencies or organisations working with non-domestic species is needed.

If a shelter or pound is restricted in its ability to accept an animal (e.g. rare or unusual species, injured wildlife, livestock, or due to local council restrictions), procedures must be in place to safeguard the welfare of the animal, such as referral of the animal to an appropriate alternative care provider.
Other recommendations

Legislation should continue to empower veterinarians to euthanase all animals found abandoned, distressed or disabled to the extent that their continued existence involves suffering.

Date of ratification by AVA Board: 15 February 2013
6.4 Native animals\textsuperscript{1} as pets

Position statement

The keeping of native animals as pets by private individuals should only occur where it is legally permitted. The welfare of the animals kept as pets must not be compromised, nor should the welfare of wild populations be compromised by the taking of wild animals or the release back to the wild of pet animals.

The capture and removal of native animals from the wild for the pet trade or for use as domestic pets is not supported unless it could be demonstrated that there would be a positive long-term benefit to that species or the environment.

Background

The keeping of native animals as pets has the potential to be harmful to the individual animal and the species in the wild.

Difficulties for the individual animal can relate to management (including housing and husbandry), nutrition, welfare, reproduction control, medical attention and preventive medicine. The potential impact on wild populations can include poaching from the wild and risks associated with release of captive animals back into the wild—these include welfare, disease and genetic risks.

Advantages of native animal pet ownership can include increased public interest in and awareness of the needs of native animals, and novel approaches to the sympathetic integration of native species into human communities.

While legislation should not discourage people from enjoying the benefits of having native animals as pets, legislation should also protect the welfare of individual pet animals and wild populations. Such legislation should specify the degree of competency and facilities required by pet owners, and should include a code of practice and sanctions for noncompliance.

Other relevant policies and position statements

16.5 Farming of native fauna

Date of ratification by AVA Board: 14 May 2005

\textsuperscript{1} All vertebrate and invertebrate animals native to Australia
6.5 Feeding of live mammals to snakes

Policy

The feeding of live mammals to snakes is strongly opposed.

Background

Although the feeding of live mammalian prey to snakes occurs in herpetoculture, it is considered that the welfare of both the prey and snake will be compromised by this practice.

Bite wounds on snakes are commonly seen as a consequence of this practice. The severity of the injury can be sufficiently serious as to warrant euthanasia of the snake.

Some snake keepers argue that such a practice mimics natural behaviour.

In a captive situation, rodents have no means of escape compared with those in the wild. Rats and mice used as prey will often exhibit frantic escape behaviour and bite snakes repeatedly.

It is recommended that only prey that has been humanely killed should be fed to snakes.

Date of ratification by the AVA Board: 15th August, 2008
6 Companion animals

Surgical and other veterinary procedures
6.6 Vaccination of dogs and cats

Position statement

Vaccination protocols should be determined within a veterinarian–client–patient relationship, based on attributes such as duration of immunity of available vaccines and an individual animal’s requirements.

Every animal should be immunised and each individual animal only as frequently as necessary. Current scientific consensus recommends that adult cats and dogs should be vaccinated with core vaccines\(^1\) triennially where applicable.

Informed consent is important.

Core vaccines should be administered to all animals to protect them against severe, life-threatening diseases that have a global distribution.

\(^1\) Dogs: Canine distemper virus, canine adenovirus and canine parvovirus.

Cats: Feline parvovirus, feline calicivirus and feline herpesvirus.

Background

Vaccination is one of the most common veterinary procedures undertaken in small animal practice. Vaccination programs have played an important role in preventing diseases and fostering early detection and treatment through regular clinical examinations during the life of the animal (Klingborg et al, 2004). Vaccination recommendations in the past were considered a simple part of animal care, but are now a complex and controversial issue (Klingborg et al, 2002). It is being recognised that veterinarians should aim to reduce the vaccine load on individual animals to minimise the risk of adverse reactions to the products (Day et al, 2007).

Although annual vaccination has long been considered standard practice in Australia, scientific information exists to suggest that the duration of immunity (DOI) delivered by many of the products available is variable, and may be significantly longer than 12 months.

Guidelines

The Vaccination Guideline Group (VGG) of the World Small Animal Veterinary Association (WSAVA) recommends that vaccines be defined as core, non core or not recommended.

Core vaccines should be administered to all animals to protect them against severe, life-threatening diseases that have a global distribution.

Dogs: canine distemper virus, canine adenovirus and canine parvovirus.

Cats: feline parvovirus, feline calicivirus and feline herpesvirus.

Non-core vaccines are required by only those animals whose geographic location, local environment or lifestyle places them at risk of contracting specific infections.

Dogs: parainfluenza virus, *Bordetella bronchiseptica* and *Leptospira interrogans*. 
Cats: feline leukaemia virus, *Chlamydia felis* and *Bordetella bronchiseptica*. Feline immunodeficiency virus vaccines may also be classified in this group.

Vaccines that have insufficient scientific evidence to justify their use are not recommended.

The Australian Veterinary Association (AVA) believes that in most cases, core vaccines need not be administered any more frequently than triennially and that even less frequent vaccination may be considered appropriate if an individual animal’s circumstances warrant it. However, local factors may dictate more frequent vaccination scheduling. These recommendations may be ‘off label’ for some vaccines.

Individual animals will require assessment by a veterinarian to select the most appropriate vaccine and vaccination protocol. The veterinarian-client-patient relationship is important to fully understand the individual’s needs.

Revaccination recommendations should aim to create and maintain clinically relevant immunity while minimising the potential for adverse reactions.

Because of maternally derived antibody and the variability in its level and duration between individuals, vaccines should ideally be administered two to three times to puppies and kittens, with timing of the final dose being variable but not earlier than the age of 16 weeks (the suggested age varies with the manufacturer and the vaccine). If cost is an issue and only one vaccine is possible, it should be at the age of 16 weeks or older.

A booster vaccine should be administered approximately 12 months later.

‘Off label’ use of vaccines will require consultation with the pet owner for informed consent.

An annual health check is strongly recommended, even if animals are not to be vaccinated.

Non-core vaccines target diseases that are of limited risk in a geographic region or, based on the lifestyle of the pet, help prevent against diseases that are a less severe health risk to infected animals.

The decision to use non-core vaccines is made for individual pets based upon consultation between the veterinarian and owner.

Many non-core vaccines require annual vaccination.

Vaccines that the WSAVA VGG considered in their 2007 report should not be recommended at that time included canine coronavirus, *Giardia* for cats and dogs, feline immunodeficiency virus and feline infectious peritonitis.

At the time of vaccine administration the following information should be recorded in the patient’s permanent medical record:

- date of vaccination
- identity of person administering the vaccine
- vaccine name, batch number and expiry date
- site and route of administration.
Adverse vaccine experiences are defined as any side-effect, unintended consequence or lack of protection associated with the administration of a vaccine product. This includes any injury, toxicity or hypersensitivity reaction associated with the vaccination, whether or not the event can be attributed directly to the vaccine. Any adverse event should be reported, identifying the product, animal and reaction involved, to the manufacturer and the Australian Pesticides and Veterinary Medicines Authority (APVMA) Adverse Experience Reporting Program.

Recommendations for vaccination protocols should be determined within a veterinarian–client–patient relationship rather than by non-veterinarians such as within boarding facilities.

References


Date of ratification by the AVA Board: 8 July 2011 (Changed to a position statement, February, 2013)
6.7 Desexing (surgical sterilisation) of companion animals

Policy

Surgical desexing of companion animals is supported however this does not include the compulsory desexing of privately owned animals.

Animals should be desexed prior to being homed from animal shelters.

Owner education is the most effective approach to encouraging owners to have their pets desexed.

Background

Desexing is a major surgical procedure and the skills, equipment and facilities used to perform it should be of a high standard.

Benefits of desexing

Desexing is important in control of animal populations and has other behavioural and health benefits. It is currently the only widely available, effective and permanent method of preventing breeding.

The success of sterilisation as a population control technique depends on the percentage of animals desexed and the freedom of those remaining intact. It is unlikely to succeed as a single measure.

As well as stopping unwanted breeding, desexing can reduce behavioural problems such as free-ranging oestrous females and fighting males, which can cause public nuisance. In cats, desexing stops calling behaviour in queens and reduces spraying behaviour in toms.

Desexed females have a greatly reduced incidence of neoplasia and other diseases of the mammary glands and do not suffer from diseases of the ovaries and uterus, although some bitches may have an increased incidence of urinary incontinence. Desexed males cannot develop testicular tumours and have a reduced incidence of prostate disease, perianal tumours and perineal hernias.

Desexed cats are less likely to fight and to suffer from abscesses and infectious diseases.

Public attitudes to desexing

The main opposition to desexing is attitudinal (sometimes cultural). Some owners believe that an animal has a right to breed, that females should have at least one litter, that sterilisation is unnatural, or that if they find homes for all the offspring they are not contributing to overpopulation.

Although cost is often cited as a major factor, evidence suggests that it is not the major reason that people fail to have their pets desexed. Many prepaid vouchers are never used, and affordable subsidised schemes for the genuinely needy have not been fully taken up.

The cost of desexing is very small compared with the cost of a lifetime of feeding and care.

The most important approach to encouraging desexing is education, so that people understand that having their pet desexed has benefits and is also part of their social responsibility.
With a strong commitment from local government, it has been shown that good results can be achieved with education, incentives and existing legislation.

**Problems with compulsory desexing of companion animals**

Although pets benefit from being desexed, and initiatives to increase the numbers desexed should be encouraged, there are inherent deficiencies in the concept of compulsory desexing. Successful compliance would depend on universal registration and permanent identification, which have already proven to be extremely difficult. It is unlikely that the target needed to control population growth would be achieved by compulsory desexing. Up to 90% of breeding animals must be desexed to halt population increases.1–3

**Subsidised desexing schemes**

Large-scale, untargeted schemes are unlikely to be successful, have not been in the past and are not cost effective. They contribute to the perception that animals have a low intrinsic value, which in turn leads to the ‘throw away pet’ mentality. However, targeted desexing schemes may play a part in an integrated stray animal control program.

The alternatives to surgical desexing are not supported by the AVA.

Suppression of oestrus by hormone administration is currently expensive, not permanent, of variable efficacy and accompanied by risks of serious side-effects.

Physical restraint/containment of both males and females is unreliable, with some owners failing to provide appropriate facilities.

**Guidelines regarding the age to desex**

For general veterinary practice, where dogs and cats are already owned, the AVA believes veterinarians should exercise their professional judgment of the appropriate age for desexing individual cats or dogs.

For animal shelters, the AVA acknowledges that the age to desex animals in these institutions is influenced by commercial and legislative factors, but overriding these should be the same principles that refer to the animal’s best welfare. This decision is made after assessing all the relevant factors, such as current vaccination status, weight and health of the cat or dog, so as to act in the best interest of the animal.

Veterinarians should ensure that all necessary precautions are taken to minimise the risks of anaesthesia, surgery, stress and infection to animals when undergoing these procedures, especially for the very young (paediatric) and/or small (body weight) animals.

The appropriate age for desexing will vary with individual cases and thus the age of desexing cannot be specified for all dogs and cats collectively.

Veterinarians must retain their professional discretion to determine the appropriate age of desexing based on present and future scientific evidence of the long-term effects of early desexing.

**References**


Date of ratification by AVA Board: 15 August, 2008
6.8 Provision of blood supplies for use in dogs and cats

Policy

Blood or blood product, collected humanely from donor animals, can be beneficial to the recipient animals, without compromising the welfare of the donors.

Animals should not be kept solely as blood donors because this may compromise their socialisation and care.

The establishment of registered blood banks that collect from practices that ensure the welfare of the animals involved and to service veterinary requirements for animal blood products is supported.

Background

This policy seeks to ensure that a reliable supply of fresh blood and blood products is available for emergency veterinary treatments and that these products are collected ethically and humanely. In many circumstances during the treatment of animals, blood transfusion can be essential because other forms of drug or fluid therapy are not sufficient.

Currently, blood is usually collected from client- or staff-owned pets in veterinary clinics with the consent of the owner. Blood products may also be supplied from registered blood banks, where dedicated donors are housed, or may be client-owned animals that donate blood a regular schedule. Some blood products, such as plasma, are available commercially.

Collecting blood from animals, including cats or dogs, provided that it is done in an appropriately humane manner and is appropriately monitored, is not detrimental to the donor. For cats, it is critical that the donor and recipient blood types are known because transfusion of incompatible blood types may be fatal. In dogs cross-matching should be performed whenever possible.

Guidelines

The following guidelines should be observed for the collection of blood from dogs and cats.

Blood can be collected from donor animals on a regular schedule, or just prior to euthanasia.

The consent of the owner or person in charge of the animal must be provided before blood collection.

If the owners of an animal, or carers in a scientific institution, instruct that it is to be euthanased, the animal should be anaesthetised before blood collection and should not be revived.

Blood may be collected without sedation from a trained animal, but the procedure should be conducted by a registered veterinarian or under veterinary supervision. Sedation or anaesthesia is acceptable if it reduces stress to the donor animal or is required for the animal’s welfare.

Animal hospitals that have in-house donors should know the blood types of the animals and know and be proficient in cross-matching procedures.

Animals used for blood collection should be clinically healthy and, as far as can be reasonably determined, free from blood-borne transmissible diseases.
Where animals are maintained as blood donors, the frequency and volume of blood collection should be recorded and monitored by a registered veterinary surgeon to avoid collecting too much blood from an animal and causing untoward physiological changes. The haematocrit of the donor should be checked before blood collection to ensure the donor is not anaemic. The animal should be monitored during collection, and until fully recovered if anaesthetised.

Intravenous fluid support may be necessary after blood collection.

The health and welfare and clinical records of animals held for multiple donations should be monitored and maintained in accordance with the Code of Practice for the Care and Use of Animals for Scientific Purposes1 and the principles in the Policy on the Care of Dogs Used for Scientific Purposes.2

Date of ratification by AVA Board: August, 2010

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Guidelines for dental treatment in dogs and cats

**Guidelines**

To provide optimal health and quality of life, good oral care is necessary. Diseases of the oral cavity, if left untreated, are not just painful, but may also contribute to local or systemic disease.

The purpose of this document is to provide guidelines to veterinarians when making diagnoses and when managing periodontal disease in dogs and cats.

The requirement for follow-up treatments will be based on the results of the oral examination and the severity of the oral disease, any previous treatments and the degree to which the clinician anticipates improvement from this dental procedure.

Veterinarians need to assess whether their dental equipment and skill level allow them to fully treat the oral pathology present or whether referral to an appropriately trained veterinarian is required.

**Definitions**

Dental prophylaxis (a term synonymous with the colloquial terms dental or prophy utilized in this document) is a procedure including oral assessment under general anaesthesia, diagnosis and formulation of a treatment plan, removal of plaque and calculus above and below the gum line, development of an oral hygiene plan (homecare) and subsequent follow up.

This procedure is limited to patients without periodontitis as these patients will, by definition, have bony attachment loss around one or more teeth. Treatment of this bone loss will entail more procedures / treatments (as defined below in periodontal surgery, periodontal therapy and oral surgery) than in a prophylactic examination (prophylaxis).

Gingivitis is considered to be a reversible inflammation of the gingival tissues without the loss of the tooth’s supporting structures (that may or may not be visible to the eye).

Periodontitis is an irreversible destructive process involving the loss of the tooth’s supporting structures (the periodontium), which includes the gingiva, periodontal ligament, cementum and the alveolar bone.

Periodontal pocket is a pathological space between supporting structures and the tooth, extending apically from the normal site of the gingival epithelial attachment.

Periodontal therapy is the treatment of chronic gingivitis and periodontitis. Depending on the degree of periodontitis, this may require multiple treatments such as periodontal surgery.

Periodontal surgery is the surgical treatment of periodontal disease.

Oral surgery is the surgical invasion and manipulation of hard and soft tissues to improve/restore oral health, function and comfort.

**Oral examination, diagnosis and treatment planning**

A full patient history is part of any oral examination.
The preliminary physical examination of all body systems is conducted in the consulting room. The extent of this initial examination will depend on the temperament of the animal.

The temperament of the animal and the commitment of the owner are assessed at the initial examination as these will influence planning for 'home-care'.

A complete oral examination can only be performed with the animal anaesthetised; excessive calculus deposits may need to be removed to aid in the more accurate measuring of pocket depths with a periodontal probe.

A comprehensive oral examination should be performed and will include periodontal probing; the use of special tests including intra-oral radiographs is highly recommended.

All findings should be recorded on a dental chart which forms part of the animal’s medical record.

Indices including plaque and calculus scores, missing or supernumerary teeth, tooth mobility, bleeding on probing, furcation involvement, gingival recession or hyperplasia should be recorded on the dental chart and are fully detailed in the procedures section of this document.

Based on the findings of these examinations, diagnoses will be made.

Consideration of the diagnoses, patient co-operation and owner commitment will permit the development of an appropriate treatment plan.

**Equipment, instruments and maintenance.**

Facility – ‘dental surgical suite’

As most dental procedures are considered ‘dirty’ and involve general anaesthesia, water and aerosol formation, it is highly recommended that a dedicated space be utilized apart from the sterile surgical theatre.

For optimal safety to operators and patients, current Occupational Health and Safety requirements should be complied with including anaesthetic gas scavenging, lighting, operator, assistant and patient protection.

Highly recommended: Operator and assistant protection includes the wearing of masks, gloves, eye shields and gowns. It is also recommended that ear protection and hair-nets be utilized.

Patient protection involves the provision of an impervious surface with adequate drainage on which to conduct the procedure; airway protection involves the use of an adequately inflated cuffed endotracheal tube and pharyngeal packs; and appropriate monitoring including heart rate, blood pressure and temperature. The patient should be adequately protected from hypothermia and hypovolaemia during the entire period of the procedure which may be of variable duration.

**Dental base and power equipment.**

To competently, adequately and rapidly clean plaque and calculus from the teeth surfaces it is recommended that some form of power equipment be used. A large choice of such equipment is available, however in essence it consists of:
a) Sonic and/or ultrasonic scalers (to remove plaque, calculus and debris from the teeth surfaces)

b) A slow speed handpiece suitable to accept a prophy-cup used with a polishing paste to remove stain and more plaque.

**Hand instruments**

The minimum set of hand instruments required for dental prophylaxis includes: a dental explorer, a periodontal probe, a variety of scalers and curettes, a dental mirror and a sharpening stone.

**Maintenance of power and hand equipment**

Power equipment should be maintained in good working order according to the manufacturer’s instructions. This includes cleaning and oiling the handpieces after each use and maintenance of the pressure vessel.

Hand instruments should be kept in good order including the sharpening of curettes and scalers.

**Operator and assistant protocols**

**Veterinarian**

Performs an initial oral examination of the pet and once under general anaesthesia and completes a thorough oral examination and treatment

Formulates a treatment plan

Oversees the dental charting and recording and give written or verbal instructions to the relevant assistant on the implementation of the treatment plan

Knows the relevant assistant’s qualifications and capabilities to implement the treatment plan.

Formulates a homecare plan

Liaises with the client directly or via a veterinary nurse regarding the implementation of any homecare plan

Recommends to the client that the pet be referred to an appropriately trained veterinarian when the practitioner does not have the skills, knowledge, equipment or facilities to perform a given procedure or treatment.

**Qualified veterinary nurse**

Certificate IV qualified veterinary nurses can prepare for these procedures (Need to define which procedures?)

Chart and record the examination findings and clean teeth under the guidance of the veterinarian

If appropriately licensed, the veterinary nurse takes and processes radiographs.
The veterinary nurse can discuss results of the homecare plan and make follow-up phone calls with clients as instructed to do so by the veterinarian.

**Veterinary assistants, vet nurse students and enrolled students**

Can set up for the procedure under the guidance of the veterinarian or a certified veterinary nurse.

Chart and record the findings and clean teeth under the guidance of the veterinarian

**Procedures**

The words *prophy*, *prophylaxis* and *dental* are often misused in veterinary medicine.

Dental prophylaxis is performed on a patient with an essentially healthy mouth or with mild gingivitis.

The treatment of periodontitis is performed on a patient with existing periodontitis (attachment loss) or with compromised or damaged dentinal structures. Thus patients with existing periodontitis undergo periodontal therapy not a *prophy.*

**Stages in dental assessment and treatment**

The Australian Veterinary Dental Society indicates that in its opinion, it is not possible to perform a professionally thorough and complete dental examination in the conscious dog or cat. These treatments are both complex and generally uncomfortable or painful and cannot be done in a professional or complete manner in a conscious or sedated animal.

Under general anaesthesia, the oral cavity is examined, assessed and graded. Findings are recorded on a dental chart and a treatment plan is formed. Intra-oral radiographs are taken to further assess the significance and extent of pathology.

Scaling using hand and power instruments is performed and findings recorded on the dental chart at this time.

Teeth to be retained are polished.

Periodontitis and other pathology is treated with the informed consent of the owner using closed or open* curettage and/or root planing of subgingival pockets. (#A flap would be raised to allow this procedure).

Extraction of teeth may be indicated for the treatment of:

- Tooth retention (as in the case of deciduous teeth)
- Supernumerary teeth
- Fractured teeth (that are not to be endodontically treated)
- Periodontally compromised teeth
- Crowded teeth
- Endodontically compromised teeth (that are not to be endodontically treated).

Perioperative adjunctive therapy (antibiotics, local anaesthesia, analgesia etc) should be administered where indicated
# Surgical flaps are frequently employed during the treatment of periodontitis to enable access to the subgingival tissues (enabling better visualization of these structures), repositioning of tissues to treat oronasal communications or fistulas etc., removal or re-contouring of bone and as part of the surgical extraction of tooth roots.

**Peri-operative care**

Maintain an open and patent airway via intubation until the animal is swallowing and is in sternal recumbency.

Maintain body temperature and continue adequate intravenous fluid support.

Maintain and record vital signs until the patient is awake.

Effective pain management should be provided as required.

**Post-operative communication**

The client must be fully informed of and agree to the procedures planned and performed to ensure the success of recommended ongoing oral care. This is especially important in cases involving established periodontal disease.

The operative procedures planned along with any existing or potential complications (e.g. bleeding, coughing, dehiscence, infection, neurological signs, halitosis, vomiting, diarrhoea, anorexia and/or signs of pain) should be discussed.

Discuss immediate postoperative homecare including medications and their side effects.

Provide antibiotics and medication for inflammation and pain where indicated.

Discuss the role of mechanical and/or chemical plaque control in the prevention or control of disease.

Discuss any recommended changes in diet that are deemed necessary such as a change to soft or premoistened food (short term following periodontal surgery) or to a prescription diet to assist in long term reduction in plaque.

Provide individualised oral and written instructions at the time of discharge.

Establish follow-up examinations and ongoing professional care.

**Homecare / preventive plan**

Effective homecare is vital for the prevention and control of oral disease.

Assessment of the amount of disease present, the owner’s compliance and the co-operation of the pet to homecare are imperative in the formulation of a homecare plan.

The homecare plan will include as appropriate the frequency, duration and method of rinsing, brushing, use of sealants, special foods and dental chews.

This plan may need to be reassessed at follow-up evaluation visits.
The Veterinary Oral Health Council (VOHC) provides a 'seal of acceptance' acknowledging the efficiency of these marked oral products in controlling plaque and/or tartar; the veterinary team is encouraged to recommend VOHC-certified products where appropriate.

Date of ratification by the AVA Board October 2010
Companion animals

Dog behaviour
6.10 Puppy socialisation

Position Statement

Puppies must be able to interact with the environment and be socialised. Socialisation is a special learning process whereby an individual dog learns to accept the close proximity of other dogs, as well as members of other species. This goal is more likely to be achieved if a sound temperament is an essential consideration when selecting animals with which to breed. The learning opportunities provided to breeding dogs and their offspring also play a significant role in animals realising their full potential as suitable companions.

Socialisation of puppies should take place between 3 and 12 weeks of age.

Breeding animals should be given the opportunity to display their innate behaviour to allow selection for sociability to occur. Breeders must provide optimal behavioural enrichment, including physical and mental exercise, as well as appropriate social opportunities with other animals and people and other environmental enrichment.

A pet that can live harmoniously with others has potential benefits for owners, the broader community and the pet itself. It is particularly important that breeders and owners take advantage of the critical periods for socialisation of young animals. A small amount of experience at this critical time can have a significant impact on future behaviour. Offspring produced must be reared to maximise their ability to integrate into society by providing the opportunity for positive associations with a broad range of environmental stimuli in a non-threatening manner, socialisation and appropriate handling.

Prospective owners should be informed of the socialisation, training and exercise requirements of the breed and individual animal and counselled on its suitability to their requirements.

Other relevant policies and position statements

6.11 Socially responsible companion animal ownership

Date of ratification by AVA Board: January 2010
6.11 Socially responsible companion animal ownership

Position Statement

Companion animal guardians are responsible for the welfare of their animals and other animals or people that may be affected adversely by their animals.

Such responsibility is governed by, but is not necessarily limited to, Legislation, Codes of Practice and Guidelines.

Background

Companion animals are important in the life of Australian families and the community in general, providing companionship and health benefits, as well as working with humans.

Companion animal owners must accept responsibility for their companion animals, including all aspects of their welfare. They must also minimise nuisance and risks associated with the companion animal in relation to other animals and humans, including all their interactions. All veterinarians have a responsibility, together with government, breeders and other sources of animals, the animal welfare sector and the companion animal industry, to educate companion animal owners and the community about these responsibilities.

Acquiring a companion animal must be the result of careful planning and clear decision and understanding of the responsibilities involved.

While ultimate responsibility for the companion animal is in the hands of its owner, Governments (Federal, State and especially Local) have a responsibility to legislate for the welfare of the animal, to maintain the safety and amenity of humans and to protect the environment, while considering the needs and rights of companion animal owners and the owners of other animals.

Guidelines

Responsible companion animal ownership means that the owner of the companion animal has responsibility toward not only the companion animal itself but also:

other animals with which the animal interacts
other humans in the owner’s household
neighbours and the rest of the community.

Responsibility for the companion animal includes:

Careful consideration of the long-term ability to care for an animal properly and to fulfil all other animal-related responsibilities (as discussed below) before acquisition of the animal. Advice should be sought from companion animal veterinarians, local government and the welfare and companion animal industry sectors.
Selection of a companion animal suitable for the owner and the composition of the owner’s household, lifestyle and available time, space and finances.
Provision of appropriate food, water, shelter and exercise.
Provision of preventive health care including vaccinations, parasite control, suitable nutrition for age and life stage, and dental care.
Provision and maintenance of an environment for the companion animal that is hygienic for the companion animal, the owner and other persons or animals.
Identification (preferably by microchipping) to ensure identification and return of the animal if it is lost.

Appropriate socialisation, habituation and training and the use of necessary restraint devices (e.g. collars, leads, head collars or muzzles) to optimise the likelihood of the companion animal being relaxed in a wide variety of circumstances and to reduce the risk of the companion animal being a nuisance (e.g. barking) or a danger (e.g. biting).

Appropriate management and training to optimise the companion animal’s relationship with its owner and household and to ensure the owner has control when required.

 Provision of appropriate behavioural enrichment (sufficient interaction with humans and animals and a rich physical environment) to maintain optimum animal welfare and thereby enhance its quality of life.

Responsibility toward other animals includes minimising risks to these animals, whether part of the household or outside the household by:

Maintaining a high standard of preventive health care for the companion animal and a hygienic environment to minimise risk of infection or infestation of other animals.

Socialisation, training and such restraint as necessary (including fences and enclosures, collars, leads, head collars or muzzles) to prevent fighting, harassment or attack.

Recognition of inappropriate or problem behaviour and training, management and behaviour modification to minimise it (veterinary behaviour specialists, veterinary behaviourists, animal behaviourists and trainers).

Responsibility toward other humans in the owner’s household includes:

Socialisation, training and management as necessary to protect humans from the animal. Teaching humans appropriate and safe behaviours around animals, including demonstrating respect for the animal.

Never leaving children, the frail or infirm unsupervised with animals (particularly dogs) capable of causing them harm.

Recognition and management of behavioural problems that might prove a risk or nuisance to humans.

Responsibility toward the rest of the community includes:

Socialisation, training, restraint and appropriate containment to prevent risk or nuisance to others.

Recognition and management of behavioural problems.

Assessment of suitability (age, conformation, health and temperament) of the companion animal for breeding, and appropriate care of breeding stock.

Appropriate rearing of the offspring, including hygiene, preventive health care, early positive experiences and socialisation.

Identification (microchipping) and registration of the animal to optimise return of the animal if lost and identification of the owner if a penalty is due.

Compliance with relevant local legislation (e.g. registration, leash and confinement laws, cat curfews, off-leash and on-leash areas, disposing of dogs’ faeces etc.).

Maintenance of preventive health care and hygiene to reduce the risks of zoonotic disease.

Ratified by the Board: 15th August, 2008
6.12 Aggression in dogs

Position statement

Aggression is a part of the normal behavioural repertoire of all dogs. People decide whether the intensity and frequency of the aggression and the situations in which it occurs are acceptable. Opinions may differ widely about even a single incident.

Background

As a social species, dogs use an extensive range of signals in their attempts to communicate with other animals, including humans. Aggressive signals are used to protect resources valuable to the dog, such as itself, food, offspring, other animals, people and territory. Because aggressive physical encounters have a potential cost to the dog, dogs usually try to avoid such interactions. However, if the perceived threat continues and the dog cannot avoid it, the intensity of the aggressive display may escalate and possibly result in a physical encounter. Once they have achieved their objective, most dogs will cease the aggressive interaction.

A few dogs, particularly some members of breeds originally selected for fighting, may fail to show precursors to such an aggressive encounter. They may also fail to stop their aggressive behaviour when the victim shows deference. Dogs of these breeds, and larger breeds in general, possess a body and jaw strength capable of inflicting severe injuries. Such dogs require greater vigilance from their handlers, and may need specific training and other control measures to reduce the chances of aggression. Although the physical characteristics of smaller breeds reduce their capacity to inflict severe injury, some individuals in this group can still pose a serious risk.

Aggression itself is not inherited. However, propensities to be reactive and aggressive are genetically transmitted. The propensity to be reactive is also greater in entire male dogs and in entire female dogs at about the time of oestrus. The threshold for aggression may be reduced when a dog is experiencing pain, discomfort, irritability, anxiety or frustration. If dogs learn that the use of aggression brings about a favourable outcome for them, they are more likely to use this strategy again.

Dogs displaying aggression to other dogs, or to another species, do not necessarily show aggression towards people. However, each dog should be individually assessed to identify the factors contributing towards and triggering the aggressive episodes.

The danger to the community of any dog depends on a number of factors; the size and temperament of the dog is only one of these factors. Other important issues are the dog’s health, the carer’s management strategies (on and off their property), the dog’s level of training, and the owner’s ability to predict their dog’s behaviour and manage it effectively to reduce the chances of an aggressive episode.

Date of ratification by the AVA Board: 15th February, 2008
6.13 Use of behaviour-modifying collars on dogs

Policy

The use of positive reinforcement training methods for dogs wherever possible is recommended. However, the use of negative reinforcement or punishment may occasionally be necessary.

The use of behaviour-modifying collars that use electric shock on dogs is opposed and the use of such collars cannot be supported unless it can be scientifically shown that their use does not cause long-term physical or psychological harm to dogs.

The use of behaviour-modifying collars that use citronella (or other nontoxic substances) in specific circumstances described under the guidelines below is accepted. Such collars must only be used under the supervision of an appropriately trained registered veterinarian or a person with appropriate qualifications, training and experience in animal behaviour.

Background

Behaviour-modifying collars are used as tools to train dogs not to bark or to remain within specific boundaries. One type of collar is based on the delivery of an electric shock to the dog's neck when it barks or crosses the boundary. Another type delivers a spray of citronella near the dog's mouth and nose. Behaviour-modifying collars can be activated by the dog's behaviour itself (barking, crossing the boundary) or by the owner.

Risks associated with use of behaviour-modifying collars that use electric shock include the potential for dogs to develop conditions such as learned helplessness, increased anxiety, increased aggression, redirected aggression, long-term potentiation (i.e. the problem becomes worse) and reduced motivation.

The use of operator-controlled behaviour-modifying collars is more open to potential abuse than collars that are activated by the dog's behaviour. Such collars should only be considered when all other methods of behaviour modification have failed and euthanasia is the only alternative. In such cases, the use of such collars must be supervised by appropriately trained registered veterinarians or a person with appropriate qualifications, training and experience in animal behaviour.

The use of electric shock collars is illegal in some jurisdictions.

Guidelines

The following guidelines should be observed for the use of citronella collars on dogs.

Citronella antibarking and boundary collars should only be used according to accepted principles of behavioural modification that optimise the effects of the adverse experience with the minimum of exposure. If, in the view of the supervising, competent person, the subject dog is likely to be distressed by exposure to the stimulus, then the collar should not be used.

The supervising person(s) must ensure that they and the persons using the citronella collar under their supervision fully understand the principles of learning (including negative reinforcement and positive punishment) that underlie the effective use of the collars and that the collars are used properly. Veterinarians should keep records of all animals on which such products are used.
**Citronella antibarking collars**

A citronella antibarking collar must only be activated by the behaviour of the dog that is to be controlled. The device should not be activated by other influences, such as the behaviour of other animals, extraneous noise or electronic interference.

The initial use of a citronella antibarking collar should be under direct supervision of a competent person who has been instructed and trained in the use of the collar until that person is satisfied that the device is operating correctly and without causing undue distress to the dog.

**Citronella boundary collars**

Boundary collars must contain a mechanism that gives the dog an initial audible or visual warning (e.g. a marker tape). The dog must only experience the aversive stimulation if it ignores the warning and continues to approach a boundary. If the dog immediately ceases that behaviour, then it must not experience the stimulus.

**Other recommendations**

The development of an Australian Standard for behaviour-modifying collars is recommended.

**Other relevant policies and position statements**

6.11 Socially responsible companion animal ownership

**References and further reading**


Date of ratification by AVA Board: 24 May 2003
6.14 Breed-specific legislation

Policy

Breed-specific legislation (BSL) for dog bite prevention is not supported as experience in other countries has shown that such legislation has failed to reduce the frequency of dog bites.

Background

The Australian Veterinary Association (AVA) shares community concern about aggressive dogs.

Other relevant policies and position statements

6.12 Aggression in dogs

Dangerous Dogs- A sensible solution. AVA 2012


Date of ratification by AVA Board: 1 January 2006, (Updated July, 2013).
6.15 Importing dogs

Position statement

Dogs being imported should be considered for behavioural assessment as well as physical examination before they are permitted to enter Australia.

Dogs should not be imported if they exhibit or carry behavioural characteristics that may inappropriately threaten the safety of human beings or other animals.

The establishment and enforcement of behavioural standards for all dogs whose owners apply for their importation into Australia is strongly supported. These standards should also apply to any genetic material imported with assessment of temperament of donors of semen, ova or embryos.

The Australian Veterinary Association (AVA) calls on the Australian government to change the importation regulations and permit conditions to satisfy the need for effective behavioural assessment of imported dogs.

Background

Current behavioural restrictions on import requirements for dogs are based on specific breeds. A case-by-case assessment of individual dogs is a more effective means of preventing the importation of aggressive dogs and thereby protecting the community.

Reference


Other relevant policies and position statements

6.12 Aggression in dogs

6.14 Breed-specific legislation

Date of ratification by AVA Board: 8 July 2011
Companion animals

Commercial activities
6.16 Companion Animals in pet shops

Policy
Pet shops must be regulated by legislation and codes of practice to ensure maintenance of high standards in every aspect of the operation.

Background
Pet shops play an important role in the Australian community as a source of companion animals, of companion animal care products and of advice.

The responsibilities associated with selling animals, products and providing advice about their care requires an ethical approach, a knowledge of and concern for the welfare of animals, and an appreciation for the role of companion animals in the community.

Guidelines
- Legislation and codes of practice should mandate minimum standards of:
  - housing including space, exercise, provision of food and water
  - husbandry and veterinary care including health examinations, vaccinations, parasite control, desexing and identification (microchipping)
  - attention to behavioural needs and training including socialisation
  - conditions on the sale of animals including checking for new owner competence, cooling off periods and the provision of health care advice
  - staffing levels and security.
- Pet shops should be regularly inspected by accredited compliance authorities, and minimum standards should be enforced.
- Owners and managers of pet shops should be members of the Pet Industry Association of Australia (PIAA). The Australian Veterinary Association (AVA) supports the March 2012 initiative of the Pet Industry Association of Australia (PIAA) and their PIAA Dogs Lifetime Guarantee Policy on Traceability and Re-Homing.

Owners and managers must, and all staff should, be trained or be undertaking training using the relevant Australian Training Package. Currently, this is ACM10: Animal Care and Management. Owners and managers should be trained to ACM40310: Certificate IV in Companion Animal Services. Staff should be trained or training to ACM10110: Certificate I in Animal Studies, ACM20110 Certificate II in Animal Studies, or ACM30410: Certificate III in Companion Animal Services.

As required by legislation in several states and territories, all pet shops should have a relationship with a registered veterinarian with knowledge and skills relevant to the species and services provided by the pet shop.

Animals should only be sourced from breeders known to the pet shop proprietors and who maintain high standards in relation to the welfare, health and genetics of their breeding stock and offspring. All breeders should be registered with government (where required) and with relevant industry groups such as the Australian National Kennel Council or Cat Fancy.

The sale of animals is a privilege with a high level of responsibility. Animals should only be sold to people of appropriate age (as mandated in legislation, or at least 18 years of age), competence and attitude to care for the pet for its lifetime.
A "cooling off" period should be established, either requiring the person to pay a deposit for the animal, receive relevant and required information and advice, and then return to collect the pet after three (3) days, or where a "no questions asked" return with full refund is allowed for up to seven (7) days after purchase. All animals should be accompanied by health and behavioural guarantees including return with guarantee of suitable veterinary treatment and re-homing if at all possible.

All animals sold must be accompanied by pet care advice either approved by PIAA or supplied by a registered veterinarian. Dogs and cats should be identified by microchip before sale, with the purchase price including lifetime registration on a national database (approved by Domestic Animal Registries or the AVA).

Animals to be sold should only be those that have been appropriately managed for zoonotic disease, are well socialised with people, and do not display inappropriate fear or aggression, including barking, toward people or other animals. The risks of zoonotic disease should be managed by appropriate parasite control and veterinary health checks.

New and potential owners must be advised of their responsibilities including the identification, registration, reproductive control (desexing) and the limitation of movement (fence and leash laws) according to relevant legislation.

References


Other relevant policies and position statements

- 6.10 Puppy socialisation

  Date of ratification by AVA Board: 15 February 2013
6.17 Sale of companion animals at markets

Policy
Companion animals should not be sold at markets.

Background
The sale of companion animals in markets encourages impulse buying and may compromise the animals’ welfare. The transient nature of some markets or vendors could inhibit the trace-back of disease outbreaks and relevant history of the animals sold.

Guidelines
The guidelines below are the minimum requirements, where the sale of companion animals at markets is permitted.

If proprietors wish to allow the sale of animals at a market they should ensure that adequate records are maintained, including the name(s) and contact details of the vendors. Proprietors should be acquainted with the requirements of the relevant state or territory legislation and ensure that vendors comply.

Welfare
All animals offered for sale must be weaned and self-sufficient. Adequate food, water and shelter must be provided at the point of sale. Dogs and cats should be microchipped and desexed before sale.

Health
Animals should be vaccinated as applicable to the species and treated for internal and external parasites before sale. Documentation on vaccination, feeding requirements and health records must be provided to the purchaser.

Veterinary care
Every market organiser should have a formal agreement with a veterinarian or veterinary practice to be on call for the treatment of animals and general advice. No animal suspected of being sick, injured or diseased may be sold.

References

Other relevant policies and position statements
6.16 Companion animals in pet shops

Date of ratification by AVA Board: 25 July 2013
6.18 Boarding facilities including dog and cat daycare centres

Policy

Overnight boarding establishments and day care centres should be regulated by a license which is underpinned by mandated standards and effective auditing arrangements.

Background

Boarding establishments, including day care centres for small animals, provide a valuable service for owners who are unable to have their dogs and cats accompany them on holidays, during working hours, or in other particular circumstances when they cannot be appropriately cared for in the home environment.

An increasing number of busy households include dogs and cats that have limited social and physical interaction with other animals and humans for extended periods each day. Well-run day-care centres can provide a range of benefits for dogs and cats by:

- allowing acceptable social interaction between different sizes and breeds in a nonthreatening environment
- providing companionship and exercise through interaction between pets
- allowing nonaggressive social interaction between pets that often come from single-pet households, and counteracting boredom in the home by providing mental, physical and social stimulation.

There must be an appropriate enforceable code of practice or standards specifying the required levels of care, socialisation, housing, husbandry, nutrition, health, hygiene, vaccinations, desexing, microchipping, exercise provision, security, staffing levels and carer competence.

A single code of practice or set of standards may not be able to cover all appropriate care in all situations, and veterinary advice should be sought in specific circumstances where there is doubt.

References


Other relevant policies and position statements

- 6.11 Socially responsible companion animal ownership.

Date of ratification by the AVA Board: 20 January 2012
6.19 Commercial use of dog and cat pelts

Policy
The commercial use of dog and cat pelts is opposed.

Background
The traditional place of domestic dogs and cats in Australia as companion household animals makes them unacceptable sources of commercial pelts.

Date of ratification by AVA Board: 14 May 2005
6.20 Vaccination of rabbits and ferrets

Policy

Vaccination of pet rabbits against rabbit caliciviral disease and ferrets against distemper is recommended.

Background

Rabbit calicivirus disease occurs in wild and domestic European rabbits (Oryctolagus cuniculus) in Australia causing acute haemorrhage and sudden death. The virus was prematurely released in Australia in 1995. A short time later a vaccine became available for use in pet and farmed rabbits. Myxomatosis occurs in Australia, however a vaccine is not available or allowed to be used in Australia because of the risk of the vaccinate strain entering the wild rabbit population and stimulating immunity.

Distemper occurs in ferrets. Distemper is also known to exist in Australia, therefore the ferret population can be considered to be at risk. No specific monovalent vaccine for ferrets is available in Australia. Consequently polyvalent canine vaccines are used.

Guidelines

Rabbit Calicivirus vaccine

1. Cylap RCD® vaccine
   a. Dose ï 1 ml
   b. Frequency
      i. 6-12 weeks of age ï two doses 4 weeks apart and repeat annually
      ii. Over 12 weeks ï single dose and repeat annually
   c. Site
      i. Subcutaneous injection

Canine distemper vaccine for ferrets

   d. Dose
      i. One quarter to one sixth of the canine dose which will vary with manufacturer of vaccine.
   e. Frequency
      i. 6-12 weeks of age ï two doses 4 weeks apart and repeat annually
      ii. Over 12 weeks ï single dose and repeat annually
   f. Site
      i. Subcutaneous injection

Veterinarians should follow the manufacturers’ guidelines and contact them on off-label use. Clients should be made aware of the “off label” use of canine vaccines in ferrets.

Note: Keeping of rabbits and ferrets in Queensland is illegal.
References


Date of ratification by AVA Board: 8 July 2011
6.21 Nutrition guidelines for dogs and cats

Policy
The nutritional status of cats and dogs is a very important indicator of their health and welfare and should be assessed by veterinarians as part of a holistic approach to veterinary care.

Background
Deficiencies or excesses in calories, vitamins and minerals and potential toxicities can impact on the health of dogs and cats and must be assessed by veterinarians.

Obesity is a disease just as debilitating as emaciation and pet owners should strive to avoid diet and body condition related diseases.

In 2011(Revised, 2013) the Global Nutrition Committee of the World Small Animal Veterinary Association (WSAVA) produced small animal nutrition guidelines with the specific aim of promoting the importance of nutritional assessments and recommendations to every pet at every visit. They developed a global initiative to promote nutritional assessment as the 5th Vital Sign that should be assessed in the standard physical examination along with temperature, pulse, respiration and pain assessment.

WSAVA has also launched a nutritional toolkit which is described as; “The toolkit includes practical aids for the veterinary healthcare team to make nutritional assessment and recommendations more efficient, such as a diet history form, hospitalized patient feeding guide, body condition score charts, and calorie recommendations for dogs and cats.”

PetFAST is a voluntary joint initiative of the Australian Veterinary Association (AVA) and the Pet Food Industry Association of Australia (PFIAA).

It is a system to track health problems in dogs and cats that are suspected of being associated with pet food, treats and pet meat. It is designed to identify possible patterns that might point to a cause.

Only veterinarians in Australia can make a report to PetFAST. They report details of adverse events that they suspect are associated with pet food, treats or pet meat for dogs and cats.

AVA and PFIAA monitor PetFAST reports for similarities that may indicate a possible problem. If a problem that might affect more pets is identified, a joint committee will meet to discuss what action should be taken.

Guidelines

- Veterinarians are professionals best placed to assess the optimum nutritional requirements for any individual dog or cat and should strive to keep pet owners informed of the importance of optimum body conditioning for pet health and wellbeing.

- Veterinarians are ideally placed to provide sound dietary recommendations and these should be made in line with current scientific knowledge. Some disease
conditions may be treated or alleviated by dietary management and this should be done under veterinary guidance.

- When formulating a nutritional program, deficiencies or excesses in calories, vitamins and minerals and an awareness of potential toxicities of the many nutritional sources must be considered.

- Breed and species differences must be understood in the formulation of nutritional programs.

References

http://www.wsava.org/guidelines/global-nutrition-guidelines

Date ratified by AVA board: December 2013
Part 7 - Horse health and welfare
7.1 Thermocautery of horses

Policy

Thermocautery (firing) should never be used as a treatment of horses as there is no scientific evidence for its efficacy and it causes unnecessary pain. All regulatory authorities across Australia are encouraged to ban this practice.

Background

Thermocautery is a procedure that has been applied to horses with tendon injuries. It involves use of a heating device to create inflammation.

Thermocautery has been described as an obsolete treatment (Rijnberk 1997).

The Australian Rules of Thoroughbred and Harness Racing also do not support the practice.

In Victorian regulations, in particular Section 77(2) introduces firing (thermocautery) of horses into the prohibited procedures section of the Prevention of Cruelty to Animals Act 1986. This prohibited procedure has been shown to have no benefits and to cause unnecessary pain.

References


The Australian Rules of Racing - [Refer AR.64F (thoroughbred racing) and Rule 99 of the Australian Harness Racing Rules].


Date of ratification by AVA Board: 25 July 2013
7.2 Equine dentistry

Policy

All dental procedures on horses and related species should be performed only by registered veterinarians and be supported by evidenced-based medicine.

Background

The Australian Veterinary Association (AVA) recognises that to provide optimal health and quality of life, good oral care is necessary. Diseases of the oral cavity, if left untreated, are not just painful, but may also contribute to ill thrift and other local or systemic diseases.

The primary aim of equine dentistry is to maintain good oral health and maximise the comfort and function of the horse while eating and when bitted.

Advances in the understanding of oral pathology and function, drug modalities, technology, skills and skill learning opportunities have allowed this area of veterinary science to leap forward to a position where only qualified and skilled veterinarians can practice it.

Unless these issues are fully understood, the practice of equine dentistry becomes unreasonable for animal welfare and consumer protection aside from horse health and legislative grounds. Incorrect dental procedures can result in any or all of the following: smooth dental tables, exposed pulps, inappropriate orthodontic movement, loss of teeth, bone fractures, osteomyelitis and abscess, death from complication or for humane reasons.

Horse owners are entitled to expect that the persons practising dentistry are properly trained, accredited and regulated.

Guidelines

These guidelines are for registered veterinary practitioners performing dental examinations and treatment procedures in the horse. They cover materials and equipment, oral evaluation and cleaning, client communication and ongoing patient care and are considered to be the minimum standards expected from practitioners of equine dentistry; in other words, the necessary steps in performing an initial oral assessment, an assessment under sedation and/or general anaesthesia of any oral pathology present, the recording of findings and the development of a treatment plan; followed by the appropriate treatment/s, and finally, the formulation of advice for appropriate husbandry and follow-up management.

This document does not include more advanced treatments, which may include oral surgery, complex periodontal therapy, endodontics, orthodontics or other dental/oral disciplines.

Practitioners should recognise whether their dental equipment and skill level allows them to fully treat the oral pathology present or whether referral to an appropriately trained and equipped practitioner is required.

Definitions

Dental examination: a procedure that includes oral assessment for the purposes of diagnosis and formulation of a treatment plan under appropriate and humane chemical or non-chemical restraint. Examination includes diagnosis of abnormalities and pathology of the oral cavity, maxillofacial area and/or associated structures.
Dental record: a completed dental chart indicating periodontal indices, any oral pathology present and procedures planned and/or performed at the time of examination.

Dental floating (a term synonymous with the terms filing or rasping): the removal of abnormalities of wear and inappropriate dental pathology of the teeth utilising hand-held or power-assisted files.

Homecare: subsequent advice given post procedure and/or follow-up to be performed by the client.

Periodontal disease: inflammation of the gingival or periodontium or the loss of the periodontium with or without active disease.

Periodontium: tissues including gingival, periodontal ligament, cementum and alveolar bone.

Gingivitis: an active inflammation of the gingiva.

Periodontitis: an active inflammation of the periodontium.

Periodontal pocket: pathological space between alveolar bone and the tooth, generally as a result of loss of the periodontal ligament, extending apically from the normal site of the gingival epithelial attachment.

Periodontal therapy: treatment of periodontal disease. Therapy may include periodontal surgery.

Periodontal surgery: surgical treatment of periodontal disease.

Oral surgery: surgical invasion and manipulation of hard and soft tissues to improve/restore oral health, function and comfort.

**Facility and instruments**

**Facility**

The working area should involve the provision of adequate patient support and protection for the handler and veterinarian.

**Hand instruments**

The minimum set of equipment and instruments required for a detailed and thorough dental examination and treatment includes:

- full-mouth speculum
- flush syringe and bucket;
- powerful light
- mirror and dental probe
- various rasps including straight, angled and curved heads with tungsten carbide floats
- wolf-tooth extraction instruments
- forceps appropriate for removal of caps or loose teeth
- appropriate sedatives and head support system and dental charts.
Lesser dental procedures may only require the equipment needed to undertake such procedures.

*Power equipment*

To competently, adequately and rapidly perform some dental treatments, power equipment may be used. It should be used only by veterinarians trained in its use.

Power equipment should be maintained in good working order on a regular basis, including cleaning and lubricating of handpieces after each use according to the manufacturer’s instructions.

Horses must be sedated for procedures involving the use of power equipment for safety reasons and the minimisation of the risk of pain and injury to the horse, handler or veterinarian.

*Operator and assistant protocols*

To perform an initial oral examination of the horse and, if necessary, to complete a thorough oral examination under appropriate sedation and/or general anaesthesia.

To formulate an appropriate treatment plan.

To oversee the recording of all findings and give written or verbal instructions to the appropriate persons about the implementation of the treatment plan.

To formulate a management plan and to liaise with the client regarding the implementation of any such advice.

Recommend to the client that the horse be referred to an appropriately trained veterinarian when the practitioner does not have the training and knowledge, skills, equipment or facilities to perform a given procedure or treatment.

*Oral examination, diagnosis and treatment planning*

A full patient history is part of any oral examination. A preliminary physical examination of all body systems is to be conducted. The extent of this initial examination will depend on the temperament of the horse, with a subsequent full oral examination performed under sedation or general anaesthesia.

Complete oral examination is not possible in the unsedated horse; taking into consideration the welfare of the horse, the safety of the operator and handlers and the commitment of the owner, a thorough oral examination can only be performed under appropriate sedation or anaesthesia.

A complete oral examination may require the taking of extra- or intra-oral radiographs.

All findings should be recorded on a dental chart, which then becomes part of the horse’s medical record.

Based on the findings of these examinations, diagnoses will be made.

Consideration of the diagnoses, patient issues such as cooperation, value and prognosis, and the owner’s commitment will enable the development of an appropriate treatment plan.
**Sedation**

Sedation of horses for dentistry must be performed by a registered veterinarian.

**Client communication**

Client communication is fundamental to ongoing (oral) care. At the time of examination or treatment, the operative procedures and existing or potential complications (e.g. bleeding, coughing, dehiscence, infection, neurological signs, diarrhoea, anorexia and/or signs of pain) should be discussed.

 Provision of individualised oral and/or written instructions at the time of examination is required. Discussion of immediate postoperative care, including medications and their side-effects, must be undertaken with the client or representative.

 Antibiotics, anti-inflammatories and analgesics are to be prescribed as indicated.

 The attending veterinarian must discuss any change in management and/or diet regimen that might be necessary.

 Establish any appointments for follow-up examinations and further discussion.

**Diagnostic assessment**

A clinical examination of the horse shall be undertaken prior to performing any dental procedure or administration of sedation/anaesthesia. Any adverse findings in this clinical examination indicate the need for further investigation prior to proceeding.

A thorough oral and dental examination on every horse is paramount to the early detection of problems and their treatment before they become irreversible.

All findings and abnormalities should be recorded using dental charts. Where possible, abnormalities should be demonstrated and explained to the owner.

Examine incisors, including the lateral excursion test, assessment of angles, occlusion tests, rostro-caudal movement and abnormalities of the teeth. Canine teeth need to be checked if present.

Examine cheek teeth using full-mouth speculum, light and mirror.

Perform diagnostic tests when indicated, including radiography, ultrasound, biopsies and blood tests etc. If unable to perform these tests, the horse should be referred to an experienced veterinarian who has the capabilities to perform them adequately.

Undertake high levels of hygiene and infection control

Clean and appropriately disinfect equipment immediately after each procedure.

Wash the horse's mouth before, during and after each dental examination with an appropriately diluted broad-spectrum antiseptic solution.

Prior to leaving each visited property, wash, disinfect or change/discard clothing and other protective equipment (such as overalls, gloves, masks etc.) as appropriate.

Dental procedures shall be safe for horses and their handlers
Equine dentistry requires the operator to have a competent level of horsemanship.

When painful or potentially stressful procedures are to be performed, ensure the horse has appropriate levels of analgesia, sedation and/or anaesthesia.

Owners or horse handlers should be advised about the risks associated with the use of heavy (full-mouth) speculums. Measures must be taken to minimise these risks to the horse, owner/handler and veterinarian.

Maintain a high degree of competency and professionalism

A thorough examination of the soft and hard tissue structures of the mouth shall be performed prior to any procedure. Special consideration should be given to the gums, pulp horns and infundibulae. Any periodontal pockets or trapping of food needs to be treated.

Routine teeth filing for normal mouths will involve removing the sharp enamel points on the buccal surface of the upper arcade and lingual surface of the lower arcade. The other surfaces of the dental arcades will be checked for sharp points and dental overgrowths that may cause discomfort or alter the biomechanics of the mouth.

Assessment of the mouth for symmetry, balance, function and occlusion should be performed. Correction of any abnormalities should be discussed with the owner and undertaken if possible. Correction may take more than one treatment.

Geriatric horses with lack of reserve crown need special consideration when attempting correction of abnormalities.

1st upper or lower premolars (wolf-teeth) should be extracted when considered necessary.

Deciduous teeth ('caps') should be removed if they are loose, retained or impacted.

Tetanus vaccination status needs to be considered if tooth extraction is performed or any laceration of gums is noted.

Horses ridden with a bit should have their lower and upper 1st cheek teeth carefully rasped so that they are specifically contoured to maximise comfort with the bit.

**Advanced dental considerations**

Cases requiring extraction of diseased teeth and endodontic treatment shall be referred when the examining veterinarian has not had training to undertake such procedures.

Pre- and post-treatment radiographs should be taken.

Radiography should be used to further investigate such cases as marked periodontal disease, abnormal bony enlargement, chronic unilateral nasal discharge, open pulp horns, discharging sinus tract, shear mouth, unilateral atrophy of muscles of mastication and fractured teeth.

Consideration should be given to the appropriate use of analgesia, antibiotic medication, sedation, local anaesthesia and general anaesthesia.

**Husbandry/prevention plans**
Effective horse husbandry, including appropriate nutrition, is vital for the prevention and control of oral disease. The assessment of the extent of disease, the owner’s compliance, the handling facilities and the cooperation of the horse to husbandry are imperative in the formulation of any homecare plans.

These plans may need to be reassessed at follow-up evaluation visits.

Date of ratification by AVA Board: November, 2008
7.3 Distal limb neurectomy

Policy

Distal limb neurectomy in appropriate and selected cases is an acceptable and useful treatment option for chronic irreversible heel pain causing lameness in horses.

The use of neurectomised horses in competitive events should be regulated by the sporting authorities and be subject to a specific Code of Practice or Standard of Practice.

The indiscriminate use of distal limb neurectomies is not supported.

Background

Distal limb neurectomy involves removal of part of the nerve to the hoof of the horse. It is performed in cases of ongoing irreversible heel pain. Opinion is divided on the merits of horses being allowed to compete in strenuous athletic events after distal limb neurectomy.

Guidelines

The welfare of the horse must be the major consideration before distal limb neurectomy is used as a treatment procedure.

Before performing a distal limb neurectomy, a veterinarian must be satisfied that the owner fully understands:

- all implications of the operation
- the possible side effects of the operation
- the requirement for continuing care of the horse after the operation
- that some sporting authorities prohibit horses from competition after distal limb neurectomy.

Date of ratification by AVA Board: 8 July 2011
7.4 Artificial breeding of horses and related species

Policy

Artificial breeding techniques are viable options for propagation of horses and related species.

Background

Artificial insemination using fresh, chilled or frozen semen and embryo transfer have been used in many animal species for many years. These technologies have advantages for disease control, improvements in the rate of genetic gain, dissemination of elite genetics, cost efficiency for export and import, and assisting in the preservation of endangered equine species.

In addition to these core procedures, newer technologies such as semen sexing will be continually examined and developed.

Guidelines

All artificial breeding procedures of horses should be conducted or supervised by a suitably experienced, registered veterinarian.

The welfare of donor and recipient horses must be considered at all times, and appropriate measures taken to ensure that animal welfare standards are maintained.

Codes of practice are required to cover the following areas:

- minimum training requirements to undertake artificial breeding of horses
- quality control of semen and embryos
- standard disease control measures
- minimum facility requirements
- standard agreements between veterinarians and clients
- use of donor horses with genetic defects.

Date of ratification by AVA Board: February 2009
7.5 Castration of horses and donkeys

Policy

Castration of horses and donkeys (including foals) is a significant surgical procedure, requiring appropriate technique, anaesthesia, analgesia and aftercare, including post surgical exercise. It should only be performed by a registered veterinarian.

Background

Castration of horses and donkeys is an essential animal management procedure. Other reasons for castration include treatment of injury, tumours, herniations and orchitis or cryptorchid correction.

Many horses and donkeys are still castrated by non-veterinarians, which is a concern on welfare grounds as the animal will not be provided with adequate anaesthesia and analgesia during or after the procedure. All surgical procedures have some degree of risk to the patient. Complications requiring veterinary attention can occur before, during or following the procedure and can be potentially fatal. Such complications include haemorrhage, intestinal eventration, colic, cellulitis, peritonitis and priapism.

Inadequate postoperative care can also lead to complications.

Particular attention to appropriate technique is required when castrating foals or much older animals.

Guidelines

As castration is an irreversible surgical procedure, obtaining a signed consent form from the owner prior to castration is recommended. Because horses, more so than donkeys, may be castrated in the standing position, the veterinarian should discuss with the owner the advantages and disadvantages of standing and recumbent castration.

Veterinary surgeons need to consider the selection of drugs most suited for induction and maintenance of anaesthesia and analgesia for the procedure.

Ratified by the AVA Board: 18 June 2009
7.6 Equine competitive events (other than jump races and rodeos)

Policy

The Australian Veterinary Association (AVA) supports equine competitive events, provided that the suitability and level of fitness of the competitor horse is appropriate and adequate for the event and the welfare of the horse is not compromised.

The AVA considers that the organisation of competitive events should be overseen by an organising committee that is responsible for the preparation of clear plans outlining procedures to maximise the safety and welfare of the horses.

The AVA considers that all horses used in competitive events must be treated humanely. This is the responsibility of the competitor, owner, rider and organising committee.

Background

Equine competitive events range from pony club events, which are low risk, to endurance events and bush races, which pose higher risks to horse welfare. The range of necessary supervision and veterinary involvement will vary according to the particular event, its duration and the terrain over which it is conducted.

Guidelines

Organisation of competitive events should involve the following.

Understanding and application of the relevant state Acts relating to the prevention of cruelty to animals.

A clear definition of the age of horses permitted to compete and the criteria relating to the horses' level of fitness and training before competition.

A defined veterinary management plan; in many sports, this will involve the attendance of a suitably experienced veterinarian at the event, with provision to ensure that the veterinarian is engaged on a professional basis.

A process that ensures, either with or without veterinary involvement, that horses do not compete when lame, ill, unfit, or injured.

A statement to competitors that horses competing should be presented drug free. For some events, there should be a process to ensure compliance.

Course design that tests the skill of the horse and rider/driver/handler, but does not place unreasonable demands on the horses for each given level of competition. The course should be checked by the organisers, with veterinary involvement if available, to ensure that adverse conditions such as heat, humidity or heavy-going and slippery conditions will not place unreasonable demands on horses. Course organisers have the final responsibility for course design and suitability of the conditions.

Procedures that ensure that riders, drivers and handlers are not under the influence of drugs or alcohol when competing and do not subject their mounts/horses to undue risk. Riders/drivers should be appropriately clothed with adequate protective gear as specified by the organisers. Riders/drivers should use aids, including whips and spurs, as sparingly as possible. Any aids should comply with industry standards to ensure no damage to the horses.
Inspection of horses and briefing of riders before the event to ensure compliance with the requirements documented above and to ensure that riders understand the rules of the event.

Adequate supervision of all parts of the event to ensure compliance with event rules.

Arrangements to treat injuries promptly and effectively.

Investigation, preparation of a report and compliance with relevant state legislation or supervising committee requirements, if a horse dies or is injured during an event. Reports should include proposed corrective action to prevent the incident occurring again.

**Other relevant policies and position statements**

7.9 Use of whips in horse racing

7.10 Use of horses in entertainment

**Date of ratification by AVA Board: 1 January 2006**
7.7 Equine jumping races

Policy

Hurdle and steeplechase (jumping) races are comparable to other legitimate forms of strenuous equestrian activity.

Horse racing over obstacles is not opposed, provided that racing authorities continue to implement measures to minimise incidents that might endanger the welfare of the competitors. Horses permitted to compete in these specialised events in public must display a suitable level of training and ability.

Background

Accidents are inevitable in equine jumping races, as in any intense athletic event. Measures should be in place to minimise the risks to the welfare of horses competing in these events.

Guidelines

Measures that racing authorities should put in place for equine jumping races include:

setting minimum skill and experience standards for the horses, riders and trainers
attention to course design and length, and to placement and size of obstacles and continuing and careful analysis of the accidents and incidents that do occur.

All jumping races, including those at picnic and 'point to point' meetings, must be conducted with a veterinary surgeon in attendance. Appropriate facilities must be available for the prompt treatment or euthanasia of injured horses.

Other relevant policies and position statements

7.6 Equine competitive events (other than jump races and rodeos)

7.8 Racing of two year old thoroughbreds

Date of ratification by AVA Board: 15th February, 2008
**7.8 Racing two year old thoroughbreds**

**Policy**

Two-year-old horses that are obviously immature in age and development, or have significant faults in conformation, should not be raced.

**Background**

Two-year-old racing is an integral part of the Australian and overseas thoroughbred racing industry, and there is an international emphasis on the breeding of early-maturing animals. There is good evidence that racing as a two-year-old does not reduce the length of a horse’s racing career (Seder and Vickery 1995, RIRDC 1998, Bramlage 2008).

Recent multi-centre work has demonstrated that early exercise in the racehorse can serve as a form of conditioning for musculoskeletal tissues and can be protective against injury. The early exercise was shown to advance the natural maturation processes in the tissues of the conditioned horses.

There should be close attention to the husbandry, diet, training and racing schedules of young horses to reduce the incidence of exercise-induced injuries. Further measures to decrease injuries to all racing horses should include improvements in track layout design, track racing surface construction, and educational programs for industry personnel. There is an increased risk of shin soreness in two year olds and horses should be monitored for this and managed as appropriate.

Consideration should be given to the increased incidence of equine gastric ulcer syndrome, respiratory disease and behavioural problems associated with stabling.

Horses should be provided with access to paddock turn-out as often as possible and practicable. Stables should be well ventilated and as open as possible so horses can see out and interact with other horses at all times.

Initial education and training of two year olds should be conducted according to science-based training methods with attention to the principles of learning theory and appropriate use of positive and negative reinforcement. Clear, simple signals should be given to the horse and punishment and inflicting unnecessary pain should be avoided.

**Other relevant policies and position statements**

7.7 Equine jumping races

7.6 Equine competitive events (other than jump races and rodeos)

17.6 The provision of optimum veterinary services to the horse racing industry

**References**


Date of ratification by the AVA Board: 20 January 2012
7.9 Use of whips in horse racing

Policy

Excessive or incorrect use of a whip on any horse, including the whipping of horses unable to improve their position in a race field, is not condoned.

Background

Whips are used during horse racing to control or guide the horse and to make the horse perform more competitively, however there is ongoing research questioning whether whip use will result in improving a horse’s placing (Evans and McGreevy 2011).

The whip functions as a training aid by being a tool for positive punishment (aversive) and hence the whip should be used to educate the horse when it responds incorrectly.

Incorrect use of a whip includes the use of the whip on any part of the body other than the hindquarters or the shoulder and any use that results in welts or breaks the horse’s skin or causes psychological injury to the horse.

There should be additional research into the use of whips in horse racing.

References


Other relevant policies and position statements

7.6 Equine competitive events

17.6 The provision of optimum veterinary services to the horse racing industry

Date of ratification by AVA Board: 8 July 2011
7.10 Use of horses for entertainment

Policy

Horses can participate in public entertainment provided their needs for shelter, exercise, transport, rest and basic husbandry are met, and their welfare is a priority during training and performance.

Background

Performance events that use horses include circuses, rodeos, film, television, stage and theatre. Other peripheral performance events could include transport for marriage engagements and tourist horse-drawn carriages. The welfare of horses may be compromised by any of these events with respect to housing, handling, exercise, travelling, training, injury, rest periods and incorrect use of equipment.

*Horses* includes donkeys, zebras and other equids.

Guidelines

The minimum standards necessary for the care and welfare of performance horses used in entertainment are as follows:

**Housing**

Adequate housing must be provided that includes shade and protection from inclement weather. A temporary shelter, such as a tent which contains prefabricated, demountable stables or pens of adequate size is a basic requirement. Adequate area to avoid being cast must be provided for animals to lie down and roll to allow normal expression of horse behaviour. Horses are herd animals and it is important for horses to be housed adjacent to other horses or appropriate companion animals.

In fine weather, horses may be maintained outdoors in pens or yards and again these pens must be of adequate area. Temporary electric fencing may be used for containment. Prolonged tethering of horses is not acceptable as a method of restraint. There must be an evacuation plan in place to protect horses from any adverse weather event or other natural disaster.

**Exercise**

Horses should be exercised for at least half an hour daily.

**Rest**

Horses must be permitted to rest in an area that is large enough to allow them to move around and lie down in comfort. This area should not be adjacent to an area of major activity.

**Training**

Horses should be trained by skillful and competent trainers using positive reinforcement techniques such as encouragement and reward for successful performance. Techniques that use punishment and inappropriate, excessive or severe negative reinforcement are unacceptable.
Horses should be trained to a level of proficiency above that required for performance. They should be used for performance only when fully and adequately trained for the task required.

**Performance**

Only horses that are fit and healthy should be permitted to participate in performances. Horses that are distressed, sick or diseased, sore, lame or injured must not be used.

Medicines, other than electrolytes or vitamins, should not be used to modify the behaviour of horses during training or performance, unless these medications have been prescribed by a registered veterinarian.

Horses should be inspected before each performance to determine that they are fit to perform. Further inspection should follow each performance to check and treat any injury. A healthy horse is one that is mentally and physically fit to participate regularly in the full range of required activities free of pain.

**Whips, spurs and other equipment**

Limited and humane use of whips and spurs during performance and training is acceptable. A whip may be used as a cue and training aid during training sessions and for sound effect only during performance. Spurs must have blunt rowels.

Whips should not be used to discipline unruly or poorly performing horses during performance. Such horses should be immediately removed from the performance area. The suitability of such horses for future performance must be reassessed by the trainer to ascertain whether rest; further training or permanent retirement is needed.

Equipment or gear used during training or performance should not cause distress, pain or injury to the horse on which it is used.

**Stunt work**

The safety and welfare of horses performing stunt work should be paramount in the planning of performances. It is unacceptable to put the lives or limbs of horses in jeopardy for a spectacular stunt scene. A veterinarian should be consulted prior to the stunt and be present while the stunt is being performed.

**Responsibility for husbandry**

A nominated person should be responsible for the daily management of performance horses. This person should ensure that the animals are:

- fed and watered each day at regular intervals
- housed adequately under sanitary conditions
- wormed and vaccinated regularly
- receiving regular hoof care
- given first aid or veterinary attention promptly when required
  - receiving adequate rest periods between performances, and
  - have an up to date health record.

**Other relevant policies and position statements**

7.6 Equine competitive events
7.7 Equine jumping races.
15.14 Tethering

Date of ratification by AVA Board: 20 January 2012
7.11 Transport of horses

Policy

The Animal Welfare Standards and Guidelines for Land Transport approved by the Primary Industries Ministerial Council (PIMC) should be uniformly adopted and effectively enforced Australia-wide.

Background

Horses are transported over large distances in Australia in the horse racing and breeding industries, as well as for other equine activities and for slaughter.

Guidelines

Persons in charge of vehicles and transport must have livestock experience.

Forward planning of any journey should be undertaken and the following factors should be considered:

- Horses must be adequately prepared for long distance transport in terms of feeding and watering to ensure appropriate amounts of roughage prior to departure (to provide a large intestinal reservoir of fluid and electrolytes to help prevent dehydration and assist with thermoregulation)
- The mode of carriage and suitable ventilation
- Consideration must be given to not transporting in extreme climatic conditions (heat and cold) if vehicles are not climate controlled
- The length of journey and frequency of rest periods
- The state of the horse, including health, age, individual behaviour if known, e.g. a propensity to kick or bite other horses. Consideration should be given to unusually stressed or panicking horses (excessive balancing and ‘scrambling’ whilst moving)
- Segregation of stallions or colts, dry, wet and pregnant mares
- Loading and unloading facilities
- Horses should be habituated to transport by practising horse-friendly loading and unloading procedures
- Feral horses should only be transported for the purposes of relocation or rehoming and as part of a government supervised management program
- Prior to transporting horses from disaster areas, appropriate medically assessment must be performed.

References


Other relevant policies

- 13.3 Control of feral horses and other equidae
  
  Date of ratification by the AVA Board: 20 January 2012
7.12 Keeping livestock in peri-urban areas

Policy

Livestock may be kept in peri-urban environments if their basic nutrition, health, exercise and shelter requirements are met and they are regularly inspected. Owners must be responsible, skilled and competent in current animal husbandry and animal welfare principles, and be aware of biosecurity and environmental issues, which include disease control and waste disposal methods.

Background

Nationwide, rural land is being converted to urban development with the resultant loss of suitable land to keep large animals. Animals are being kept in the peri-urban environment to reduce the owner’s costs of travel and agistment.

Guidelines

Paddocks/living areas must be well drained, have no sharp projections from fences or enclosed objects and be free of poisonous plants.

Adequate feed and fresh water must be provided.

The owner needs to be familiar with national, state and local authority regulations in peri-urban areas, including waste disposal, noise pollution and preventing offensive odours.

Appropriate yarding and loading facilities should be provided.

Contact phone numbers or email contacts must be provided to adjoining property owners for use in an emergency.

Provision for owner identification and animal location to fit with an Ausvetplan to assist crisis management should a disease outbreak occur, especially for an exotic disease.

State Departments of Primary Industry (DPI) extension personnel to educate owners, especially where there are differing views to animal husbandry that may be in contradiction to Australian expectations and standards.

References


Date of ratification by AVA Board: January 2010
Part 8 - Cattle health and welfare
8.1 Induction of parturition

Policy

The Australian Veterinary Association (AVA) opposes calving induction in dairy herds other than for therapeutic reasons. The AVA strongly supports the adoption of management processes that improve dairy herd fertility and welfare without the use of calving induction.

The AVA also supports research and extension programs involving cattle reproductive physiology, with a view to improving the reproductive performance of Australian dairy herds.

Background

Induction of parturition (calving induction) is used in seasonally calving dairy herds. Welfare issues can arise if calves are induced prematurely, such that the induced cow is not yet lactating.

Calving induction programs should only be used as an adjunct to a complete reproductive management program, adopting the significant advances in reproductive management technology that have been made in recent years. Calving induction should not be used as a substitute for good reproductive management.

Improved reproductive performance would allow elimination of calving induction in Australian dairy herds.

Guidelines

Any calving induction program must be structured to minimise risks to the welfare of the induced cow or her premature calf. It must involve a veterinarian with intimate knowledge of:

- information required before starting an induction program
- administration of compounds to induce parturition
- management and welfare of the induced cows and their premature calves
- health conditions associated with calving induction.

Detailed guidelines are provided below.

Preparatory information required before commencing an induction program

Practitioner skills

Any practitioner planning an induction program must be skilled in nutrition management, reproduction analysis and planning, body scoring and pregnancy testing (including accurate estimation of the stage of gestation). If the practitioner does not have suitable experience in these areas, then they should seek appropriate advice and assistance.

Pregnancy testing and selection of induction candidates

In order to identify all potential induction candidates, the whole herd should be pregnancy tested at a time when cows to be induced are between 6 and 16 weeks pregnant. This will allow the optimal date for induction to be calculated, and appropriate early management of this group of cows. In some management systems, different groups of cows might need to be pregnancy tested at different times.
Planning the induction program

It is important to ensure that cows are free from any disease and will be in the correct body score at the time of induction. This requires a planned nutrition program from the time pregnancy is diagnosed. The cows should be dried off, ensuring that the dry period is at least 7 weeks. It is recommended that, at drying off, cows be infused with a dry-cow antibiotic and treated with the appropriate parasiticides. Cows should also be enrolled in a vaccination program e.g. for clostridium, leptospirosis, salmonellosis appropriate for the farm.

Review of the farm’s previous reproduction history and reproduction management plan

Calving induction should be part of a total reproduction program. It is not as important as good heifer rearing and reproduction management.

Before starting an induction program, the veterinarian should:

- benchmark the farm’s reproductive performance determine success and failures in previous years
- investigate the need for an induction program on the farm
- initiate a structured reproduction planning program with annual review and update
- assess whether the calving pattern is appropriate and whether there are alternative management techniques that will return equal or greater benefits to the farming operation.

Selection of candidates

A basic history of cows presented for induction should be available to the veterinarian and this should be assessed. Every cow must be pregnancy tested prior to injection of the induction agent.

Criteria for inclusion

Age: 3–5 years old is ideal these cows have the best performance return and are likely to remain in the herd.

Health: free from infectious disease, and no history of mastitis or chronic high somatic cell counts.

Body condition: body condition score (BCS) 4.5–5.5 on a score of 1–8 (or 3–4 on a score of 1–5).

Stage of pregnancy: 27–34 weeks it is essential that all cows are pregnancy tested immediately before injection of the induction agent to confirm that they are still pregnant and at the correct stage.

Criteria for exclusion

Age: > 8 years old.

Health:

current health problems, particularly infectious disease
history of significant health problems such as milk fever, mastitis, chronic pneumonia, longstanding abscess or osteomyelitis, chronic or recurrent high somatic cell counts.

Body condition: BCS > 6 or < 3.5 on a score of 1–8 (> 4 or < 2.5 on a score of 1–5).

Stage of pregnancy: < 27 weeks or > 34 weeks.

Parity: heifers (previously unbred females) as their use can result in extremely poor production.

Farm nutritional management: cows on farms with poor farm nutritional management, especially if there is a shortage of feed.

**Administration of compounds to induce parturition**

The following compounds can be used to induce parturition:

dexamethasone trimethylacetate — currently the only product registered for this purpose

dexamethasone sodium phosphate

prostaglandins, including cloprostenol sodium and dinoprost trometamol.

**Administration regimes and recommended timeframes**

An initial injection of 25–35 mg dexamethasone trimethylacetate is given after the cow is confirmed pregnant. The farmer may be advised to begin milking the cows once they develop an udder. This can occur from 7 days after the dexamethasone trimethylacetate injection. Cows that calve without developing an udder should be run with the milking herd and milked to stimulate milk production. Cows that have not calved 10–14 days after the initial injection may be reassessed and injected with one of the following:

- a prostaglandin
- dexamethasone sodium phosphate
- dexamethasone trimethylacetate.

Cows that are bagged up can be given either a standard dose of prostaglandin or 25 mg dexamethasone sodium phosphate. Those that are less developed can be given either 20–25 mg dexamethasone sodium phosphate or 25 mg of dexamethasone trimethylacetate. Cows that do not respond at all to the initial injection of induction agent should be rechecked between 14 and 28 days post-injection and may be given a second injection of 25–35 mg of dexamethasone trimethylacetate if they are confirmed as suitable candidates.

**Precautions against anaphylactoid reactions**

Anaphylactoid reactions after injection with a long-acting corticosteroid have been reported. All veterinarians inducing cows to calve prematurely using dexamethasone trimethylacetate should carry adrenalin or antihistamines for use when these reactions occur.

**Recommendations for the management of the induced cows and their premature calves**

**Management of cows**
If possible, cows to be induced should be run as a separate group after drying off, to allow for easy identification of any cows failing to meet body condition requirements. Cows should be at BCS 4.5–5.5 at drying off and be fed adequately throughout the dry period to allow for maintenance of the cow and to meet the energy requirements of the calf.

**Preparatory nutrition**

One week before induction, cows should be changed onto an appropriate springer ration. Controlled green pasture intake and supplementation with good quality hay and Causmag/anionic salts at recommended levels (to reduce the incidence of metabolic disease) are recommended. Cows should be maintained on this ration until they calve.

**Prevention/management of metabolic disorders**

Correct nutrition management during the dry period, particularly the 3 weeks prior to calving, and attention to body condition are the major methods for preventing metabolic disorders. Cows need to be observed regularly and the farmer must be instructed about the appropriate course of action if metabolic disease occurs or is suspected.

**Management of infectious disease**

Cows should be kept in a clean, well drained, sheltered and easily accessible paddock or alternative form of confinement (eg calving pen, calving pad) from the time they receive their first injection to induce parturition until after they have calved. They should be kept in the best calving area available on the farm. Cows need to be regularly monitored and receive veterinary attention at the initial signs of any illness.

**Preparation for health and monitoring**

Induced cows should be checked at least 3 times per day from the time of induction. The farmer needs to have adequate supplies and knowledge of the appropriate treatments available to prevent and treat milk fever and mastitis. Farmers should be warned that a small but variable proportion of induced cows may develop peracute infections associated with reduction in immunity caused by the corticosteroid injection. These cows may die if they are not promptly detected and submitted for veterinary examination and treatment.

**Observation and assistance**

Induced cows should be observed closely as they may show less obvious signs of imminent calving than non-induced cows. Many induced cows require assistance at calving. Any cow that appears to be trying to calve for more than 4 hours or is persistently straining for more than half an hour needs to be brought in and assisted as necessary.

**Lactation before calving**

Any cow that has a distended udder and is dripping milk prior to calving must be brought in at the beginning of each milking and milked out. These cows should not be run with the milking herd as they may not receive the appropriate nutrition (see *Preparatory nutrition* above). Induced cows may develop milk fever before calving and are prone to being knocked down in the yard if they are in the early stages.

**Management of premature calves**
Assessment of vitality

Calves must not be allowed to suffer unduly. Calves should be euthanased promptly in a humane manner if they are:

- obviously nonviable
- incapacitated in any way
- unable to stand, walk or suckle within 8 hours
- more than a month premature.

Methods of euthanasia

Appropriate methods of euthanasia are:

- injection of a euthanasia solution (these solutions may only be administered by a registered veterinarian)
- barbiturate by intravenous or intracardiac injection (note: carcasses of calves killed in this way are not suitable for rendering or for use as pet food and must be disposed of by burning or deep burial)
- xylazine by intravenous or intramuscular injection followed, when the xylazine has taken effect, by supersaturated potassium chloride or magnesium sulfate, by intravenous or intracardiac injection
- a single forceful blow to the head using a balling hammer or other suitable blunt instrument
- use of a licensed firearm or captive-bolt pistol in accordance with state government regulations.

Carcasses should be disposed of quickly and hygienically in accordance with state and local government regulations.

Management of viable calves

Viable calves born within one month of their predicted due date may be reared, but will require preferential treatment if they are to survive and thrive.

Colostrum management

Calves should be fed 2 litres of good quality colostrum in the first 6 hours, followed by another 2 litres in the next 6–12 hours. It is recommended that these calves are fed colostrum for 7 days. This provides extra protection to the premature calf because of the local gut effects of antibodies against gastrointestinal bacteria. The later colostrum may be of a lesser quality than that fed during the first 24 hours, but not fermented or stored.

Colostrum quality

It is highly probable that the ability of induced calves to absorb antibodies will be compromised by their prematurity, and so colostrum quality is important. To make sure that the colostrum used is of appropriate quality, it is important to follow these rules:

- Only use colostrum from the dam, or from donor animals that are healthy and disease free and have been resident on the farm for a prolonged period. Colostrum from the dam should not be used if she has been milked or has been dripping milk before calving.
Colostrum should not be sourced from heifers or other induced cows.

Only use first milking colostrum if possible.

If using unpoled colostrum, don’t use colostrum from cows that are producing over 8-9 litres.

Monitor colostrum quality daily with a colostrometer.

*Calf housing*

Calves should be supplied with good housing to provide warmth and shelter and to minimise the risk of disease. Induced calves should be reared separately from non-induced calves for the first 2 weeks of life. Feed consumption and disease status must be closely monitored.

*Health conditions associated with calving induction*

*Immune suppression*

Long-acting corticosteroids (such as dexamethasone) used to induce parturition in dairy cattle impair the secretion of proteins that are critical to normal cellular and humoral immune responses, an effect that is strongly linked with changes in the composition of the white blood cells. The resulting immune suppression is still profound at the time of parturition.

*Mastitis*

To minimise the risk of mastitis in induced cows, practitioners recommend the following procedures:

Maintain cows in clean, well-drained paddocks.
Milk cows if the udder is tight with milk.
Monitor udders carefully for signs of mastitis. Once the cows are being milked, strip each quarter before milking until 4 days after calving.
Monitor induced cows very closely for signs of systemic illness. Cows may become acutely ill with a coliform mastitis endotoxaemia, even though visible changes in the udder may be limited and the secretion from the affected quarter difficult to differentiate from colostrum.

*Metabolic diseases*

Calving induction does not increase the incidence of metabolic diseases except in cows that are over-fat at the time of induction (refer to *Criteria for exclusion*). Those induced cows that do develop metabolic problems may be more profoundly affected, may be less responsive to treatment and may have a higher mortality rate than other cows. Proactive steps must be taken to control milk fever in induced cows.

*Retained foetal membranes*

Cows induced to calve have a greater than normal incidence of retained foetal membranes. Assessment of retained foetal membranes is usually by visual appraisal, but this may underestimate the incidence. The incidence of retained foetal membranes increases with increasing prematurity and among induced cows experiencing dystocia. The drugs used for induction also affect the incidence of retained foetal membranes. Long-acting
corticosteroids, when used alone, tend to produce a lower incidence than short-acting corticosteroids or prostaglandins.

**Peracute infections**

Induced cows are susceptible to peracute peri-parturient infections. Apart from toxic mastitis, the most common condition is peracute metritis, but cows can also suffer other severe infections such as septicaemia and enteritis.

**Fertility following inductions**

The reproductive performance of induced cows does not differ from their herd mates that calve naturally at the same time. The advantage in induction lies in the longer pre-mating period, allowing the early-induced cow an improved chance of pregnancy and therefore retention in the herd.

**Photosensitisation**

A photosensitivity reaction can occur on the nonpigmented skin and teats of induced cows. In some cases, this can be severe enough to preclude milking. It has been hypothesised that the corticosteroids used to induce parturition lead to hepatic damage, with the photosensitisation occurring as a sequel.

**Calf mortality**

Premature calves have reduced chances of survival. However, most studies (McDiarmid 1983, Bellows et al 1994, Dlamini 1995) report that when calving is induced using short-acting corticosteroids or prostaglandins within two weeks of term, little difference is seen in the number of stillbirths, calf vigour, or calf mortality compared with natural calving, except when long-acting corticosteroids have been previously used.

Calving induction should not be performed if the owner requires live calves. Approximately 50% of induced cows’ calves are stillborn, die or are euthanased before they can be legally sold (at least 4 days old). The majority of induced calves weigh less than 23 kg and/or may show other signs of prematurity, also making them ineligible for sale as ‘bobby calves’.

**Immunity**

Calves born after long-acting corticosteroid induction are lethargic, slow to stand and suck, and may not be able to take in enough colostrum during the time in which they have the ability to absorb the immunoglobulins. In addition, immunoglobulin concentration in this colostrum is reduced by the corticosteroids and may be further changed by any pre-calving milking deemed necessary. These calves also have impaired ability to absorb immunoglobulins because the steroid acts on the foetus long enough to promote premature closure of the gut absorption mechanism. Consequently, induced calves will require a higher level of management to successfully grow and avoid infectious disease. They will have a higher morbidity and mortality than non-induced calves. Induced calves reared with non-induced calves may act as amplifiers of infectious agents such as coccidia and viral enteritis.

**Growth rate**

Growth rates are adversely affected by increased prematurity. Induced calves that are reared will require additional nutritional support to achieve acceptable target weights.
Other recommendations

The AVA recommends the adoption and vigorous promotion of farmer extension programs on integrated reproductive management. These programs should include education about available procedures and protocols, costs, benefits and welfare considerations.

Ongoing research is required to develop reproductive technologies and reproductive management programs that can be used on farm. Research into the economics of changing the calving pattern is also required.

References


Date of ratification by AVA Board: 4 May 2002 (Policy), 3 August 2005 (Guidelines)
8.2 Tail docking of cattle

Policy

Tail docking in cattle should be performed only for therapeutic reasons on veterinary advice.

Background

Tail docking (i.e. removal of tails by amputation or by the use of rubber rings of dairy cows) is performed because some farmers believe that it improves milking shed and udder hygiene, cow health and workplace health and safety (by preventing tails from hitting the faces of workers and reducing the transfer of microorganisms to workers). Existing scientific evidence (Tucker et al. 2001, Schreiner & Ruegg 2002) does not support claims that tail docking of dairy cows reduces the prevalence of mastitis, improves the clinical health of cows, reduces the soiling of teats and udders, reduces bacterial contamination of milk or reduces the incidence of leptospirosis in staff. Docking does remove physical interference to milking staff from the cows’ tails, but there is no evidence that tail docking significantly improves workplace safety.

The Australian dairy industry does not support tail docking and recommends alternative practices to tail docking including switch trimming. The general public, farmers, veterinarians and livestock officers are concerned about the effects of tail docking on the welfare of cows.

Tail docking in Victoria and Tasmania can be carried out by farmers; in South Australia, tail docking can be carried out by a qualified veterinary surgeon; in the Northern Territory, tail docking of cattle is prohibited under the Animal Welfare Act 2005; in Queensland, tail docking is prohibited under the Animal Care and Protection Act 2001 and veterinary surgeons may only dock an animal’s tail if it is in the interests of the animal’s welfare; in New South Wales, under Section 12 of the Prevention of Cruelty to Animals Act 1979, docking the tail of a cow up to 6 months of age is allowed. Acts in some other states are silent on the issue of tail docking.

Tail docking of cattle is banned in Denmark, Germany and the United Kingdom, but is common in Ireland and the USA. There is evidence (Eicher et al. 2001, Eicher & Dailey 2002) that tail docking has long-term effects on cattle welfare through increased levels of predation from biting flies, and increased efforts by farmers to counter these flies using insecticides and other measures. At high levels of biting fly predation, grazing is more likely to be disrupted in docked than in intact cows. There is also evidence that neuromas may develop in cows with docked tails, causing ongoing discomfort and pain (Gentle 1986, French & Morgan 1992, Eicher et al. 2000).

When docking tails for therapeutic reasons, the research indicates that tail docking of heifers or cows using rubber rings is the method of tail amputation that causes the least pain and distress. Tail banding rapidly desensitises the tail distal to the banded area. The use of local or regional anaesthesia has not been shown to significantly reduce physiological or behavioural responses of adult cattle tail docked with bands.

Although tails are richly supplied with nerves and blood vessels, tail docking adult animals using rubber rings is more likely to cause chronic irritation, rather than intense pain, and has minimal effects on behaviour, cortisol concentrations, physiological parameters or immune function (Wilson 1972; Eicher et al. 2000; Schreiner & Ruegg 2002a, b). The docking iron, in contrast, produces second- or third-degree burns and so may destroy nerve endings after initial intense pain. Both banding and hot iron cautery methods cause considerably less pain and distress than surgical techniques of tail removal, which are also associated with greater risks of bleeding and infection (NAWAC 2005).
Eicher et al. (2000) found that the use of lidocaine to anaesthetise the tail before banding affected lymphocyte phenotypes and TNF-α, parameters associated with pain, but banding alone did not alter these parameters. Tom et al. (2002) found no observable differences in the behaviour of lactating dairy cows docked by rubber rings with or without epidural anaesthesia and concluded that tail docking by banding was associated with minimal discomfort in cows, and that the use of epidural anaesthesia provided no benefit.

Collectively, these studies suggest that tail docking by banding in adult cattle can cause mild discomfort of limited duration and that there is little or no apparent benefit gained through the use of anaesthesia. In fact, in some cases, the use of a local anaesthetic seemed to increase the cortisol response to the rubber ring, suggesting that the anaesthetic may be more stressful in cattle than the actual application of the rubber ring and the ischaemia that follows (Petrie et al 1995, 1996).

Necrotic tissue, such as the ischaemic distal tail after banding or severe tail fracture, is prone to infection with pathogens. Clostridial organisms, ubiquitous in soil, may colonise the wound and result in local or systemic infection. Tetanus and gangrene have been reported after tail docking and vaccination against clostridia is recommended prior to performing the procedure (Stull et al. 2002).

Other relevant policies and position statements

3.1 Surgical alteration to the natural state of animals

References


Date of ratification by AVA Board: 27 July 2012
8.3 Cattle spaying

Policy

Cattle can be spayed by veterinarians using the Willis spay technique until suitable alternatives are developed.

The surgical flank spaying of cattle may only be performed by veterinarians with the use of appropriate anaesthesia and analgesia.

Animals must be assessed by the veterinarian to be sufficiently healthy to undergo the procedure. Animals showing signs of disease, weakness or emaciation should not be spayed by any technique.

Background

Long-term contraception of cattle can benefit the welfare and production of animals where females cannot be segregated from males and in other, limited, circumstances. In extensive pastoral conditions, contraception enables cull females to survive and achieve marketable body condition by preventing the stress of mismanaged pregnancy, calving and lactation.

Spaying of cattle is a widely practised husbandry procedure in northern Australia and will continue as the only low-cost method of contraception until new technologies become available.

The Willis spay technique involves transvaginal separation of the ovary, which is then left in the abdominal cavity. Since the advent of this technique, the use of and need for surgical flank spaying has declined considerably. It is likely that surgical flank spaying will eventually no longer be necessary and will be eliminated.

Laws in some states permit the spaying of cattle by non-veterinary lay operators.

Other recommendations

The Australian Veterinary Association strongly supports research into non-invasive means of controlling oestrus and conception in cattle management systems with a view to removing the need for surgical spaying.

References


Date of ratification by AVA Board: 27 July 2012
8.4 Dehorning of cattle

Policy
The practice of dehorning as a necessary cattle husbandry procedure to improve herd welfare is supported, provided that:

- the procedure is performed by competent operators using an appropriate technique
- cattle are dehorned as young as possible, preferably under six months of age
- analgesia is used, where appropriate, to minimise pain and stress.

Tipping (rounding of the points) may be an acceptable alternative to dehorning in some circumstances.

The use of topical caustic chemicals for dehorning is opposed.

Background
Dehorning of cattle is a painful procedure. It is practised to minimise injuries that cattle cause each other, especially during handling. This contributes to the welfare of the cattle and high standards of beef quality and food safety. Dehorning also reduces the risk of injury to handlers, and allows cattle to be handled in a humane way.

Guidelines
Cattle should be dehorned before six months of age using one of the following methods:

- heat cautery in calves up to 40 days of age
- dehorning knives for small horns, or scoop-type dehorners on larger horns.

In cattle over six months of age, guillotine dehorners or embryotome wire may be used with suitable restraint, appropriate analgesia and/or anaesthesia, and suitable postoperative wound management.

Restraint
Unless the procedure is performed under heavy sedation, cattle to be dehorned must be appropriately restrained.

Minimising stress and pain
Dehorning should be carried out as efficiently and quickly as possible to minimise handling. Analgesia, sedation and local anaesthetic should be used to minimise pain and stress, where appropriate. In some circumstances, such as when the horn buds are small, use of anaesthesia may not be required because it could entail more stress on the animal.

Cattle should be in good body condition, well hydrated and rested before surgery and should be allowed to recover before rehandling.

Management
Cattle should be handled quietly pre- and post-operatively, and monitored for any persistent bleeding after the operation. Measures should be taken to prevent postoperative sinusitis.
and flystrike (myiasis). Bleeding and myiasis can be minimised by dehorning during cool weather, or during the cooler parts of the day. Dehorning should not be conducted in hot weather.

Other recommendations

The AVA recommends the breeding of polled cattle and the development of methods for determining the carrier status for horn genes as alternatives to dehorning.

Date of ratification by AVA Board: 31 Oct 2004
8.5 Foetal bovine serum collection

Policy

Foetal bovine serum is of great value for diagnostic and research purposes. The collection of foetal blood at licensed abattoirs is supported, provided that the welfare of the foetus is safeguarded by ensuring that the foetus is unconscious at the time of collection.

On-farm blood collection from perinatal calves is not endorse, because this poses significant welfare risks.

Background

Whole animal blood and blood products are collected from livestock, including horses and perinatal calves, for a wide range of research and diagnostic purposes. In particular, foetal bovine serum (FBS) is a highly valued byproduct, which is collected at many abattoirs throughout Australia.

Guidelines

The welfare of calves during slaughter of pregnant animals should be safeguarded.

If uterine, placental or foetal tissues, including foetal blood, are not to be collected as part of the post-slaughter processing of pregnant animals, the foetus should be left inside the unopened uterus.

When uterine, placental or foetal tissues (not foetal blood) are to be collected, the foetus should not be removed from the uterus until at least 15-20 minutes after the cow is slaughtered.

When foetal blood is to be collected, the foetus should not be removed from the uterus until at least 5 minutes after the cow is slaughtered. At this stage, the foetus should be unconscious. A foetal heartbeat will usually still be present and foetal movements may occur. These are only a cause for concern if the exposed foetus begins to breathe air.

If a live mature foetus is removed from the uterus, it should be prevented from breathing air and inflating its lungs— for example, by clamping the trachea.

If there is any doubt about consciousness of the foetus, it should be killed with a captive bolt or a blow to the head with a suitable blunt instrument.

In normal abattoir procedures, a foetus is not removed from the uterus until 20-35 minutes after the slaughter of the cow. Therefore, commercial practice currently meets these guidelines.

Foetal rescue

The above requirements do not refer to foetal rescue, the practice of attempting to revive a foetus found alive at evisceration of the dam. This should not be attempted during normal commercial slaughter as it may lead to serious welfare complications in the newborn animal. These include impaired brain function resulting from oxygen shortage before rescue is completed, compromised breathing and body heat production because of foetal immaturity, and an increased incidence of infections due to a lack of colostrum.

Date of ratification by AVA Board: 1 January 2006
8.6 Welfare of vealer calves

Policy

Vealer calves must be raised under conditions that maintain the welfare of the animals. This includes appropriate nutrition, housing, disease prevention, veterinary care and measures to reduce stress.

Background

A vealer calf is a calf that is reared for the purpose of slaughter for human consumption at less than six months of age. Vealer calves are fed extra concentrates to improve carcase weight and are usually housed intensively.

Guidelines

General welfare

It is essential to minimise stress and disease in vealer calves whether they are reared on the farm of origin or purchased through saleyards. Calves purchased from saleyards are very susceptible to stress-induced diseases such as diarrhoea and dysentery. It is therefore recommended that calves are purchased directly from their farm of origin.

Calves should travel as short a distance as possible, with maximum care being taken with transport and handling. They should be slaughtered at a site located within a reasonable distance of the production unit.

Feeding

Calves should receive at least two litres of fresh or preserved colostrum within the first 12 hours after birth. Thereafter, calves should be fed at least once daily on liquid milk, commercial milk replacer or colostrum in sufficient quantities to provide essential requirements for maintenance and growth. Access to roughage is necessary from a day or two after birth to allow rumen development.

Calves must not be fed an iron-deficient diet. Apart from causing anaemia in the calves, deficient diets are not necessary or desirable for good meat colour. Available evidence indicates that a diet containing 30 mg/kg of iron in the dry matter provides sufficient iron to prevent anaemia, while the meat colour remains pale.

Shedded animals should receive fat-soluble vitamins (A, D and E), since they have no access to pasture or sunlight. For the wellbeing of the calf, suitable fibrous food should be provided, especially after four weeks of age, to allow rumination to develop.

Housing

Calves should be housed in well-ventilated and well-lit surroundings. An acceptable light intensity is 216 lux or natural daylight. The light/dark time ratio should be ideally 50:50, although increasing the light periods will increase feed intake and growth rate in the calves.

The optimal ambient temperature for housed calves is 20°C. An acceptable temperature range is 20–25°C.
Ventilation depends on the type of shed, but it should be sufficient to maintain temperature and humidity and remove potentially toxic products, such as methane, carbon dioxide, ammonia and airborne microorganisms.

Ideally, calves should be housed in groups rather than individually. They must be able to see, hear, smell and touch other calves and have relative freedom of movement. Veterinary supervision of the rearing of calves in group housing is essential. Short-term individual housing of calves is preferable when calves are first introduced into the vealer unit, to minimise disease spread.

A calf must have room to stand, lie down and adopt a comfortable sleeping posture on a dry floor. In a group pen, the size of the pen to be used depends on the weight of the individual calves.

Guidelines for housing calves in group pens

<table>
<thead>
<tr>
<th>Calf weight (kg)</th>
<th>Minimum pen floor area (m²)</th>
<th>Minimum pen floor length (m)</th>
<th>Feeder space per head (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;60</td>
<td>2.0</td>
<td>1.1</td>
<td>0.3</td>
</tr>
<tr>
<td>60–100</td>
<td>2.2</td>
<td>1.8</td>
<td>0.3</td>
</tr>
<tr>
<td>100–150</td>
<td>2.4</td>
<td>1.8</td>
<td>0.35</td>
</tr>
<tr>
<td>150–200</td>
<td>2.5</td>
<td>2.0</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Strict attention is required when planning correct flooring for housing of calves. The best flooring is raised wire mesh, with sufficient clearance to allow regular cleaning without unduly wetting the calves. Concrete flooring and sawdust are not recommended due to lack of hygiene.

**Prevention and treatment of disease**

There should be minimal mixing of calves of different age groups, to prevent the spread of infection from older calves to younger calves or the introduction of disease from newly acquired animals.

Diarrhoea is a common complaint of housed calves. Shed design can predispose animals to infection. Diarrhoea must be treated appropriately as soon as it occurs. Pneumonia is also common in calf groups undergoing stress.

A competent stockperson, capable of early diagnosis and treatment of disease, must supervise the operation. Due care must be taken to avoid antibiotic residues in the meat of treated calves.

*Date of ratification by AVA Board: 1 Jan 1997*
8.7 Use of female cattle for pregnancy testing and artificial insemination schools

Position statement

Pregnancy testing/diagnosis (PD) and artificial insemination (AI) are important and useful tools that help promote good management and the genetic improvement of cattle. It is important that these procedures be conducted competently and with due regard for animal welfare. Personnel should be appropriately educated and trained in the use of these procedures. Instructional programs for cattle PD and AI must adhere to the following guidelines.

Definitions

The following definitions apply for the purposes of this position statement.

Pregnancy testing/diagnosis: The detection of pregnancy (or non-pregnancy) by trans-rectal (or per-rectal) manual palpation. The training of personnel in other methods of PD (e.g. ultrasound) will be considered separately by the Australian Cattle Veterinarians.

Artificial insemination: The placement of semen into the most appropriate part of the female genital tract to optimise the possibility of subsequent conception. In cattle, this is usually the uterine body.

Alternatives to live animal use

Students must receive prior instruction on the relevant aspects of cattle anatomy and physiology. If possible, they should practise techniques with abattoir-derived organs and/or appropriate models before using live animals.

An acceptable level of competence in trainees can only be achieved by providing supervised training with live animals.

Procedures

The use of live animals in schools or training must be approved in advance by an animal care and ethics committee (AEC).

Instructors should be veterinarians with appropriate experience or instructors approved for the purpose by the AEC. There should be at least one instructor for every 10 students.

Instructors and students should:

- wear an appropriate shoulder-length glove (if plastic, preferably with seams inward)
- be free of skin lesions on the arm and hand
- use adequate amounts of appropriate lubrication, ensure fingernails are cut short, and remove jewellery on fingers and arms
- employ appropriate hygiene measures
- use appropriate equipment that is designed for the purpose
- be advised about protection against Q fever, or tested for immunity and vaccinated if not immune.

Animals used for instruction should be:
examined by a veterinarian before the class and deemed suitable for the purpose intended of appropriate size and physical development
individually identified and of suitable temperament
free from abnormal vaginal discharge
currently immunised against leptospira with an adequate vaccination protocol; the most recent vaccine should have been administered no more than one year before and no less than one month before
known to be free from enzootic bovine leukosis (EBL) or pestivirus; if the status for either disease is unknown, a fresh glove should be employed for the examination of each animal.

Welfare considerations

In general, no drugs are to be used on, or administered to, animals involved.

Cows should be examined by a suitably experienced veterinarian to assess their suitability for use, with particular emphasis on temperament and the size of the anal orifice. Only those assessed as unlikely to suffer undue trauma should be selected for use.

Instructors and students should observe good animal handling principles to minimise animal stress.

Animals should be restrained in suitable equipment to minimise movement and inadvertent damage to either the cow or the trainee palpator/inseminator.

Equipment and materials used for AI and PD should be of good quality and meet appropriate hygiene standards.

Animals should not be restrained for sessions for more than two hours per day and should not be used on more than two occasions in a seven-day period; they should be rested for 14 days after their second usage.

An appropriate method (e.g. stock marker or a method prescribed by the AEC) should be used to track individual animal use.

Individual animals should not be used for more than five procedures (AI or PD) per day by novice students or eight procedures per day by more experienced students.

For AI instruction, individual animals should not be used for more than two insemination procedures per day by novice students or four procedures per day by more experienced students.

A minimum of five cows are to be provided for each trainee inseminator (i.e. a course with 10 participants will require a minimum of 50 cows for the practical training sessions and the examination).

Pregnant animals or those with abnormal female tract development (e.g. freemartins) should not be used for inseminator training.

Animals should be immediately withdrawn if they show signs of undue stress, severe straining, excessive rectal ballooning, or overt tissue damage. These animals should not be considered for reuse until either healing has occurred (normally three weeks) or their use has been approved following inspection by a veterinarian.
After the school:

animals should be monitored twice daily for the first two days, and then once daily for the next five days

veterinary attention should be obtained for any animal that exhibits any of the following

- signs of pain on defecation
- discharges from the rectum or vulva
- persistent abdominal/rectal straining for longer than 30 minutes after discontinuing use
- failing to eat and
- signs indicating peritonitis or fever (e.g. depression, lethargy, \textit{Saw horse\^} stance)

records should be kept of all findings and treatments;
an autopsy must be performed on any animal that dies unexpectedly (or is euthanased) during or following a school, and the supervising AEC must be provided with the report as soon as possible; and

an adequate record of students and instructors should be kept by the organisation (to be used in the event of a zoonotic disease developing after the school).

References


http://www.dse.vic.gov.au/dpi/nreninf.nsf/9e58661e880ba9e44a256c640023eb2e/3bd8abf5d04a5b49ca256f0f0009b4ec/$FILE/AG0009.pdf (Viewed by author 20 December 2007)


Date of ratification by AVA Board: 15th February, 2008

8.8 Beef and sheep feedlots

Policy

Background

Cattle and sheep feedlot industries make an important contribution in producing quality finished meat, and can complement the beef/sheep grazing systems as an environmentally sound, sustainable source of animal protein production.

Husbandry conditions in an intensive feedlot situation differ greatly from extensive grazing management systems. Appropriate knowledge and management skills are required to maintain animal welfare and productivity.

Guidelines

For beef cattle feedlots, the standards set out in the National Feedlot Accreditation Scheme of the Australian Lot Feeders’ Association (ALFA) should be followed. The National Feedlot Accreditation Scheme (NFAS) Standards comprise five modules.

The five modules and the areas pertinent to animal health and welfare within these modules include:

1. Quality management system – training, internal auditing and corrective action, quality records, document control, and chemical inventory
2. Food safety management – property risk assessment, safe and responsible animal treatment, treatments of stock foods, preparation for dispatch of livestock, livestock transactions and movements
3. Livestock management – livestock identification, husbandry and transport, animal welfare, biosecurity, and contingency planning
4. Environmental management
5. Product Integrity – feedlot rations.


For housed cattle, mechanical or natural ventilation should remove from the environment excessive heat, moisture, carbon dioxide, dust, other noxious gases and airborne infectious organisms, and ensure continual replacement with fresh air. The ventilation method used must be appropriate to the location of the cattle and the design of the building.

Feed troughs should not be allowed to be empty for more than two to three hours, if at all. The manager should always be on the lookout for shy feeders with any trough feeding system.

When using feed ingredients that carry a risk of disease because of infectious agents or may contain toxins or inappropriate energy content if not correctly or consistently processed (such as poultry litter or brewers grain), safeguards must be in place to ensure that the feed is properly processed. Poultry litter must be treated and stored properly, should not contain any parts of dead birds and should not make up more than 10 per cent of the total diet.

References


Date of ratification by the AVA Board: 20 January 2012
8.9 Off-cow rearing of calves

Position statement

Off-cow rearing of calves (aged less than 6 months) and their sale and transport are acceptable procedures, provided the welfare of the calves is safeguarded and the guidelines for the health and welfare of the calves, as provided below, are followed.

Definitions

Off-cow rearing in this context refers to complete removal of a calf from its mother at less than 6 months of age and its subsequent management and care. In many cases, especially in the dairy industry, this separation occurs within the first 24 hours following birth.

Off-cow rearing is not necessarily the same as early weaning, which refers to cessation of a milk- (or substitute) based diet. Early weaning in a cow-calf operation is practised when ongoing suckling is likely to be detrimental to the cow and nutrition of the calf can be carried on without further fresh milk intake. Early weaning also occurs in calf-rearing operations to minimise milk replacer intake and encourage rumen development.

Bobby calves are calves to be slaughtered, generally within a few days (up to 6) of birth. [This position statement is not intended to address either the care of prematurely born calves (including those early induced births) or calves used for veal production (which is the subject of another policy).]

General principles

Operations that practice off-cow calf rearing should follow veterinary advice to establish written protocols for calf management, including preventive medicine guidelines. The latter should include protocols for routine cleaning and disinfection of equipment and facilities, regular monitoring for disease detection, provision for segregation of sick calves and protocols for treatments and good record keeping.

Guidelines

Early nutrition

Calves should receive at least two (2) (preferably four(4)) litres of fresh or preserved colostrum* (or an effective substitute) within the first 12 hours following birth. Calves should continue to receive colostrum for the first days after birth. Thereafter, they should be fed at least daily on liquid milk, commercial milk-replacer or colostrum, in sufficient quantities to provide the essential requirements for maintenance, good health and growth.

Concentrates (pellets or meal) should be made available to artificially reared calves from the first week of life to encourage rumen development and enhance their ability to assimilate straw, hay and pasture ingested from an early age. High-quality pasture, hay, pellets or straw should be available to calves from no later than three (3) weeks of age.

Hygienic calf-feeding practices, including thorough daily cleaning of all equipment (feeding units, lines, bottles, nipples, troughs etc.) are recommended to sustain calf health and welfare, and to prevent diarrhoea.
Weaning should only take place when a calf is eating a minimum quantity of concentrates (≥1 kg/day) and will rarely be achievable prior to four to five weeks of age (although, on occasion, weaning can occur as early as three (3) weeks). Abrupt weaning may then occur, as long as calves are given increased access to concentrates and high-quality straw or other roughage.

Calves should be weaned off milk, milk replacer or colostrum onto rations providing all essential requirements only when their ruminant digestive systems have developed sufficiently to enable them to maintain growth and well-being. Weaning may be an opportune time to introduce calves into group housing.

In cold weather, higher energy-value feeds should be provided.

Restricted rations of the white veal type (i.e. iron-deprived diets <20 ppm iron), which cause anaemia, are unacceptable.

Appropriate preventive procedures include using colostrum obtained from the calf’s dam, which should be immunised against those major pathogens that threaten the young calf.

**Transport**

In accepting calves for transport, the transport driver becomes legally responsible for their welfare. Transport drivers have a responsibility to refuse to load calves which, in their opinion, do not meet the requirements listed below. Veterinary advice should be sought in questionable cases.

To be suitable for transport, sale or slaughter, calves (including bobby calves) must:

- Be at least four (4) days old (or three (3) weeks old in the case of artificially induced calves) (they must not travel before the fifth day of life).
- Weigh at least 23 kg (Friesian) or 15 kg (Jersey).
- Be prior fed (within six (6) hours before delivery) with colostrum, milk or milk replacer, and appear to be adequately nourished.
- Be free from drug residues.
- Have a dry, shrivelled navel cord (not pink, fleshy or raw).
- Have hooves that are firm and worn flat (not bulbous with soft, unworn tissue).
- Be in good health, alert, strong and able to rise from a lying position.
- Not be obviously distressed, diseased, malformed, blind or disabled in any way.
- Not be wet and/or cold.

All vehicles used to transport calves should be cleaned and disinfected prior to loading.

Transport vehicles should have decks constructed of materials that provide reasonable foothold for calves and effective protection from wind and rain, and should be escape proof.

Precautions to prevent overcrowding and injury, as well as providing adequate rest, feed and water during transport, should comply with relevant National Livestock Transport Standards.

Drivers should stop and check the loading and comfort of calves at least every two (2) hours.

Wherever possible, bobby calves should be transported directly to the abattoir.

Bobby calves should not be transported if the journey will take more than 10 hours to reach the final destination of any of the calves.
**Housing**

Although calves are social animals and seek the company of other calves, individual penning of calves during early rearing (two to three weeks of age) may be preferable for disease prevention and management, as well as for implementing a liquid-feeding regime. If individual penning of calves will exceed three (3) weeks, careful consideration should be given to the social needs of these animals. (some animals object to individual penning)

When calves are grouped, careful attention should be paid to the following in the interests of alleviating problems of health, stress or aggression: group size, variation of calf sizes within groups, access to feed and clean water, bedding, drainage, handling facilities and the stalls and their dimensions.

Group housing is best utilised on an *all-in, all-out* basis, with appropriate cleaning and disinfection between batches.

When calves are grouped, sick or injured calves should be isolated to prevent transmission of disease or further injury by herd mates, and appropriate treatment provided.

Housing for artificially reared calves should be hygienic, with adequate ventilation, climate control and lighting. Flooring should be well drained with adequate, dry, lying space for each calf. Flooring and internal surfaces should not cause injury and be easily cleaned.

In calf-rearing systems where calves are individually and continually housed in pens or cribs, the available floor area for each calf must take into account the normal behaviour of calves.

The floor area must be sufficient to enable each calf to freely turn around, stretch out and lie down comfortably. A floor area of at least 1.5 square metres should be provided for each calf individually housed in pens or cribs. Pen height should be a minimum of 1 metre, with provision of additional height to allow for adequate ventilation.

Social interaction should be recognised as an important calf welfare need, as follows.

In systems using individual pen or crib housing, visual contact and social interaction between calves should be facilitated by allowing uninterrupted visual contact between calves at the front of individual pens and restricting the height of solid partitions between calves to a maximum of 50 cm from the floor.

Where large numbers of calves are reared together, they should be grouped by age and size to reduce competition for food and to improve observation and management.

Calves must be protected from rain, wind and extremes of temperature.

**References**


Department for Environment, Food and Rural Affairs UK. Improving calf survival. www.defra.gov.uk


RSPCA.org.au/policy


Date of ratification by the AVA Board: 15th August, 2009
Part 9 - Pig health and welfare
9.1 Halothane testing of pigs

Policy

The continued use of halothane testing in pigs is not supported.

Background

The halothane test was used in boar test stations to detect pigs carrying genes for porcine stress syndrome, an inherited disease of pigs. This test has been replaced by a blood test. Halothane testing has the potential for adverse effects on animal welfare.

Date of ratification by AVA Board 1 January 2005
9.2 Sow housing

Policy
Sow housing should optimise the health, nutrition and welfare of sows, newly born piglets and unborn piglets. Feeding systems for pregnant sows housed in groups must minimise aggression and allow all sows equal access to food and water to meet their physiological requirements. Accommodation for farrowing and lactating sows must be designed and managed to optimise sow welfare whilst minimising piglet mortality.

In previous housing protocols, stall housing of individual sows during early pregnancy for periods up to 6 weeks was commonly endorsed as a means to reduce reproductive losses and adverse social interactions. New research in addressing group housing that reduces the need to confine sows individually, and promotes sow welfare through improved mobility, environment and social interaction is supported.

Background
Pregnant sows housed in groups will fight to determine group hierarchy, with fighting accentuated at feeding times. Any housing and feeding system for pregnant sows in groups must:

- minimise competition for food and water and the associated fighting, stress and injury to sows
- ensure appropriate daily food and water intake and good nutrition of all sows, and allow individual sows to be fed more as required to maintain their body condition score above 2 out of 5.
- maximise the proportion of successful pregnancies by reducing stress-induced abortions.

There are similar considerations for housing farrowing and lactating sows and their piglets.

Farrowing accommodation must:

- ensure appropriate daily food and water intake and good nutrition of all sows (including the increased feed and water intake required to produce milk for rapidly growing piglets)
- minimise the number of overlain suckers and the pre-weaning death rate
- enhance the health, nutrition, welfare and survival of piglets by:
  - providing control over the quality of their environment
  - allowing the provision of supplementary heating and feeding (if required)
  - facilitating close supervision and care by farrowing shed stockpeople.

The quality of stockmanship of the people caring for the sows and piglets must be sufficiently high to minimise any adverse effects of sow housing.

Other recommendations
Further research is urgently required to develop systems that improve housing of sows and piglets.
Other relevant policies and position statements

20.3 Model code of practice for the welfare of animals: pigs

References


Date of ratification by AVA Board: December 2013
Part 10 - Sheep and goat health and welfare
10.1 Pizzle dropping

Policy

Pizzle dropping in sheep should not be undertaken until there is scientific evidence to demonstrate a reduced incidence of posthitis and fly strike.

Background

Pizzle dropping is a surgical procedure performed on wether lambs and weaners (under 12 months of age).

The skin between the prepuce and the abdomen is severed to allow the prepuce to hang below the wool on the belly region.

Some important points to note are:

- The procedure is undertaken to reduce wool wetting and the incidence of pizzle rot (balanoposthitis — inflammation of the prepuce and penis of castrated sheep).
- Pizzle rot and wet wool predispose sheep to fly strike.
- Welfare risks associated with the procedure include pain and the risk of surgical damage if the procedure is performed incorrectly.
- No evidence based trials have provided valid data to support the procedure.
- Anecdotal reports only to justify the procedure on a production basis in terms of reduced staining of belly wool.

Other relevant policies and position statements

3.1 Surgical alteration to the natural state of animals

Date of ratification by AVA Board: 27 July 2012
10.2 Castration of adult rams

Policy

The castration of adult rams should be treated as a major surgical procedure, with appropriate pre- and postoperative techniques.

Background

Castration of adult animals is a major surgical procedure that involves disruption and removal of significant vessels and organs, as well as all the inherent risks of surgery, such as blood loss, shock and postoperative infection.

Guidelines

Sedation and/or narcosis with local anaesthesia, or general anaesthesia alone, or local anaesthesia alone, are required. The animal must also be appropriately restrained. A triple crush emasculator or other satisfactory method of haemostasis is obligatory.

Date of ratification by AVA Board: 2 Aug 2005
10.3 Electroejaculation of rams

Policy

Electroejaculation should be used only by, or under the supervision of, a skilled operator with appropriate training and technically-advanced equipment to protect the welfare of the ram.

Background

Electroejaculation is used to collect semen from rams to be examined as part of a clinical examination or as part of a specific artificial breeding program.

Electroejaculation has the potential to cause discomfort to the ram, especially if the equipment is deficient and the operator not fully competent. The semen collected as part of a clinical examination may yield information important to the reproductive disease status of the ram and its welfare.

Damian and Ungerfeld (2011) showed that electroejaculation does cause stress response changes in respiratory rate, haematology, biochemistry and heart rate, even in rams frequently electroejaculated. Rams do not become habituated to electroejaculation, so it is important that the operator uses techniques to minimise stress responses during the procedure.

Guidelines

The following guidelines should be observed for electroejaculation of rams:

- The equipment used should be manufactured for that purpose and must be maintained in correct working order.
- The electroejaculation unit must deliver the appropriate electric current.
- Rams should be adequately restrained throughout the procedure.
- If the procedure fails to produce an ejaculate after six pulses of current on any ram, it should not be persisted with on that ram.
- Comply with relevant state and territory Codes of Practice.

References


Date of ratification by AVA Board: 25 July 2013
10.4 Tail docking and castration of lambs and sheep

Policy
Tail docking and castration of lambs under three (3) months of age is acceptable provided that:

the operations are performed by a skilled operator, using accepted industry practices; and
the tail is docked at the third palpable joint.

National standards and guidelines for the welfare of sheep must be followed.

The castration and tail docking of sheep older than three (3) months should be treated as a major surgical procedure, using appropriate analgesia or anaesthesia.

Short tail docking is not supported because of the health and welfare problems that can result from this practice.

Background
Tail docking is performed in sheep to reduce the incidence of blowfly strike that may result from urine and faecal staining in undocked lambs and sheep.

Analgesia or anaesthesia are required during tail docking of sheep older than 3 months because the level of pain and risk of postoperative complications are significantly increased in these animals. There is also evidence that younger sheep are less stressed by a quick incised wound than by restraint for anaesthesia and surgery.

Short tail docking, where the tail is docked shorter than the third palpable joint, is currently practised in some breeds. This procedure can cause health and welfare problems, including increased breech staining associated with fly strike and an increase in rectal prolapse in ram lambs (Thomas et al. 2003).

Castration is performed for economic reasons, to increase meat quality and production. It also eliminates the behavioural and management problems that occur when large numbers of entire male sheep are kept together.

Other recommendations
Industry, with veterinary input, should establish an accreditation program to identify skilled operators for performing surgical castration and tail docking of lambs less than 3 months of age.

Other relevant policies and position statements
3.1 Surgical alteration to the natural state of animals

References


Date of ratification by AVA Board: 15 February 2013
10.5 Sheep dentistry, including tooth trimming

Policy

Tooth trimming, tooth clipping or tooth grinding in sheep is opposed as these procedures have been shown scientifically to have no benefit to the welfare or productivity of the animal and therefore cannot be justified or recommended.

Background

Tooth clipping involves the severing of all the incisor teeth just above the gum line, using a variety of cutting instruments.

Tooth grinding and tooth trimming occur when an angle grinder, fitted with a cutting disc, is used to reduce and level the incisor teeth.

These procedures were being recommended by certain sections of the sheep industry because of perceived benefits to animal production. However, a number of field trials in a range of locations have been unable to demonstrate any benefit to the welfare of individual animals or to animal production. A large trial involving over 40 900 ewes in Victoria and southern New South Wales showed no effect on productivity of treated ewes except for a 2.6 per cent reduction in greasy fleece 7–11 months after treatment and a 2.3 per cent reduction in body weight of tooth-trimmed ewes 2–5 months after treatment (Williams 1993).

References


Date of ratification by AVA Board: 14 May 2005
10.6 Surgical mulesing

Position statement

Blowfly strike is a serious animal welfare concern. Alternative methods of fly strike management and blowfly control that do not involve surgical removal of skin from the breech region are available and should be used and further developed.

Until mulesing is ceased:

- all lambs being mulesed should be treated with approved analgesics to minimise the pain associated with the procedure
- operators carrying out the mulesing procedure should be accredited

the appendix on mulesing in the Model Code of Practice for the Welfare of Animals: The Sheep is recognised by the AVA as a sound basis for mulesing practice.

References


Ratified by the AVA Board: 18 June 2009 (Board revision May, 2013)
10.7 Laparoscopic artificial insemination in sheep and goats

Policy

Laparoscopic artificial insemination (AI) in sheep and goats is supported provided that appropriate animal welfare and animal husbandry requirements are met.

Laparoscopic AI should be carried out by a registered veterinarian. Lay operators should only perform this procedure under the direct supervision of a veterinarian.

Background

AI of ewes with thawed semen via the vaginal or transcervical routes is unreliable. The use of a laparoscope to inject semen directly into the uterus is needed for reliable conception with thawed semen.

Laparoscopic AI in sheep and goats is an invasive procedure that involves the use of prescription animal remedies. It requires high standards of asepsis and analgesia to ensure that the welfare of the animal is not compromised.

Guidelines

The following guidelines should be observed for laparoscopic AI in sheep and goats.

Where state or territory regulations allow laparoscopic AI to be conducted by lay operators, the supply of restricted drugs to the lay operator for use in the program must be strictly in accordance with the relevant state or territory drug laws.

The procedure must be conducted using effective sedation, analgesia and aseptic technique, for the welfare of the animal.

The procedure must be performed in an environment deemed by the supervising veterinarian to be suitable for such a procedure.

Only healthy non-pregnant ewes or does should be used.

Animals that have been shown to possess genetic defects should not be used in normal breeding programs. This does not preclude breeders specifically selecting ewes with traits that are commonly called genetic defects (e.g. black wool) for use in their specific programs.

Accurate and verifiable records must be maintained in accordance with relevant state or territory artificial breeding regulations.

Veterinarians and lay operators using these techniques have a responsibility to maintain and update their knowledge of advances in the field.

Protocols for laparoscopic AI and embryo transfer in sheep and goats

Introduction

Laparoscopic artificial insemination (LAI) and embryo transfer (ET) of sheep and goats are invasive procedures, involving penetration of the abdominal cavity. They have the potential to cause pain and distress. These protocols are intended to protect the welfare of all animals undergoing LAI and ET and prevent any deaths or untoward sequelae.
Although these protocols are intended to set minimum standards, improved knowledge and information will become available over time, and the procedures used must reflect this knowledge.

Provided that these protocols are followed by a competent veterinarian, the risk of unnecessary pain, adhesions, infections, mortalities and other sequelae to the procedures (e.g. rumen and bladder puncture) should be minimised.

Existing laws

All operators should perform according to existing legislation in each state relevant to LAI and ET. Relevant legislation may include Stock Artificial Breeding Acts, Veterinary Surgeons Acts, Prevention of Cruelty to Animals Acts, Stock Medicines and Poisons Acts and any relevant regulations.

Operators should refer to the AVA document ‘Definitions in relation to supervision’ which sets out the conditions under which animals are regarded as being under the care of a registered veterinarian.

Preparation for the program

The veterinarian responsible for the program must provide clear written instructions for all procedures, including:

- selection of animals
- nutrition and relevant disease control programs for the donors and recipients before, during and after the procedure
- suitability of the facilities, including hygiene in the operating area and facilities for handling and holding the sheep before, during and after the procedure
- oestrous synchronisation, including the correct use of intravaginal devices and injections.

Animals selected to undergo LAI or ET or to act as ET recipients should be in good health. If the outcome is to be giving birth, the animal must be old enough and sound enough to give birth and raise the offspring. Udder soundness must be considered.

The persons responsible for the management of LAI and ET programs on the property must be aware of the potential for poor husbandry and facilities to affect the health and welfare of the ewes and does and their subsequent reproductive performance. Routine husbandry procedures such as shearing, crutching and parasite control should be programmed to avoid handling the animals in the period shortly before or after the procedure.

LAI and ET must be carried out in a clean and dry environment, free from dust and contamination. The procedures should not be performed where individuals or flocks are at risk from poor facilities. The shearing board in a shearing shed is generally suitable, provided that attention has been paid to hygiene and lighting.

Semen used for LAI should come from a licensed semen collection centre, unless collected on the farm where it will be used.

Semen quality must be high enough to achieve an acceptable result that would warrant these surgical procedures. Semen should be assessed by a person with expertise in semen handling and assessment.

Restraint
Specially designed cradles, properly maintained, must be used. Animals must be restrained for the shortest practical time, with minimal discomfort, and handled as gently as possible at all times.

**Surgical procedures**

LAI and ET are invasive surgical procedures. They require high levels of skill, hygiene and attention to detail. Operators must be familiar with the anatomy and physiology of the stock before attempting the procedure. Operators must also be aware of the common anatomical abnormalities that may impact on the procedure or the health and welfare of individual animals. Animals with any abnormalities in the abdominal cavity should not be used for LAI or as recipients for ET.

**Use of appropriate analgesia**

Consideration must be given to the pain that is part of any surgical procedure, and appropriate analgesia or anaesthesia must be used.

**Skin preparation**

The area of skin to be penetrated should be clean, dry and free from dust.

**Sterility of equipment**

All surgical equipment used for LAI and ET must be clean at all times and disinfected between animals. It should be rigorously cleaned and sterilised at the end of each day. If any gross contamination occurs (e.g. from faecal or rumen material or infection in the abdominal cavity), operators must fully clean and sterilise all such equipment immediately.

**Treatment of sequelae from LAI and ET**

Operators must be aware of the procedures to deal with any surgical mishap.

**Postoperative care**

Before animals are released from the cradles, consideration must be given to the treatment of wounds with an appropriate antiseptic and flystrike preventative, in accordance with accepted veterinary practice. If sedation is used, special care should be given to recovering animals.

Whenever possible, any mortality, postoperative sequelae or poor reproductive performance should be investigated by the supervising veterinarian. An effort should be made to determine the cause of death of any animal that dies during or immediately after LAI or ET. Operators should also discuss with clients all appropriate management factors up to and including lambing, with the aim of maximising the result.

**Other relevant policies and position statements**

3.6 Embryo collection and embryo transfer

Date of ratification by AVA Board: 1 May 2004
10.8 Johne’s disease

Position statement

The objectives and activities of the National Johne’s Disease Control Program are important in ongoing efforts to contain and control the spread of *Mycobacterium paratuberculosis* on Australian farms.

Background

Both Bovine Johne’s Disease (BJD) and Ovine Johne’s Disease (OJD) are caused by an *M. paratuberculosis* infection.

Historically, the diagnosis of Bovine Johne’s Disease (BJD) on farm often led to quarantine of the farm, and the diagnosis of Ovine Johne’s Disease (OJD) often led to forced de-stocking of entire flocks. Diagnosis of both these diseases still has serious potential impacts on the ability of individual farmers to trade livestock in domestic and international markets.

The Australian Veterinary Association (AVA):

- Recognises both the real and potential impact that OJD and BJD has on the cattle, sheep, goat and alpaca industries at all levels, including:
  - the welfare effects on individual animals
  - the economic effects on farming businesses
  - the social effects on individual farmers, and
  - the potential trade implications on the industry as a whole.

- Recognises that in many regions of Australia, *M. paratuberculosis* infection is endemic and needs to be monitored and controlled, and understands the importance of protecting regions of Australia that appear to be free from contamination and infection.

- Supports the use of a range of management tools, including vaccination (sheep), hygienic calf rearing (dairy cattle), Beef Only declarations (beef cattle), and the use of biosecurity plans (all species) to minimise the risk of spread of infection between flocks and herds in endemic areas.

- Supports the need for research into improved diagnostic testing methods, and the effects of vaccination against *M. paratuberculosis* in cattle.

The National Johne’s Disease Control Program (NJDCP) is managed by Animal Health Australia (AHA). The principal goals of the NJDCP are to provide effective coordination of Johne’s disease programs across all jurisdictions and affected industries, to protect Australia’s favourable Johne’s disease status and reduce any adverse impact of the disease and subsequent control measures on the affected industries.

The catalyst for the establishment of the program related to concerns about the potential effect on food safety and public health and the possible impact on market access, brought about by evidence that there may be links between Crohn’s disease and Type 1 diabetes mellitus in humans and Johne’s disease in animals (Cossu A et al. 2011).
Currently a number of trading partners require certification of freedom from Johne's disease as part of their country's import protocols.

The program also aims to protect the economic and trade interests of the various domestic livestock industries through a better understanding of the disease, development of effective control and eradication strategies and establishment of market assurance programs and other tools for effective risk management. In recognition of the special needs of particular industry sectors, there are separate sub programs for the management and control of OJD and BJD in all susceptible species.

Australia is well placed internationally in that a minority of herds and flocks are affected with Johne's disease. This compares favourably with the prevalence of disease in Europe and North America where in some regions 100% of large dairy herds are infected and the within-herd prevalence may approach 50% of animals.

Nevertheless Johne's disease continues to spread in the sheep population in some regions of southern Australia and is common in dairy herds in south-eastern Australia. The herd prevalence remains very low in the beef and alpaca sectors since both of these sectors trade independently of the dairy sector.

Increasingly Australian livestock and livestock products are scrutinised by importing countries and the former are tested for the presence of *M. paratuberculosis*. Japan and the European Union have both identified *M. paratuberculosis* as a food safety issue and have indicated the likelihood of undertaking herd disease eradication programs to reduce the risk of entry of the organism into the food chain.

Management and control programs that use a risk assessment approach have been developed for each industry sector. These are underpinned by a number of industry specific tools such as abattoir monitoring, subsidised testing, and an emphasis on the use of health declarations and on-farm biosecurity practices. Producers are strongly encouraged to buy low risk animals and a Market Assurance Program operates to provide a pool of such animals.

In the sheep industry Johne's disease continues to spread, causing significant production losses that impact farm profitability and the viability of the sheep meat industries. In the dairy sector producers are reporting clinical disease in young animals and the disease appears to be spreading, placing export markets for live animals at risk.

Uncontrolled spread of Johne's disease has the potential to cause animal welfare issues for individuals and for the national livestock industries through emaciation and death of grazing stock, or during transit.

**References**

Cossu A et al. MAP3738c and MptD are specific tags of Mycobacterium avium subsp paratuberculosis infection in type I diabetes mellitus. Clinical Immunology 2011;141:49-57.


Date of ratification by the AVA Board: 3 February 2012
Part 11 - Deer health and welfare
11.1 The management of antlers on farmed deer

Policy

Deer velveting must be carried out by a veterinarian or by a deer farmer trained and accredited under the National Velveting Accreditation Scheme (NVAS).

Background

A stag or buck with a full set of hard antlers is a danger to humans, to other deer and to themselves. To prevent unnecessary harm, the antlers of farmed deer should be removed either while still growing (a process called velveting), or after the antlers harden and become insensitive. Velveting involves effective handling and restraint of the animals and the application of appropriate analgesia, since the growing antler is fully sensitive. To cut velvet antler without analgesia is inhumane and unacceptable.

Deer are farmed for the production of venison and velvet antler, or for the sale of breeding stock to other deer farmers. The principles of farming deer are the same as for cattle, sheep and goats, and it is in the management of antlers that the main difference occurs between deer and the other farm ruminants. For all the deer species farmed in Australia only the males grow antlers, which grow and are cast annually in a process that is quite unique to the Family Cervidae. The growth and casting of antlers is mediated through serum testosterone (T) levels, which are basal when antlers are cast and then at the end of the antler growth period in autumn the T level rises sharply during the hardening of the antlers and the rubbing of velvet.

Evolution is designed to have the males in hard antler in time for the onset of the rut, with high levels of serum T making them very aggressive during the breeding season. On the other hand, the T levels are low at the time that the velvet antler is harvested, making it much easier to handle the deer than it would be if the antlers are allowed to harden. Most velvet antler is cut at or around 65 days after the previous antler buttons are cast. The buttons are the result of cutting the velvet antler no less than 2 cm above the coronet, with the buttons hardening and being cast when the full antler would have cast.

Antler cycles

Deer of temperate origin (fallow deer Dama dama, red deer Cervus elaphus and red deer or elk hybrids) make up 90 per cent of farmed deer in Australia. In these animals the males have very seasonal behaviour patterns, with the periodicity of reproduction being a consequence of the secretion of melatonin by the pituitary gland in response to declining daylight length. Deer of tropical origin, namely chital deer, Axis axis, rusa deer, Cervus timorensis, and sambar deer, C. unicolour, make up only about 10 per cent of the national deer herd. In these tropical species there is less seasonal periodicity in the reproductive cycle, and consequently also in their antler cycles. In fact some individuals in these species may not cast their antlers annually, and they may not cast their antlers for two years.

Options for antler management

There are several options available to deer farmers to achieve antler management aims. All such procedures must be humane, must not compromise human safety, must allow deer to be yarded and handled without undue stress or damage to the growing antlers, and the velvet must be cut and stored with the same standards of hygiene as for any food product.
All options require suitable handling facilities through which the deer are handled regularly and without antler harvesting becoming an exercise in wild animal capture. The use of projectile syringes for chemical restraint must not take the place of the provision of suitable handling facilities, although there may be occasions when such equipment is useful and necessary.

The options for antler management are as follows:

a. Removal of velvet antler by cutting off the growing antler at a stage when it will sell for the best price. Given that the growing antler is fully sensitive, the harvesting of velvet antler must be done with effective analgesia. The removal of velvet antler without analgesia is illegal. After the primary cut there is antler regrowth which must also be removed, otherwise this regrowth will harden and become a very effective weapon. If regrowth is cut while still in velvet, the same degree of analgesia as for the primary cut must be used. Second cut velvet antler is always worth a lot less than the primary cut, but has to be removed for management reasons. In both cases either the deer is sedated with xylazine and then analgesia is achieved with a local anaesthetic such as 2% lignocaine applied as a regional or ring block, or the deer is restrained physically in a suitable drop floor or hydraulic crush and local analgesia is applied as above. A meat saw is ideal for cutting velvet antler.

b. Removal of hard antler by cutting off the antlers once the velvet has been rubbed off the horn. At this stage the antlers are fully calcified and are insensitive, and they do not require analgesia. Embryotomy wire makes a very effective saw for cutting hard antler. The disadvantage of this method is that the deer are becoming more aggressive as the rut approaches, and they can be more difficult and dangerous to handle compared to their behaviour while in velvet. There is also the economic loss in not cutting velvet antler when it attracts the best price.

c. Castration may be used on animals destined for slaughter, and this is mostly done with fallow deer bucks, with the intention of preventing the vigorous fighting that is typical when entire fallow bucks are yarded for transport to an abattoir at 22 to 27 months of age. Cutting off the antler spikes with shears as soon as they harden in late December does reduce the number of penetrating wounds, but there can still be severe bruising of carcasses. Deer castrated prepubertally do not grow antlers, and they are readily handled throughout the year. The usual method for castration in fallow bucks is to apply rubber Elastrator® rings at 3-6 months of age, with castration of bucks over 6 months of age being done by a veterinarian after administration of an appropriate method of analgesia.

Older deer should be castrated either surgically or by the use of a Burdizzo emasculator. Attention must be paid to analgesia, control of haemorrhage and protection from infection, especially tetanus. Polyvalent clostridium vaccinations should be administered to all deer at weaning (3 months) and repeated at the time of castration.

d. Surgical polling (removal of horn buds to prevent antler growth) has been advocated in species which do not produce much velvet antler, such as fallow bucks and chital stags. It removes the need for the annual removal of antlers and must be done as soon as the antler pedicles are palpable under the skin. This is a surgical procedure and must be done by a veterinarian. It has not been a common practice in recent years.

National Velveting Accreditation Scheme (NVAS)
The National Velveting Accreditation Scheme enables accredited farmers to harvest velvet antler from their own deer, using approved S4 prescription animal remedies which must be prescribed by the veterinarian working with the farmer under NVAS.

NVAS was established in 1995 and is managed by a national committee which is appointed by the Deer Industry Association of Australia (DIAA). An experienced deer veterinarian serves on the committee in each state. The farmer must set up a proper client-veterinarian relationship. The farmer must first pass an examination at the end of a two day training course, after which the veterinarian must then complete the accreditation by assessing the farmer's ability to undertake velveting on his or her own premises and only using his or her own deer.

The Scheme has been successful and is now an established part of deer farming in Australia. Both farmer and veterinarian must keep records of all drugs supplied and the number of animals velveted. An annual return with these details must be submitted to DIAA. Any farmer failing to meet these obligations loses their accreditation.

Other relevant policies and position statements

3.4 Use of projectile syringe equipment

Date of ratification by AVA Board: 20 January 2012
Part 12 - Poultry health and welfare
12.1 Beak trimming of commercial poultry

Position statement

Beak trimming of commercial poultry is endorsed only in situations in which it is needed to reduce the prevalence of pecking and cannibalism, not able to be controlled by other means. Husbandry procedures aimed at reducing the prevalence of these behavioural problems should also be implemented.

Only minimal beak trimming by competent persons qualified under the national competency standards is supported, and it must be performed at the earliest possible age of the birds. The procedures for workplace training of beak trimmers, which has been developed under the auspices of the Australian Egg Corporation, is recommended.

Research and selection for less aggressive strains of birds that may reduce the need for beak trimming is strongly supported.

Background

When observations within a poultry flock and/or experience from previous flock histories indicate the occurrence or likelihood of traumatic pecking or cannibalism, routine beak trimming is one management option.

The Egg Corp Assured quality assurance program developed by the Australian Egg Corporation includes a Beak Trimming Training Manual and beak trimming trainer guidelines. These resources are designed to assist workplace trainers with the training of beak trimmers in the egg industry.

This approach clearly defines the roles of the workplace trainer. It also provides formal recognition of trainees' skills by assessment (accreditation) and the development of national competency standards.

At the same time, there is a need to implement other husbandry procedures to reduce the likelihood of commercial poultry developing behavioural problems associated with pecking and cannibalism in all production systems. This involves attention to:

- husbandry
- types of rearing and production facilities
- stocking densities
- feed formulations and management throughout lay.

The suitability of strains for particular production systems requires ongoing assessment.

Other recommendations

The Australian Veterinary Association (AVA) supports the development and implementation of new beak trimming methods, such as the use of infrared technology.

8 http://www.aeccl.org/index.asp?pageid=363
Other relevant policies and position statements

3.1 Surgical alteration to the natural state of animals

References


Date of ratification by AVA Board: August, 2010
12.2 Commercial egg production systems

Policy

Commercial egg production systems should provide for the health, nutrition, and psychological wellbeing of the hens. Continuing scientific research into hen welfare in different production systems under Australian conditions is essential.

Background

Laying hens are housed in different commercial management systems. Each system provides varying levels of protection from hazards including predation, theft, parasitism, disease, temperature variation, seasonal variation in light intensity and feed wastage. Commercial egg production systems, for the purpose of this policy, are defined as those where laying hens (chickens) are kept under commercial management systems for the purpose of egg production for human consumption. The commercial egg production systems legally permitted in Australia include caged, barn, free range and organic, however Tasmania has announced the phasing out of battery hen production.

The European Commission's Welfare of Laying Hen's Directive came into effect on 1 January 2012, banning the use of conventional battery cages for laying hens and the marketing of eggs from hens housed in such cages. It is the first piece of European legislation to phase out a method of production because of animal welfare concerns. New Zealand will phase out the use of battery cages by 2022 following the introduction of a new code of animal welfare. New battery cages can no longer be installed there, while cages already in use will be progressively removed from use over the next 10 years.

The welfare of hens used for egg production is a matter of concern for the veterinary profession and the general public here in Australia and overseas. Layer bird housing is at the forefront, but other issues such as the breeding of layer stock, disposal of male chicks, moulting practices, rearing of pullets, transport of birds and disposal of birds at end of lay are also of concern to the public and profession.

The Animal Welfare Science Centre Melbourne is currently undertaking a research project to elucidate the benefits and challenges of free-range systems on the welfare of laying hens. At the moment there is little scientific evidence supporting that access to an outdoor range yields clear welfare benefits to the hens.

Guidelines

1. Caged, barn, free range and organic egg production systems have advantages and disadvantages, and no single management system caters entirely for health, biosecurity, food safety, environmental sustainability or welfare outcomes.


3. The welfare of the hens managed under every production system requires a comprehensive and whole-of-life approach. It is recognised that one of the most critical inputs to achieving optimum welfare in every system is the standard of stockmanship and husbandry achieved by the farm management. In order to continually improve welfare outcomes both new and current poultry workers and managers should undertake regular, recognised training in husbandry, welfare, food
safety and biosecurity. Particular attention must be given to training of farm staff in
day-to-day management of housing systems to ensure consistent management
practices and optimum welfare outcomes.

4. Robust scientific research into the welfare of poultry that encourages decisions
based on science evidence rather than anthropomorphic argument is strongly
supported. Areas of urgent research need include, but are not limited to:

4.1 Optimum management of alternative and existing housing systems
4.2 The welfare implications of housing hens at varying stocking densities in cages, in
barns and on range pasture
4.3 Strategies for reduction of cannibalism and pecking
4.4 Comparisons between layer strains for their suitability in different housing systems
4.5 Pharmaceuticals suitable for treatment of hens during egg production.

5. Veterinarians are uniquely placed to assist poultry producers to manage a wide
range of issues including health, welfare, biosecurity, nutrition and food safety, and
every commercial egg producer should have a veterinarian with poultry experience
available to advise regularly on these matters. The veterinarian has an obligation to
report issues of biosecurity concern including notifiable diseases and monitoring for
diseases of human and animal health significance.

The use of infra-red beak treatment at day-old where birds are at risk of cannibalism under
their management system is supported. Beak trimming at an age older than one day should
only be completed by experienced and trained operators using a hot blade and only when
authorised by an experienced poultry veterinarian

Other relevant policies and position statements

12.1 Beak trimming of commercial poultry

References

Advantages and disadvantages of different housing systems for the welfare of laying hens.
www.laywel.eu

Australian Animal Welfare Standards and Guidelines - Land Transport of Livestock 1st
edition 2012


New Zealand Animal Welfare Codes (Layer Hens) 2012


Date of ratification by AVA Board: December 2013
Part 13 - Wild animal control
13.1 Control of native and introduced animals causing damage to agriculture and natural habitats

Policy

The control of over abundant animals, both native and introduced, may be justified to prevent and address adverse impacts on agriculture or the environment. Methods can involve harvesting, culling, poisoned baits or biological control, or combinations of these, provided they are highly effective, and applied at times when populations are naturally at their lowest to minimise the number of individual animals impacted over time. Further research is required to identify new control options for pest animal species.

Background

A large number of native and introduced animals have become abundant and are regarded as pests in Australia, because of their potential to damage agricultural lands and natural ecosystems.

Harvesting, culling and biological control are common tools used in management programs for animals regarded as pests. These controls are defined as follows.

Harvesting is the taking of free-living animals for commercial, community or personal use.

Culling is a procedure used primarily to reduce the population size of free-living animal species, and may or may not involve the utilisation of some or all of the animals that are killed.

Biological control generally implies the use of microorganisms or vertebrate or invertebrate predators but can also include modified reproduction.

Control programs should aim to identify and minimise the unwanted impact of the pest species rather than simply controlling the species itself.

Harvesting and culling can be legitimate methods to reduce the impacts of introduced animal species, such as the rabbit, fox, cat, pig, goat, buffalo, camel and horse. Harvesting and culling can also be applied to designate "game species" like deer for which there are game management plans. It also applies to certain native species where there may or may not be evidence of overpopulation. The commercial harvesting of designated species of kangaroos and wallabies is an example.

At present, eradication of the major feral animal species is unlikely, except on off-shore islands and in predator-proof enclosures. The development of a wider range of effective and humane control options for pest animals is the subject of significant research effort in Australia and needs to be backed up with public education and oversiting legislation.

Guidelines

The following guidelines should be observed for harvesting, culling and biological control programs.

- Harvesting, culling and biological control programs must have a firm scientific basis and take account of animal welfare.
• Programs should be rigorously evaluated and subjected to community consultation before being implemented and should be specific for the target species.
• The commercial harvesting in some states and territories of certain large macropod species is carried out under a National Code of Practice for the Humane Shooting of Kangaroos and Wallabies (2008) as this sustainable harvest of kangaroos and wallabies provides significant revenue to rural communities across Australia as does the hunting of species of deer and feral pigs.
• The live capture of pest animals such as feral goats as part of a control program should be restricted to accredited operators who have received appropriate training, including veterinary advice. The decision on whether to attempt capture should take into account the risk of injury and stress to the animals during capture, subsequent handling and transport, as euthanasia may be preferable in some circumstances.
• Methods used to kill animals must be rapid and humane and participants in harvesting and culling programs must be adequately trained and demonstrate competency in killing methods approved for the program, such as the National Code of Practice for the Humane Shooting of Kangaroos and Wallabies (2008), with the head being the specified target. This code of practice stipulates head shots for those who obtain permits to cull macropods, but this raises concerns about the ability of non-professional shooters to consistently deliver a lethal shot to the head at longer ranges. The chest kill zone is a much more humane option for those culling kangaroos, with a suitable high velocity projectile targeting the heart, associated large vessels or the lungs.
• If an animal is suspected of being alive after being shot, every reasonable effort must be made to locate and kill it immediately.
• Biological control agents should have minimal effect on the normal behaviour and demeanour of the animal (unless such effects are part of the control objective). Where agents will cause death of some animals, death should be as rapid and as free from pain, apprehension or disorientation as possible. The level of these undesirable effects should be comparable with, or less than, effects caused by non-biological control agents. Individuals that recover should be minimally affected.
• Biological control agents must have no effect on non-target species.
• The seasonal breeding patterns of feral and native animals should be taken into account when control programs are planned. Killing or capture of breeding females with unweaned offspring should be avoided. Killed females should be checked for unweaned offspring which must be located immediately and killed humanely.
• Free living fauna may harbour diseases transmissible to humans or other animals. Brucellosis due to Brucella suis in feral pigs is an example. Harvesting and culling protocols must be designed to prevent disease transmission.

The AVA does not support the use of steel-jawed traps for killing foxes or dingoes (or any other animal) or for capture of these animals prior to killing. It is an inhumane method that causes injury and suffering to target species as well as to non-target species. Death is often slow and results from a combination of exposure, exhaustion and shock.
Other relevant policies and position statements

- 13.2 Management of cats in Australia
- 13.3 Control of feral horses and other equidae
- 13.4 Control of wild rabbits
- 13.5 Kangaroo and wallaby population control
- 13.6 Harvesting and culling of native fauna

Date of ratification by AVA Board: August 2010
13.2 Management of cats in Australia

Policy

Environmental and conservation consequences of the large feral and un-owned cat populations in Australia should be managed.

- Owned cats should be permanently identified with an RFID (microchip) traceable to an accredited database with their health and reproduction managed in conjunction with a veterinarian. Owners should be encouraged to either permanently confine the cat, or at a minimum impose a night-time curfew. This not only reduces public nuisance complaints, but also protects the welfare of the cat.

- Un-owned cats should not be fed, but should be reported or captured and handed over to welfare agencies or the local government authority. Education around prevention of owned cats becoming lost or stray is essential and humane killing may be required where the colony is a public nuisance or the welfare of the colony is threatened. Trap, de-sex and return strategies have limited utility in Australia.

- Feral cats should be controlled and eradicated from Australia because of their negative impact on populations of native fauna. Currently used methods include cat free buffer zones, fencing, trapping, shooting and poisoning. Methods employed for the control of feral cats must be as humane as possible. Research is required to develop more innovative, effective and humane methods of control and eradication of feral cat populations.

Background

There are three distinct populations of cats in Australia. Denny and Dickman (2010) noted that to the various populations of cats in Australia, can be categorised as domestic, feral or stray. They can also be broken down into feral, owned and un-owned.

The populations to a limited extent feed into each other, but management of each population requires different strategies.

An understanding of cat population demographics is essential for successful management and implementation of legislation.

Denny and Dickman (2010) observe that stray cats living in self-perpetuating populations in urban, peri-urban and highly modified rural habitats, constitute possibly the largest sub-group of cats in Australia and remain largely unrecognised. In terms of legislation and cat control programs, most attention has been paid to owned domestic and feral cats, with little information on colonies of cats that exploit highly modified habitats in urban fringe and rural areas. Legislation has been introduced in most states and territories to address the control, via sterilisation, marking (tattooing or microchipping) and confinement of owned domestic cats.

Feral cats: These are wild cats that have escaped domestication. They are born outside human society and have no or minimal contact with people. They are not reliant on humans for survival and obtain food by hunting and scavenging. They tend be solitary or live in small family groups of 3-4 dominated by a matriarch. Their territory can be large and variable, dependent on resources. They are successful survivors in harsh circumstances, expert at eluding capture.
**Unowned cats:** Sometimes known as semi-owned or semi-feral, these cats or their immediate antecedents were once owned by people. Their origins are as abandoned or lost cats and they often live in larger colonies than feral cats.

Unowned cats are largely dependent on human society for food and shelter. They are typified by factory cats, cats living around rubbish tips, and colonies maintained by well-meaning members of the public who perceive their only responsibility for them is to provide food. It is this population that is responsible for most of the complaints about cats in urban areas. Most are not de-sexed, vaccinated or given parasite control. They serve as repositories for many feline diseases and zoonoses and their numbers expand rapidly when given access to ample resources. The welfare of these individuals and colonies is often poor.

**Owned cats:** These are cats that live in a domestic household. They are usually named and have a form of identification. Over 90% are de-sexed and they may live totally indoors or a mix of indoors and outdoors. Although some may hunt birds and small mammals they are mainly dependent on their owners for food. While an easy target for legislation around desexing, identification and confinement, this population and their largely responsible owners are not the cause of most complaints about cats. Cat ownership is recognized as conferring a significant societal benefit.

There is growing public awareness that the free-living feral cat (*Felis catus*) is causing damage to populations of small native mammals, reptiles and birds in many parts of Australia and can be a disease reservoir.

The humane control and eradication of feral cats, where possible, is a legitimate and necessary objective for managers of national parks and a desirable objective for managers of agricultural and pastoral lands. Control and eradication may also be necessary in urban areas that support significant populations of native fauna or where neighbourhood amenity or health is being affected.

Elimination of cats in some circumstances may be extremely costly and may result in only temporary predation relief for native animals and birds. Currently available technologies (trapping, shooting and poisoning) are unlikely to achieve eradication. In fact this will only ever be achieved with current control methods within predator-proof enclosures and on islands.

Owned cats should be identified by microchip with details recorded on a database accredited by Domestic Animal Registries Incorporated or the Australian Veterinary Association (AVA), and registered with the relevant state or local government where required. Reproduction should be controlled, in most cases by permanent surgical sterilisation. Cats should be confined in accordance with local legislation to protect the cat from accident and infectious disease, to prevent predation on wildlife, and to reduce community nuisance.

Mandatory desexing programs do not reduce overpopulation and other problems associated with cats in the community. Instead, voluntary desexing of owned cats should be encouraged by owner education and financial incentives such as a reduction in registration fees.

Unowned cats should not be fed, but should be reported or captured and handed over to the local government animal management authority or shelter for assessment and care. The AVA supports more research into humane control of unmanaged cat populations.

Authorities and shelters receiving cats should immediately determine whether they are identified, and, if so, contact their owners. The welfare and health of cats must be managed
as a priority. Un-owned cats should be assessed for health and temperament. Most un-owned cats should be kept for at least 7 days (or according to legislation), prior to being made available for rehoming or euthanasia. Cats that are severely ill or are very anxious or stressed should be immediately euthanased.

The AVA does not support trap-neuter-return (TNR) programs as it is usually not possible to control the entry of new cats into the colony, and the long term welfare of the cats is generally very poor. Additionally, un-owned cats have a serious impact on Australian wildlife, and can be the cause of considerable community nuisance, whether or not they have been sterilised.

Guidelines

The following guidelines should be observed for the control of stray, feral and un-owned cats:

Methods used to control cats should minimise risk to non-target species. Scientific evidence must first justify that there is a feral cat problem. Control methods must be humane to the target cats and be effective in the long term. Physical capture methods are preferred in urban areas to allow impounding and recognition of domestic cats that have owner identification. Management of impounded cats with owner identification should be similar to that used in animal shelters and municipal pounds. Trace-back and education of owners of straying domestic cats should be compulsory in areas where municipal councils offer cat registration and identification procedures.

- The AVA strongly supports permanent identification of cats by their owners by methods such as microchips (preferred), tattoos, tags or collars. The AVA also strongly supports and promotes de-sexing of pet cats prior to puberty to minimise unplanned breeding, roaming and fighting.
- Education of the community on responsible pet ownership is an essential part of any control and management program.
- All cat breeders should be licensed, registered and adhere to relevant state or territory codes of practice.

The AVA recommends that sufficient resources must be made available to further study the impact of feral cats on native fauna. Studies should include the interrelationship between predators (including feral cats, foxes and other predators), habitat destruction and prey (including rodents, rabbits and native fauna).

Research is also required to determine the relationship between urban owned cats, urban strays, rural cats and free-living feral cat populations. This should include research on the interaction of these different populations, and the part that each plays in maintaining feral populations and destroying native fauna.

There is an immediate need for research into more innovative, effective and humane methods of control and eradication of feral cats. In a recent review, Denny and Dickman (2010) stated that feral cats occur throughout the Australian mainland and on more than 40 islands off the Australian coast. They note that feral cats are linked to the mainland extinctions of seven species of mammals.

References


Other relevant policies and position statements

- 13.1 Control of native and introduced animals causing damage to agriculture or habitat

  Date of ratification by AVA Board: 20 January 2012
13.3 Control of feral horses and other equidae

Policy

The management of feral horses and other equidae populations is considered necessary to achieve fauna and flora conservation goals as well as economic goals (such as reducing competition with livestock for finite food and water resources). Where culling is indicated on scientific assessment of the relative merits, the most humane methods must be employed.

Background

Feral horses (*Equus caballus*) have their origins in escaped and released domestic horses brought to Australia with the European settlement to provide draught power and personal transportation. With the advent of mechanical alternatives, horses decreased in value and have in some places achieved pest status.

Feral horses occur in many parts of Australia. In the open rangelands areas, horse populations are widely distributed. Aerial surveys estimated the Northern Territory feral horse population at about 265,000 (Saalfeld, unpublished data, 1986-2001, in Dawson et al 2006). In New South Wales and Victoria, the feral horse populations are smaller and more isolated, and there are occasional incursions into the Australian Capital Territory. In the more urbanised areas of eastern Australia, feral horses primarily occur on crown land and these smaller populations are generally the main focus of public and media attention (Dawson et al 2006).

Economic impacts include competition with livestock for food and water, and this impact is especially severe during drought. Feral horses can also interfere with station management, and damage fence lines. Horses are susceptible to a number of exotic diseases, a recent example being equine influenza.

Impacts on the environment include damage to native vegetation (including trampling and changes to the structure and composition of vegetation communities), soil erosion and compaction, competition with native fauna for resources and fouling of waterholes, which also may be more apparent during drought. Areas used by horses during drought are believed to be important refuge areas for many native plants and animals. There are also significant animal welfare concerns associated with overabundant feral horses during drought, due to starvation. A good summary of the known environmental impacts of feral horses is provided in Csurhes et al. (2009), pp 14-16.

Despite the published negative impacts, 79% of respondents in a survey of Victorians did not regard feral horses as a pest animal (Nimmo et al. 2011). This work agrees with findings from a three year social study commissioned by the Invasive Animals CRC that obtained 5,060 responses to questions about pest animals and their management. Feral horses were listed in only about 3% of responses when participants were asked to indicate up to five animals (from a provided list) that you regard as Australia’s worst pests (Fisher et al. 2012). Indigenous people may also have social concerns about horses, with some communities perceiving them as a resource and therefore wanting minimal population management (Dawson et al. 2006). Differing perceptions of feral horse impact and the suitability of control methods in the broader community make management very challenging. There is often public outcry in response to lethal control programs (Nimmo & Miller, 2007).

Many Australians are concerned about the humaneness of feral horse control methods. Management effort across Australia varies significantly due to the varying abundance of feral horses, the different pest status among states and territories, available resources, differing
environments or topography, and existence of regional (cross-jurisdictional) management plans.

Available control techniques include trapping and mustering, capture and removal, fencing, and aerial and ground shooting.

Fertility control is not a currently practicable option.

Commercial harvesting may be feasible in some situations (Dawson et al. 2006).

The *Feral horse management plan for Oxley Wild Rivers National Park* (NSW NPWS, 2006) is a good example of a site-specific management plan. A good summary of the benefits and disadvantages of the various control options is provided in the section 'Horse management methods' (pp. 14-15). It is important to recognise that other sites in Australia may have vastly different requirements.

**Guidelines**

The primary concern is for the welfare of the feral horse population being managed, and in the protection of the natural or agricultural values important to the particular area.

Feral horse control is a necessary management practice provided it is humane and justified.

Every situation should be considered on its merits and should involve stakeholder consultation, expert consultation and sound scientific understanding of the impacts of feral horses in the particular environment. Lethal and non-lethal control programs should be well coordinated, planned and resourced, and use of personnel trained and accredited in the chosen control techniques.

The method of control of feral horse populations should be in accordance with a locally or regionally specific management plan that reflects both community views and sound scientific advice.

*A model for assessing the relative humaneness of pest animal control methods* (Sharp & Saunders, 2008) has been developed to enable the evaluation of methods in use and to allow the most humane methods to be identified based on scientific evidence.

The model examines both: the negative impacts of a control method on an animal’s welfare and the duration of this impact (Part A); and, if a lethal method is employed, the intensity and duration of suffering of the killing technique. The information used to develop the matrix for feral horse control techniques is provided at:


This model has been used to assess the humaneness of a variety of pest animal control methods used in Australia, including for feral horses (see Figure 1, below).
Worksheets to assess the merits of available options are also available on the site currently managed by the Invasive animals CRC.


Following decisions about the choice of method to be employed, all operations should be conducted in adherence to relevant state/territory legislation (including OH&S)

**Codes of Practice**

Model Codes of Practice have been developed and are available at the following site

[CSIRO PUBLISHING - Series](#)

Relevant codes are:
Model Code of Practice for the Welfare of Animals: Feral Livestock Animals
Model Code of Practice for the Welfare of Animals: Land Transport of Horses
Model Code of Practice for the Welfare of Animals: Livestock at Slaughtering Establishments.

References


Dawson, MJ, Lane, C & Saunders, G (Eds) 2006, Proceedings of the National Feral Horse Management Workshop, Canberra, August.


Date of ratification by AVA Board: 25 July 2013
13.4 Control of wild rabbits

Policy

Reducing adverse impacts of wild rabbits is a legitimate and necessary objective for those responsible for managing agricultural land, pastoral land, national parks and other land. Methods employed for the control of rabbits must be as humane as possible. The total eradication of rabbits on the Australian continent is not a realistic goal.

Background

The European rabbit (Oryctolagus cuniculus) has caused, and continues to cause, very severe damage to agricultural and natural areas in the southern half of Australia. It poses a serious threat to the survival of some native species of plants and animals.

Guidelines

The following guidelines should be observed for the control for wild rabbits.

- The use of sodium fluoroacetate (1080) and anticoagulants is an acceptable method of poisoning rabbits. Strychnine should not be used in rabbit control.

- Methods of applying poisoned baits should minimise the risk to non-target species.

- Ripping of warrens alone is effective but should be used in conjunction with other methods so that rabbit numbers are minimal when ripping is carried out.

- The AVA rejects the use of explosives alone because the operator has insufficient control to ensure that it is not inhumane. It is a reasonable technique to employ to destroy warrens in rocky ground or inaccessible country after an efficient poisoning program has been carried out.

- Fumigation may be necessary, but the AVA urges that more effective, humane and less irritant fumigants be developed.

- The use of steel-jawed traps is inhumane and is not an efficient means of controlling rabbits.

- Shooting is humane if the bullet passes through the brain, causing instantaneous loss of consciousness. Shooting through the heart may be more practical in some situations. Shooting is generally not an efficient method of controlling rabbits if no other method is used, but it can be useful to reduce the number of rabbits that survive poisoning or warren ripping.

- Myxomatosis has been an extremely effective agent in rabbit control. Although this disease causes distress to rabbits, it is a necessary part of any comprehensive rabbit control campaign, given the context of the Australian environment.

- The imported calicivirus causes an acute fatal disease in rabbits and has now been released in the field for rabbit control. The AVA believes that this disease causes less suffering than other current methods of control, including 1080 and myxomatosis.
Other recommendations

The AVA supports ongoing research to find more practical and effective and humane methods of control, particularly research into fertility control (including virus-vectored immunosterilisation and related techniques).

Other relevant policies and position statements

13.1 Control of native and introduced animals causing damage to agriculture and habitat

Date of ratification by AVA Board: 8 July 2011
13.5 Kangaroo and wallaby population control

Position statement

Population management of large macropods (kangaroos, wallabies, euros etc) is necessary to prevent circumstances where there could be significant welfare or environmental issues arising from overpopulation.

Management and control methods must be humane and consistent with legislation relating to kangaroo and wallaby protection and control.

Shooting is the preferred method of control, but other methods may sometimes be required.

There must be heavy penalties for contravention of legislation relating to kangaroo and wallaby protection and control.

Research into alternative methods of population management, such as fertility control is also supported.

Background

General

In some circumstances it is appropriate to reduce the population of kangaroos and wallabies, usually when animals are present at very high densities, resources are limited, and there is ensuing environmental degradation and/or starvation of the kangaroos as resources are depleted. Common examples include unmanaged populations confined within fenced areas or wild populations in times of drought. Starvation is a significant animal welfare issue. Environmental degradation and animal welfare can be addressed largely by appropriate management, a key element of which is population control.

Options for population control

The options for population control of kangaroos and wallabies are lethal (usually shooting) or non-lethal using either capture and translocation or some form of fertility control, or a combination of the last two. All control methods must be humane.

The control of kangaroos and wallabies by harvesting or culling involves managing sustainable use of natural resources, minimising environmental degradation, reducing impacts on grazing and cropping, and ensuring animal welfare. This policy should be read in conjunction with AVA policies in Part 16 of the Policy Compendium (Environment and conservation).

Guidelines

Lethal control

The following guidelines should be observed for the lethal control of kangaroos and wallabies.

Decisions to use, harvest or cull kangaroos and wallabies must be based on objective scientific data.
Any method used must be rapid and humane, with the preferred technique being shooting by an accredited operator using a high-velocity rifle, as described in the National Code of Practice for the Humane Shooting of Kangaroos and Wallabies (2008). Shooting kangaroos and wallabies for population control is considered the most acceptable on animal welfare grounds.

Animals must be shot through the head at night, with the aid of a spotlight. If an animal is suspected of being alive after being shot, every reasonable effort must be made to locate it and kill it immediately.

Animals must not be shot from a moving vehicle or platform unless specific authorisation is included in the permit issued by the licensing authority.

Pouch young must also be killed by a shot or heavy blow to the head to cause instant death.

**Non-lethal control**

There is a community perception that non-lethal control methods are more humane than shooting, but this is not necessarily the case. Capture and translocation of kangaroos and wallabies is difficult and traumatic. The loss of some animals is highly likely, with mortality rates of 5–10% being common with the use of dart rifles or other means of capture, with or without some form of herding into enclosures constructed for the purpose. Smaller individuals may be caught by hand or with hoop nets, and in some situations a draw-string trap may be used to capture animals moving under fences. Causes of death can include direct trauma following impact with fences or other fixed objects, post-capture myopathy and losses during transport from injuries, hyperthermia and dehydration. There is often difficulty in selecting a suitable release site that will not pose potential ill effects for resident kangaroo and wallaby populations.

Surgical and non-surgical methods of fertility control can be used, but as none is currently deliverable by remote means, it is not possible to use them on most free-living macropod populations. Fertility control does not achieve an initial reduction in the size of the population, which is required in many cases, but may be useful for ongoing reproductive management of the remaining animals. The only way to achieve an initial reduction in numbers is to cull or move the animals elsewhere, with all the difficulties discussed above.

**Other relevant policies and position statements**

13.1: Control of native and introduced animals causing damage to agriculture or habitat

13.6: Harvesting and culling of native fauna

Part 16 Policy compendium: Environment and conservation

**References**


Date of ratification by AVA Board: February 2009
13.6 Harvesting and culling of native fauna

Policy

Both harvesting and culling of overabundant populations of native fauna are accepted subject to the use of rigorous population assessment methods and the use of humane techniques in accordance with current scientific knowledge, legislative frameworks and agreed management plans, and so as not to adversely affect threatened or endangered species\(^{10}\). The harvesting of non-abundant species is opposed and vigorous conservation of threatened and endangered species is supported.

Background

Overabundant native fauna may have deleterious economic\(^{11}\), ecological\(^{12}\) or social impacts. Harvesting involves the taking of free-living native fauna for use on a commercial, community or personal basis. Harvesting should be distinguished from culling, which is a procedure used primarily to reduce the population numbers of a free-living species. Australian native fauna is a unique and valuable natural resource that can, at times, be used as a source of food and other products. Some native animal species are abundant offering opportunities for commercial harvesting. There are also legislative provisions\(^{13}\) for the legal harvest of native fauna by Indigenous communities and individuals with a native title right.

Nonetheless, harvesting and culling of native fauna are controversial activities that require continuing scientific investigation, appropriate legislative oversight, community education, stakeholder consultation and up to date operator training.

Guidelines

The following guidelines should be observed for harvesting and culling of native fauna:

i. Harvesting and culling programs for native animals must be based on current scientific data on population dynamics and habitat to ensure maintenance of viable ecosystems and population numbers (see Chee and Wintle (2010) for an approach). Where appropriate, efforts should be made to harvest meat and meat products from culled animals.

ii. Programs must be designed and regulated\(^{14}\) in a way that will prevent unauthorised harvesting or culling of target species and have minimal effect on non-target species.

iii. To avoid adverse effects during live transport of trapped native animals, capture and transport techniques that cause minimal injury and avoid pain and stress must be used and be validated by appropriate studies.

iv. Killing methods must be rapid and humane, and carried out by trained, skilled operators.

v. If it is suspected that an animal remains alive after the killing procedure, then every reasonable effort must be made to locate it immediately. The dependent young of killed adult female animals should be humanely destroyed without delay. Harvesting

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\(^{10}\) As listed under the Environment Protection and Biodiversity Conservation Act 1999 (http://www.environment.gov.au/epbc/protect/species-communities.html) and various state/territory legislation.

\(^{11}\) For example, over-abundant macropods grazing on pastoral land.

\(^{12}\) For example, over-abundant macropods on native grasslands, or noisy miners negatively impacting bird species richness (see Clarke and Grey 2010).

\(^{13}\) Under section 211 of the Native Title Act 1993.

\(^{14}\) For example, for commercial harvesting, through obtaining a commercial wildlife harvesting licence, or similar, under state/territory legislation.
and culling activities should be carried out to avoid circumstances which require the consequential killing of dependent young animals. 

vi. Where harvested animals are used for human consumption, adherence to relevant carcass processing, packaging, transport and storage and meat hygiene and inspection protocols is necessary\textsuperscript{15} to ensure public health and product quality.

vii. Free-living fauna may harbour diseases transmissible to humans or other animals. Harvesting and culling protocols must be designed to prevent disease transmission.

References


Other relevant policies and position statements

13.1 Control of native and introduced animals causing damage to agriculture or habitat

13.5 Kangaroo and wallaby population control

16.5 Farming of native fauna

Date of ratification by AVA Board: December 2013

\textsuperscript{15} For example, the Australian Standard for the Hygienic Production of Wild Game Meat for Human Consumption (AS4464:2007), the Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption (AS4696:2007) and state/territory meat hygiene legislation.
Part 14 - Hunting and fishing
14.1 Hunting

Position statement

The Australian Veterinary Association (AVA) recognises that animals are legally hunted and killed in Australia. The AVA believes that statutory codes of practice need to be developed to ensure that those engaged in hunting use methods to seek and kill prey animals that will minimise stress and suffering to both the prey animals and any other animals used in the hunting process.

The AVA supports the development of population management systems that will reduce the necessity for hunting to control animal numbers.

Within the AVA (as within the wider community), there are diverse opinions on the moral aspects of hunting. The AVA’s prime concern is for the welfare of the animals being hunted.

Background

Wild animals are hunted for a number of reasons, including:

- control of introduced feral animals
- reduction in numbers of overabundant native species
- recreation
- food gathering
- euthanasia of animals following natural disasters.

There can be a positive outcome for animal populations when animals are hunted to control numbers, minimise suffering or conserve animal habitat.

Guidelines

A code of practice is necessary within each jurisdiction to ensure that animal welfare considerations are adequately addressed during hunting. Specifically, codes of practice need to address the following:

- The welfare of animals (both the prey animals and any other animals used in hunting) is of paramount importance.
- The methods used to kill prey animals must be humane and instantaneous. Animals should not be used to kill or injure hunted animals.
- Hunters must ensure that each animal is dead before continuing to hunt for subsequent prey animals.

Other relevant policies and position statements

13.1 Control of native and introduced animals causing damage to agriculture or habitat

13.6 Harvesting and culling of native fauna

Date of ratification by AVA Board: 1 May 2004
14.2 Waterfowl hunting

Policy

Waterfowl should not be hunted for recreation or sport alone. Where waterfowl are shot for culling or food, shooters should obey all relevant legislation, permit conditions and codes of practice. The main concern must be for the welfare of the waterfowl.

Background

Waterfowl hunting is undertaken in our society for a number of reasons, including food provision, mitigation of crop damage, traditional or cultural reasons and recreation.

The hunting of waterfowl using shotguns may result in the non-fatal injury of a proportion of target birds resulting in pain and suffering. To address this issue, hunters must be trained to only fire on birds within the optimal shotgun range, choke and shot size being used. Strict waterfowl identification tests (WIT) must be completed prior to the issuing of a duck hunting license.

A study by Szymanski & Afton (2005) in Minnesota (USA) reported approximately one-third of ducks are injured but escape capture, however this percentage needs further study to be validated. Their data are insufficient to ascertain the proportion of ducks that are still alive when they are retrieved. Although this study’s intent was not to examine the animal welfare aspects of duck hunting, it raises important questions about the humaneness of waterfowl hunting activities in Australia.

The primary concerns are for the welfare of the hunted waterfowl, and in the sustainability of native waterfowl populations. It is therefore essential that all hunters are appropriately licensed under their relevant state or territory legislation, that they must pass waterfowl identification tests (in Victoria, these are conducted at DPI offices and TAFEs) and that waterfowl populations are regularly monitored by the relevant state authority. The Victorian Government’s Shotgunning Education Handbook (2010) provides guidance on improved hunting practices, use of appropriate chokes and loads for various scenarios, equipment limitations, and information on best practice hunting and retrieval strategies, to reduce the number of wounded birds and improve the sustainability and humaneness of waterfowl hunting. In all states, hunters should be required to attend specific training courses, to improve their shotgunning skills and the humaneness of waterfowl hunting activities throughout Australia. Using trained gun dogs to retrieve birds ensures wounded birds are quickly found.

Veterinarians need to be aware that in some jurisdictions, it is illegal for persons without a duck hunting license to be in possession of both dead and live waterfowl. Under relevant sections of the Victorian Wildlife Act 1975, for example, a person must not be in possession of live game. If game birds are recovered alive they must immediately be killed humanely. Dead shot birds instantly become the property of the licensed hunter who shot them, and other persons seizing such birds are committing theft.

References


Date of ratification by AVA Board: 25 July 2013
14.3 Fish welfare

Position statement

When fish are farmed, kept in aquaria or captured from the wild for commercial or recreational purposes all efforts must be taken to minimise suffering of the fish.

The veterinary profession should be actively involved in the development and review of regulatory and advisory frameworks for fish welfare.

Background

Definition

For the purpose of this position statement fish denotes finfish and does not include aquatic invertebrates such as molluscs or crustacea.

Guidelines

The AVA recognises the diversity of the fish sector and supports the establishment and implementation of effective welfare Code of Practices for each of the four sub sectors, i.e. recreational, aquaculture, ornamental and wild capture. The Codes of Practice should be able to be enforced and should incorporate the following principles.

Holding fish in captivity

The quality of water should be maintained within the species’ natural range of tolerance, which includes the temperature, salinity, pH and dissolved oxygen of the water. Metabolic wastes should not be allowed to increase to levels that cause unnecessary suffering of the fish.

The holding unit in which fish are kept should provide protection from predators.

The food supplied should ensure that known nutritional requirements for the fish being held captive are satisfied, except in cases where purging is required to decrease unwanted flavours in the fish.

Sick fish

Sick or injured fish should be euthanased, or treated if treatments are available and legal for the fish species being treated. Sick fish should not be sold.

Handling of live fish

Any handling of live fish should be undertaken in a manner that avoids damage and stress to the fish. Prolonged handling (e.g. for health checks, veterinary treatment, artificial reproduction etc) should be undertaken using an anaesthetic approved and appropriate for the species and numbers of fish involved.

Any captured fish that is to be released should be handled as little as possible, and if possible should not be removed from the water, to increase the chances of a successful release. The use of knotless nets and circle hooks is encouraged because such devices will minimise physical damage to the fish prior to release.
Killing of fish

The killing of any fish should be carried out promptly and by humane means suitable for the species and numbers involved, recognising that methods may vary between species and according to available technology and equipment.

Ratified by the AVA Board: 18 June 2009
Part 15 - Miscellaneous welfare issues
15.1 Live animal export

Position statement

There must be strict adherence to the following requirements to protect the health and welfare of animals when they are exported to provide food or genetic material.

Importing countries should be members of the World Organization for Animal Health (OIE) and have a legislative commitment to ongoing monitoring and enforcement of animal welfare standards.

Animal health and welfare should be protected from farm gate to slaughter through a whole-of-chain enforcement of the OIE Terrestrial Animal Health Code chapter 7 at a minimum.

The AVA policy on humane slaughter for all species states "When animals are to be slaughtered they must be humanely rendered unconscious until death." This equates to use of stunning for the species involved in live export. Australian exporters and authorities must work to promote these standards in importing countries.

The Australian Standards for the Export of Livestock (ASEL) and Australian Maritime Safety Authority requirements must be enforced by the Australian Government and regularly reviewed and updated.

There must be an effective and enforceable dispute resolution process agreed between governments prior to export approval being granted. Contingency plans must be in place to ensure that the welfare of exported animals is protected if they cannot be unloaded at the designated port.

There needs to be continued research and development into the health and welfare of livestock at all stages of the export process.

Every Live-Export shipment must be accompanied by an Australian registered shipboard veterinarian

Veterinarians accompanying shipments must be independent and not be employed by either the exporting company or the shipping company where the entities are different. All measures must be implemented to ensure there is no conflict of interest for the veterinarian accompanying the shipment.

Background

Animals are exported for food and genetic material. When animals are exported for genetic material it is acknowledged that the exporter cannot exert any significant degree of control over their eventual slaughter, which may be many years later.

It is important to engage with the livestock export industry and international veterinary associations to promote the welfare of animals globally and to help safeguard the welfare of all exported animals.

If Australia removes itself from the trade, any shortfall of supply will be sourced from other countries and the welfare standards applying to those animals are likely to be considerably less than those we impose.

Australia is working to improve animal welfare in importing countries and if the live export trade ceases then this input will be compromised.
Effective operational protocols should be in place at all times to safeguard the welfare of exported animals. These protocols should include the accreditation of abattoirs, training of employees and the implementation of an independent animal welfare auditing process, as is the case in Australian processing establishments.

Other relevant policies and positions statements

15.16 Humane slaughter

References


Date of amendment by AVA Board 28 October 2012
15.2 Export of native birds

Policy

Only common (non-CITES1 listed) Australian native birds bred in captivity may be exported. Such export should only occur if effective controls are in place.

The capture and export of wild native birds and their eggs for commercial gain is not acceptable.

Background

Effective controls would include:

permanent identification and registration of individual birds;
registration of licensed breeders;
humane and safe transport of birds across international boundaries; and
pre-export health testing and quarantine with appropriate diagnostic tests in place for disease identification.

At present, these controls are not in place and therefore the export of Australian birds for commercial reasons is opposed until these conditions are met.

The limited export of fertile eggs produced in captivity is also opposed, because of the present difficulty in permanently identifying and registering such eggs.

Consideration should be given to the limited export for non-commercial purposes of common native birds bred in captivity, subject to the regulations that are presently in place. Unless appropriate provisions can be enacted and enforced to protect adequately the welfare and conservation of native birds, then the current restrictions on exports should remain in force.

Other relevant policies and position statements

16.5: Farming of native fauna

References


1.Convention of the International Trade in Endangered Species

Date of ratification by AVA Board: February 2009
15.3 Circus animals

Position statement

The use of animals in circuses is a matter of growing community debate, and can have considerable animal welfare implications. Such use is acceptable only where the welfare of the animals concerned must not be compromised and the operators must be subject to enforceable and auditable licensing arrangements, underpinned by compliance with national animal welfare standards. Animals for which the standards are not applicable should not be kept or trained for use in circuses.

Guidelines

The following conditions should be included in the standards or licensing arrangements:

1. No new non-domestic animals are to be bred, imported, kept, displayed or used in any way. For those animals already in circuses, provision must be made for them to live out their lives in an appropriate environment retired from circus performance so as to maintain established strong bonds with their human carers. Removing them totally may adversely impact on their welfare, however regular welfare assessments should be performed to determine their status.

2. All circus animals need to perform or be exercised daily e.g. training or other activities.

3. Standards of health, welfare, nutrition, housing, confinement, transport and handling are to be not less than those that are described, legislated, or enforced for similar domestic animals used or kept in our society.

4. Environmental enrichment is an essential consideration for circus animals within the limitations of an itinerant lifestyle.

5. Licences to use or display animals in circuses should be underpinned by a clear, unambiguous, enforceable National Code of Practice or Standard. Alternatively an auditable, accountable and prescribed quality assurance system is required. While veterinary advice may be sought from local veterinarians in emergency situations, circuses should retain veterinarians with relevant expertise, especially in relation to non-domestic animals. These veterinarians should act as professional advisers, be involved in regular health assessments of the animals and be available for telephone consultations with local veterinarians.

Background

Circuses are a traditional form of travelling entertainment with ancient connections, especially in Europe. The first circus in Australia was operating in 1840. Their proponents maintain that animal acts differentiate circuses from cabaret acts. Public support for circuses is still demonstrated by large attendances at their performances. In some jurisdictions (such as the Australian Capital Territory), the use of animals in circuses is no longer permitted under animal welfare legislation.

Circus animals include both domestic species (small and large) and non-domestic species. It is difficult to meet the needs of non-domestic animals— for example, for space, socialisation, exercise and natural habitat—within the constraints of circus life. Most
animals are weaned early and hand reared to allow imprinting, thus facilitating handling and training.

These animals are different from zoo animals and are likely to be kept under different conditions. For example, animals that normally socialise well may need to be kept as individuals. Circus animals are exercised during training procedures, so the size of their cages may not be as critical as for zoo animals. Positive re-enforcement training is recommended.

Domestic circus animals present fewer welfare problems than non-domestic animals.

Generations of breeding in confinement and socialisation with humans make the husbandry requirements of domestic animals less difficult to maintain than non-domesticated species. They interact with people and can be more easily exercised and trained.

References


Accessed Jan 2014

Date of ratification by AVA Board: 8 July 2011
15.4 Rodeos

Position statement

The Code of Practice for the Welfare of Rodeo and Rodeo School Livestock in Victoria should be adopted at a national level.

Background

Rodeos should be permitted only where there is appropriate legislative control to ensure the welfare of the animals involved. Such control must include a permit to operate a rodeo event underpinned by an enforceable code of practice that includes a requirement for a suitably experienced veterinarian to be involved in planning the event and to be present for the entire duration of the rodeo.

The rodeo organising committee must commit to accepting the opinion of the attending veterinarian, and accept responsibility for the welfare of all animals during the event. The event planning must cover management of animals before, during and after the event including procedures for the treatment or destruction and removal of injured animals.

Event organisers must provide adequate remuneration for the professional attendance by suitably experienced veterinarians. The veterinarian must inspect the facilities prior to the event and be in attendance for the duration of the rodeo.

All rodeo associations should endorse the national code of practice, ensure that all required welfare issues are properly addressed, and ensure that breaches of the permit and/or the code are appropriately investigated.

There is considerable inherent welfare risk to animals participating in rodeos. These risks are exacerbated by poor or non-existent levels of regulation and enforcement at a state level, and the involvement of multiple rodeo organisations with varying welfare standards. Many rodeos take place in remote areas where there is little monitoring or enforcement of animal welfare codes of practice. Consequently the Australian Veterinary Association (AVA) is concerned the welfare of the animals used is compromised by rodeos which can be conducted in a manner that is cruel and unnecessarily dangerous.

Proper consideration must be given to the health and welfare of animals used in rodeos. Events and procedures in rodeos should be specifically designed to prevent cruelty and minimise the impacts on the welfare of the animals used. People responsible in the organisation for running of rodeos must have appropriate training so that they understand their responsibility to ensure that animal welfare needs are met. It is also important that there is proper supervision of rodeos to enforce the appropriate code of practice.

References

Victorian Department of Primary Industries.


Date of ratification by the AVA Board: 20 January 2012
15.5 Exhibitions of animals

Under review
15.6 Zoos, aquaria, sanctuaries and animal parks

Policy

Zoos, aquaria, sanctuaries and animal parks must be established, maintained and monitored under relevant state or territory legislation. Animal welfare and ethics committees should be established to oversee the welfare of the animals being kept in such facilities to ensure openness and transparency.

Background

These facilities can play a significant role in today's society by providing services addressing the following missions:

- Conservation of threatened species, involving both in situ and ex situ breeding and other programs, and including the re-introduction of individual animals into rehabilitated habitats when appropriate
- Research programs that support conservation activities and link to other research institutions
- Formal education at all levels from school children to postgraduate students, and informal education to develop an interest by the broader community in the animal kingdom and their interaction with the environment.

It is recognised that, in fulfilling these functions, zoos, aquaria, sanctuaries and animal parks also provide recreational and educational activities for the visiting public.

Ongoing assessment and improvement of animal housing, feeding and welfare based on research into the behaviour, nutrition and disease control of wildlife in human care is strongly supported. Animal welfare incorporates both physical and mental wellbeing.

Zoos can play an important role in the conservation of endangered species through captive breeding (noteworthy examples include the Corroboree frog and Regent honeyeater in NSW and the Tasmanian devil) and in research into ecosystem health, animal health, husbandry and management. Zoos actively provide a range of formal and informal educational activities about animals and their environments that support the development of positive attitudes towards animals.

Guidelines

The peak body at the national level is the Australasian Regional Association of Zoological Parks and Aquaria (ARAZPA), which conducts a stringent accreditation process for its members. Collection planning is done under the auspices of the Australasian Species Management Plan (ASMP) to maximise the cooperative management of captive populations for genetic and demographic purposes.

Zoos must strive to provide natural, stimulating environments, secure for both animals and the public. Husbandry techniques should be consistent with the animals' natural behaviours and welfare needs. Veterinarians who have experience in the different species kept in zoos, aquaria, sanctuaries and animal parks must be engaged by these facilities.

The New South Wales Exhibited Animals Protection Act 1986 and subordinate legislation, provide a guide to the facilities necessary for the keeping of non-domesticated animals and is the minimum standard expected for zoo animal housing.
References

Queensland - Animal Care and Protection Act 2001

Northern Territory - Animal Welfare Act

Australian Capital Territory - Animal Welfare Act 1992

Western Australia - Animal Welfare Act 2002

New South Wales - Exhibited Animals Protection Act 1986 (select E under Acts in Force)

South Australia - Prevention of Cruelty to Animals Act 1985

Victoria - Prevention of Cruelty to Animals Act 1986

Tasmania - Animal Welfare Act 1993

Date of ratification by AVA Board: January 2010
15.7 Welfare of cetaceans in captivity

Policy

Cetaceans should not be kept in captivity unless it can be demonstrated that their husbandry, welfare and health requirements can be met.

Background

The welfare of captive cetaceans is part of the broader issue of the welfare of captive mammals generally.

Cetaceans (such as whales and dolphins) in zoological marine parks provides a useful focus of contact for Australian people. The opportunity to observe cetacean behaviour contributes to community education and the development of positive attitudes towards wildlife. Captive cetaceans are also used in behavioural and biological research.

Keeping cetaceans in captivity is substantially more challenging than keeping many terrestrial mammals because of the challenge of maintaining an adequate marine environment. Although this policy refers to all cetaceans, it is really only bottlenose dolphins (Tursiops spp.) that have proven suitable for captivity. Nearly all other species are much more difficult and their keeping has been associated with high mortality rates. It is also important to understand that dolphins are highly social and have a hierarchical social structure.

Welfare issues that must be addressed when keeping cetaceans in captivity include the animals’ need for adequate space, exercise, socialisation and an appropriate environment. Adequate husbandry and facility design must accommodate the correct balance of age and sex classes and allow for escape/separation for individuals when managing agonistic social interactions.

Finally, a developing issue is that of holding animals for rehabilitation and release. One significant issue for consideration in this situation is that of disease transmission when releasing rehabilitated animals back into wild populations.

Guidelines

It is the responsibility of each marine park proprietor to ensure the welfare of captive animals.

Any facility keeping cetaceans in captivity must conform to the legislative requirements and exhibit standards for those species.

A veterinarian, experienced with cetaceans, should be retained on contract to monitor the health and welfare of the animals in each marine park.

Other recommendations

The AVA supports the operation of marine parks that meet the standards laid down by the Australian Regional Association of Zoological Parks and Aquaria (ARAZPA).

Where possible, state legislation relating to the welfare of marine mammals should be aligned to a uniform national standard.
Other relevant policies and position statements

15.6 Zoos, aquaria, sanctuaries and animal parks

Date of ratification by AVA Board: January 2010
15.8 Greyhound hurdle racing

Policy
The Australian Veterinary Association does not support hurdle racing by greyhounds.

Background
Greyhound hurdle racing results in a higher frequency and a more serious magnitude of injury than flat racing. Hurdle racing can result in mid-air collisions with greater loss of balance and greater potential for serious injury.

Date of ratification by the AVA Board: 15th August, 2008
15.9 Animal experimentation

Policy

There must be appropriate legislation and enforcement in all states and territories to ensure that the welfare of animals used in research, field trials and teaching is adequately protected. The principles in the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes (2004) as amended from time to time should form the basis of the regulatory control of animal experimentation.

The Australian Veterinary Association Ltd. (AVA) should be actively involved in the development and review of such regulatory and advisory frameworks.

Background

AVA urges the application of uniform national standards for welfare during animal experimentation. Standards should be the responsibility of an appropriate government department with adequate resources and support, staffed by suitably trained and qualified personnel.

AVA is committed to the ‘three Rs’ to replace, reduce and refine the use of animals for the purposes of teaching and research.

The Australian Code of Practice for the Care and Use of Animals for Scientific Purposes stresses the responsibilities of individual investigators and teachers and of research institutions. Animal ethics committees (AECs) are an integral part of the implementation of the Code. AECs require the presence of a suitably experienced veterinarian who will bring expertise to the consideration of animal research, which is not deliverable by any other member of the committee. AVA endorses the requirement in the Code that each AEC includes a research scientist, veterinarian, representative of the animal welfare sector, and a lay person.

State governments have passed legislation that regulates the use of animals in research and underpins the Code, including the use of AECs. Animal welfare advisory committees (AWACs) or panels have been established at the state level to advise on and monitor the welfare of animals used in research and teaching. They include representation from research scientists, the community and animal welfare organisations.

Guidelines

Other recommendations

An advisory council, similar to the peak councils of the state AWACs, is needed at the federal level, to ensure that high standards of animal care are maintained in animal experimentation in federal departments and instrumentalities.

Legislation must ensure that expert advice and care are provided in research facilities. Procedures for reporting the number and types of animal experiments performed must be clearly stated. Expert veterinary advice must be available at all times.

Research and teaching institutions must recognise that appropriate financial resources are required to ensure adequate facilities and staff to maintain the highest standards of care of animals used in experimentation.
Education of both the experimenters and the community will be important in the implementation of relevant legislation. AVA would expect to participate in this process.

**Other relevant policies and position statements**

18.2: Veterinarians on animal ethics committees.

**Reference**


Date of ratification by AVA Board: February 2009
15.10 Genetically modified organisms

Position statement

The development and use of genetically modified organisms (GMOs), the products of genetic manipulation, or the use of related technologies such as gene therapy, represent a valid extension of traditional methods of genetically altering organisms in some cases, but are recognised in others to extend far beyond such methods.

GMOs or their products must provide community benefit.

The development and use of GMOs or their products must be subject to assessment, consultation and regulation. The Office of the Gene Technology Regulator (OGTR) is recognised as the primary regulatory body in relation to GMOs and it must remain independent of commercial interests.

The issues of animal welfare, ethical and environmental concerns must be considered at every stage of the development and use of GMOs. In particular the development of genetically modified animals must not compromise the welfare of the animals.

Limited, phased release of Genetically Modified (GM) organisms should occur in restricted geographical areas with ongoing monitoring of the outcomes.

Non-living products of genetically manipulated organisms are not considered to represent such significant departures from conventional products in terms of patterns of use or safety to people, animals or the environment that they warrant additional regulatory assessment.

Background

GMOs, which are also known as genetically engineered or transgenic organisms, are animals, plants or micro-organisms that have had genes artificially inserted, deleted or modified. It is now possible to insert genes from any species into the genome of any other species across families, phyla and kingdoms, creating organisms that might never arise by natural reproduction, selection and evolution.

Potential benefits

The potential benefits of GMOs are enormous and provide the driving force for much research and development. They include:

- better human and animal health through better pharmaceuticals, vaccines, other biologicals and diagnostic tests;
- better understanding of mammalian genomes;
- improved crop and animal varieties with higher productivity in a wider range of environments and/or with nutraceutical properties; and
- environmental remediation by micro-organisms tailored to break down specific contaminants.

Potential risks

The novelty and variety of new GMOs may bring potential risks that need to be examined in particular, the long-term safety of human or animal food products derived from these new organisms and the eventual effect of new GMOs on the environment or ecosystem into which they are released.
**Ethical issues**

The capacity to modify the genome has led to the biotechnology revolution. It has contributed the wellbeing of humans, animals and other organisms, in a multitude of ways. These range from new and better ways of manufacturing products (hormones such as insulin, antimicrobials, vitamins), genetically modified organisms, products which enhance our analytical capacity in research or disease control, through to plasmid vectors containing nuclear material. However, the level of knowledge and education in the community has not kept pace with these developments. This has resulted in a fear of the unknown, which in turn often causes outright rejection of new concepts without proper debate.

GMOs raise deep disquiet in many people because of the idea of people creating new life forms. Putting human genes into animals or animal genes into humans is particularly disturbing as it can raise questions about the nature of humanity itself.

Also of concern is the idea that some corporations may make substantial profits from the sale of patented GMOs while exposing people to potential food safety or environmental problems.

Assessment of products resulting from genetic modification must be science based. This means that hazard identification, risk assessment and risk management principles must be applied to these biotechnologically derived products.

**Appendix**

**Genetically modified animals**

Genetically modified (GM) animals (as approved by the OGTR) may be developed:

- for research to improve understanding of mammalian genome function in order to enable genetic modification;
- for producing biologicals that will be used to improve human health (e.g. secretion of specific enzymes in cows’ milk); and
- for producing organs such as heart valves that can be transplanted into sick people without fear of subsequent rejection.

In relation to animals intended for the human food chain assessment of food safety, animal welfare and environmental protection must be more stringent.

The development of GM animals for use as pets or performance animals where there is no direct benefit to the animal is not supported. This does not preclude use of techniques such as insertion of fluorescence genes as a diagnostic marker provided that they are approved by the OGTR.

The AVA does not consider an animal to be GM because it has been fed on GM feeds or treated with a GM medicine or vaccine.

**Genetically modified plants**

The development of animal vaccines derived from GM plants, subject to approved safety and efficacy tests, is a very useful outcome of genetic manipulation. Such transformed plants should be grown under contained conditions and not released into the general environment. Animals would be fed controlled amounts under schedules necessary to develop and maintain a satisfactory immune response. This development has the potential to make
vaccines for some diseases, such as foot-and-mouth disease, far cheaper and easier to administer, leading to better prevention, control or eradication.

Animal feeding trials will often be necessary to demonstrate food safety of GM crops and their products for humans. Evidence of animal toxicity should be a reason for stopping release of the particular GM plant.

There is consumer and community concern about general release of GM crops that do not have direct consumer health or environmental benefits and that may cause agricultural marketing problems. The release of such plants should be considered on merit by the OGTR. Limited, phased geographic release of such plants should occur, with ongoing monitoring of the outcomes of release and the use of the plants.

**Genetically modified micro-organisms**

There is real benefit from the development of GM viruses, bacteria or other micro-organisms for the purpose of developing more effective animal or human pharmacologicals, vaccines and better diagnostic tests for particular diseases.

GM micro-organisms are also now widely used for food processing without apparent human health problems and a number are being developed for environmental remediation purposes.

**Genetically modified vaccines**

Non-living products of genetically manipulated organisms are not considered to represent such significant departures from conventional products in terms of patterns of use or safety to people, animals or the environment that they warrant specific, additional regulatory assessment.

Approval of all immunobiological products of genetic manipulation technology should continue to be based on the standard criteria of efficacy, safety, quality and stability, not on the means by which the active ingredient was manufactured.

**Antibiotic resistance markers**

Many GM plants have antibiotic resistance markers, often being antibiotics that are used therapeutically in human or veterinary medicine, incorporated into their genome.

The Gene Technology Technical Advisory Committee of the OGTR has advised that the use of certain such markers poses negligible risk to humans or the environment. Although the risk of these genes becoming dissociated from the genomes into which they have been transferred appears remote, some trading partners have concerns about their use. It is prudent that Australia, as a major exporting nation, should require that plant constructs containing antibiotic resistance markers be phased out, and that new plant constructs should rely on markers not active against bacteria.

**Date of ratification by AVA Board: August, 2010**
15.11 Sale of unweaned altricial birds

Policy

Unweaned altricial birds should not be sold.

Background

An altricial bird is one that is hatched with eyes closed with little or no down, is nest bound and fed by its parents. A bird is considered weaned when it can eat sufficient food without human or animal assistance and sustain its own bodyweight for at least two (2) weeks. Selling an unweaned altricial bird to people without the necessary experience to handrear a bird in accordance with accepted avicultural and veterinary practices is unethical.

The handrearing of young altricial birds, especially psittacine birds, is common practice by aviculturists. This is done with the intent to produce tamer and friendlier individuals that bond readily to people. Some vendors sell an unweaned altricial bird to an inexperienced owner with the assumption that the bird will bond more readily with the new owner if they have participated in the handrearing process. In reality, trust can be developed with a weaned bird as easily as an unweaned bird, assuming that the bird has been either handreared or handled in the nest (Aengus & Millam, 1999). The sale of unweaned altricial birds to inexperienced people is fraught with potential complications and compromises animal welfare.

In the short term, the major welfare implications are physical. Inappropriate hygiene, hand formula choice and preparation, food temperature and feeding implements can lead to malnutrition and dehydration, aspiration pneumonia, crop burns, oesophageal and crop trauma (including bruising, abrasions and punctures), bacterial and fungal infections, crop stasis and delayed crop emptying. Inappropriate nutrition and housing can also lead to musculoskeletal deformities (Doneley, 2011).

In the medium to long term, inappropriate weaning can result in behavioural abnormalities that impact on a bird’s behavioural resilience and psychological well-being (Fox, 2006). Behavioural abnormalities can lead to a bird being abandoned or re-homed later in life. In fact, in an American study examining psittacine rehoming, the top five reasons were insufficient time for the bird, biting or aggression, noisiness and incompatibility with other family members (Meehan, CL, 2003-2004).

Many states have existing guidelines that preclude the sale of unweaned birds however the practice continues to be common.

References


DAFF (National Consultative Committee on Animal Welfare): Guidelines for the welfare of pet birds


Northern Territory: Guidelines for the Care and Welfare of Caged Birds

NSW: Animal Welfare Code of Practice: Animals in Pet Shops

15.1.5 Hand-reared birds must be fully feathered and self-sufficient before sale.

NSW Animal Welfare Code of Practice # 4: Keeping and Trading of Birds:

Queensland: Queensland Code of Practice for Pet Shops:

15.27. Hand-reared birds should be fully weaned and self-sufficient before sale.


Date of ratification: 25 July 2013
15.12 Livestock production

Under review
15.13 Genetic defects in domestic animals

Policy

Animals with known genetic defects that have the potential to adversely affect their welfare or that of their progeny should not be used for breeding, other than in exceptional circumstances.

Definition

A genetic defect is a heritable trait that adversely affects an animal’s appearance, physiology or function.

Background

People have been actively involved in the selection of preferred traits that enhance the functional value or the aesthetic appeal of specific animal breeds, while at the same time working to preserve and improve animal health and well-being. The ability to select for a specific genetic trait through controlled breeding has resulted in a remarkable variety of animal breeds that are both physically and functionally unique.

Artificial breeding techniques, such as embryo transfer and artificial insemination, have the potential to inadvertently accelerate the dissemination of genetic defects. Care must be taken to minimise this risk.

The development of workable government legislation is encouraged to minimise promulgation and dissemination of genetic defects in domestic animals, with the onus of responsibility being placed on the breeder or vendor of animals displaying or carrying the genetic defect.

In companion animals, where performance and production are not factors in breeding selection, many genetic defects have become prevalent. In many cases, these defects are not incompatible with survival and reproduction and, although undesirable, a few have been included in breed standards. Brachycephaly (a short or flattened face) and chondrodystrophy (dwarfism) are examples in several breeds of dogs.

Guidelines

The following guidelines should be observed with regard to genetic defects in domestic animals.

Animal breed societies and controlling bodies should be encouraged to instigate, support and recommend procedures to identify affected and carrier animals. Individual owners should not be targeted; instead, breed societies should be assisted to reduce the incidence of genetic defects.

Breeders should be encouraged to adopt strategies for minimisation of the breeding and dissemination of animals displaying or carrying genetic defects.

Individual animals affected by a genetic defect should be desexed or not bred. Some controlled breeding of affected animals under a recognised breeding program may be necessary to ensure genetic diversity in that breed.

Potential owners of animals should be advised of the problem and information provided to purchasers prior to sale.
Where a genetic test is available for carriers of an inherited defect, two recognised carriers should not be bred.

Breeding animals to be imported from other countries should be certified by the breed society as free from known genetic defects before they (or their genetic material) are imported.

Veterinarians should play an active role in identifying and monitoring genetic diseases and assisting breed societies and breeders with advice. They should also assist in the education of owners managing animals displaying inherited defects.

Other recommendations

Research should be carried out to determine the mode of inheritance and expression of particular defects.

Awareness of genetic disease should be encouraged as should practices and research to minimise its incidence and effects in populations of animals.

Date of ratification by AVA Board: February 2009
15.14 Tethering

Position statement

Tethering is a temporary method of restraint and is not suitable for long-term confinement. Tethering of animals requires a high standard of animal husbandry and exceptional care, including regular and frequent inspections. Animals should be appropriately trained to tether.

Animals should never be tethered where their welfare is compromised.

Background

Tethering is defined as the securing of an animal to an anchor point, in order to confine the animal to a desired area. It is used to prevent an animal (e.g. dog) straying in the owner's absence, or to allow an animal (e.g. sheep or goat) to graze unfenced pasture. Tethering should not be confused with short-term tying up or with hobbling.

Tethering of animals exposes them to increased risk of stress, injury or death. In particular, tethered animals may be:

unable to access food and water
unable to obtain shelter from climatic extremes
unable to obtain sufficient exercise
unable to evade attack from other animals
isolated from their companions
exposed to environmental hazards, such as road traffic
injured by the tether δ for example, where there is no swivel in the chain.

For these reasons, other confinement methods appropriate for the species should be sought.

Guidelines

Species-specific guidelines are to be developed by respective Special Interest Groups, based on the Victorian Code.

Relevant guidelines

15.15 Guidelines for the tethering of animals

Date of ratification by AVA Board: 1 January 2006
15.15 Guidelines for the tethering of animals

Background

Tethering is defined as the securing of an animal to an anchor point to confine it to a desired area. It is used to prevent animals (e.g. dogs) straying in the owner’s absence or to allow animals (e.g. sheep and goats) to graze unfenced pasture. Tethering should not be confused with short-term tying up or with hobbling.

Tethering of animals may expose them to increased risk of stress, injury or death. In particular, tethered animals may be:

- unable to evade predators
- unable to obtain shelter from climatic extremes
- unable to obtain sufficient exercise
- isolated from their companions
- exposed to environmental hazards, such as road traffic, and the tether itself.

For these reasons, other confinement methods appropriate for the species should be sought. Tethering of animals requires a high standard of animal husbandry and exceptional care, including regular inspections.

Some species and individuals may not be suitable for tethering. Animals should never be tethered in conditions where they are vulnerable to extreme weather.

These guidelines have been developed to assist people to tether animals correctly when circumstances make it a necessary method of confining and protecting animals. They specify the requirements for tethering dogs, sheep, goats, cattle, donkeys and horses.

Guidelines

Site selection

A suitable tethering site should:

- be reasonably flat (steep sites are unsuitable)
- have an area of shade provided in hot weather and, if no natural protection is available, some form of shelter in windy or wet weather and
- be clear of obstructions that may cause the tether to become entangled or cause injury to the animal; an animal can be choked when the tether becomes entangled, or hung when the animal jumps over a fence or other obstacles.

A suitable tethering site should not:

- be rocky
- be prone to flooding
- be waterlogged or
- cross a footpath or be close to any road; the proximity of people or vehicles should not cause animals to take fright.

Type of tether

There are two basic types of tether:
fixed tether — the anchor point is fixed.
running tether — the anchor point can move freely along a wire.

For both types of tether, an appropriate collar or harness should be fitted to the animal. The collar or harness should be fitted with a swivel to which the tether is attached. The other end of the tether should be firmly attached via a swivel as follows:

For a fixed tether, to an appropriate anchor point, such as a steel spike or stake driven to ground level, which allows 360 degrees of movement at ground level. The anchor point must allow the animal to cover the area without tangling. An additional swivel halfway along the length of the tether may help to keep it tangle free; and

For a running tether, to a strong wire, which should be firmly secured at either end to trees, fences or posts. The wire must have stops at either end to ensure that the running tether cannot become entangled or injure the animal.

Suitably secure material should be used for the tether.

Training

All animals must be closely monitored when left alone on the tether for the first time. Some animals may adapt quickly and others may require a period of training. Training requires a gradual increase in the amount of time that the animal is left alone on the tether.

Frequency of inspection

Tethered animals require greater supervision and owner vigilance. They should be inspected at least twice during daylight hours in each 24-hour period. This should be increased to three times, or preferably more, in extreme weather.

Collars and harnesses should be regularly inspected to ensure that they are properly fitted — they must never interfere with or constrict throat passages. They should be well maintained and regularly checked to ensure they are not causing injury or discomfort. Collars and harnesses should be removed if wounds are apparent.

Tethers, wires and anchor points should be inspected regularly for signs of wear.

Food and water

All animals must receive sufficient food, containing adequate nutrients to meet their requirements for good health and vitality. Tethered grazing animals should receive supplementary feeding where pasture is not adequate.

Sufficient clean, potable fresh water to meet the animal’s physiological needs must be available at all times — for example, in troughs or heavy containers that are firmly fixed on the perimeter of the tether.

Specific requirements

Dogs

The site must provide a minimum tether radius of 3 metres, allowing 6 metres of run.
Dogs less than 4 months old should not be tethered.  
Bitches in season must not be tethered where entire males may have access.  
Bitches about to give birth must not be tethered.  
Tethered dogs must have ready access to a kennel, shed or other protection from the elements and for sleeping. The kennel should be of an appropriate size for the particular animal and must not cause a threat of entanglement.  
As a guide, dogs should be let off tethers for at least 2 hours per day.  
Dogs must not be tethered adjacent to a fence in a manner that places them in danger of death by hanging if they attempt to traverse the fence.  

Sheep, goats, cattle, donkeys and horses  

The site must permit a minimum tether radius of at least 6 metres for sheep, goats, cattle and donkeys, and 9 metres for horses.  
The site should be well grassed and provide adequate grazing at all times, especially if grass is to be the sole source of food. Periodic inspection of the site should be made to ensure feed availability and suitability of the site. It should be free from poisonous plants, shrubs and trees.  
Horses or donkeys should be allowed regular exercise off the tether.  
Mares in season must not be tethered near stallions.  
Mares about to foal or with a foal must not be tethered.  
Stallions must not be tethered near any other horses.  

The temperament and exercise needs of cattle, goats, sheep, horses and donkeys are such that immature animals should not be tethered. Young animals need more exercise than a tether would permit and they are likely to resist the tether and sustain injuries.  

Acknowledgement  

These guidelines are drawn from the Victorian Department of Primary Industries Code of Practice for the Tethering of Animals. The AVA seeks to adopt existing codes where appropriate.  

Other relevant policies and position statements  

Â15.14 Tethering  

Date of ratification by AVA Board: 15th February, 2008
15.16 Humane slaughter

Policy

Slaughter of animals must be carried out in a humane manner. Animals must be humanely rendered unconscious until death.

Background

The slaughtering of animals is usually to provide food, although animal slaughter can also be used for population control and disease eradication. Arrangements should be in place so that animals are spared unnecessary excitement, pain, stress or suffering during movement, restraint, stunning and slaughter.

Regardless of religion or cultural beliefs, animals must be humanely rendered unconscious prior to exsanguination. A sheep can remain conscious for 7 to 20 seconds after its throat is cut, while loss of consciousness in cattle under similar circumstances can take up to two minutes.

There are species-specific Australian guidelines on how to slaughter animals humanely. These are outlined in the animal welfare model codes of practice as well as in industry standards.

References


Date of ratification by AVA Board: 8 July 2011
Part 16 - Environment and conservation
16.1 Introduction

Veterinarians have been active in broad, high-profile environmental and conservation issues. These include preservation and rescue of native fauna, control of feral animals and preservation of biodiversity through artificial breeding techniques. The expertise of the veterinary profession has also contributed to important environmental gains for humans and domestic and wild animals through veterinary public health, animal quarantine services and disease control and surveillance.

State and federal veterinary services, often with the assistance of private practitioners, have played major roles in the development of a competent and professional meat inspection program. This program protects the Australian people from microbiological pathogens and chemical and biological residues, and protects the environment from gross microbiological contamination by requiring the hygienic disposal of abattoir wastes.

The national animal quarantine service has operated since 1908 to protect the Australian environment from a wide range of introduced hazards, including exotic animals, birds and insects. The program has become a model for neighbouring countries seeking to protect their environments from similar hazards.

The Australian veterinary profession has managed programs that have effectively removed several major diseases of animals from our environment. These include contagious bovine pleuropneumonia, bovine brucellosis, rinderpest and bovine tuberculosis. The profession has often led the world in developing vaccines to control other diseases to the point where they are no longer hazards for humans or animals.

The debate on the environment is fluid, and the agenda is often set by irrational considerations. The veterinary profession is able to participate in and inform the debate through its expertise in the natural sciences and understanding of the interdependence of biological components of the environment.

Australian Veterinary Association (AVA) policies reflect both our current dependence on traditional approaches to these problems and the desire to innovate, change and improve. Members are encouraged to bring to the attention of the association areas that may need critical assessment for environmental impact and consequent policy development by the Policy Council.

Date of ratification by AVA Board: 1 Jan 1997 (Reviewed, 2013)
16.2 Quarantine and risk assessment

Policy

Australia should have strong and effective quarantine policies and strategies to maintain its favourable animal health status. The veterinary profession is best placed to provide technical advice in relation to animal quarantine and risk assessment.

Background

Quarantine policies and strategies must:

- protect Australia's favourable pest and disease status and thus enhance access to international markets for animals and animal products
- maintain efficient livestock production and reflect public expectations to ensure the highest standards of animal welfare
- minimise the risk of entry of exotic pests and diseases into Australia and thus also protect public health and the environment
- meet Australia's international obligations as a member of the World Trade Organization, the World Organisation for Animal Health and the World Health Organization
- provide for open and transparent consultation with stakeholders during their development and implementation.

Policies and strategies that ensure the provision of appropriate infrastructure to deal with exotic disease incursions and the continuing education of all veterinarians, particularly those in private practice are needed to ensure they are kept up to date with regard to current biosecurity recommendations and practices supporting Australia's quarantine and exotic pest and disease control policies.

The Australian Veterinary Association (AVA) endorses the major principles in the Australian Government's response to the Nairn Committee report (1996) and the Beale Review (2008) particularly the principles of:

- allowing the entry of animals and their products consistent with safety to agriculture and the environment and adopting a conservative approach to risk
- the continuum of quarantine - managing risks pre-border, at the border and post-border.

AVA supports the need for a structured, comprehensive and consultative process for risk analysis to ensure a robust quarantine system that maintains and enhances Australia's biosecurity. AVA advocates continued improvement in the methods used for quarantine risk assessment to ensure that import policy remains science-based and leads to appropriate risk management measures. AVA supports ongoing and iterative risk communication with all stakeholders to maintain an open and robust process.

Australian animal health authorities must maintain a close relationship with key trading partners to ensure accurate and current intelligence on pest and disease risks. AVA supports Australian animal health authorities undertaking offshore pre-border monitoring and surveillance, and assisting in capacity building, particularly in the Asia-Pacific region, to help identify emerging pest and disease risks and to reduce the risk of incursions of exotic pests and diseases. AVA also endorses the need for Australian animal health authorities to engage and influence international agencies that set standards for animal health and trade in animals and animal products.
AVA supports the continued development of the National Animal Health Information System to improve the quality of information provided for international disease reporting and to enhance Australia’s trade position.

It is essential for Australia to maintain and continuously review preparedness plans (e.g. AUSVETPLAN) for incursions of exotic pests and diseases and for outbreaks of endemic emergency animal diseases (whether well-known diseases such as anthrax or newly recognised emerging diseases such as Hendra virus). The number of Australian government veterinarians, state/territory government veterinarians and private practitioners accredited to the Australian Veterinary Reserve must be kept at a level that is adequate to deal with outbreaks. Relevant infrastructure, such as veterinary laboratories, disease monitoring and surveillance, and training in emergency animal disease responses must be maintained at levels sufficient to ensure outbreaks of emergency animal diseases (whether incursions of an exotic pest or disease or outbreaks of endemic disease) are rapidly detected and appropriately controlled and eradicated where possible.

References


Date of ratification by AVA Board: February 2009
16.3 Sustainable use of pastoral land

Policy

Pastoralists have primary responsibility for the care of pastoral land and should develop sustainable agricultural practices which should be monitored and supported by the community.

Veterinarians are well placed to foster a better understanding of how livestock health, wellbeing and productivity impact on pastoral land. Where possible they should work with pastoralists, the community and other advisers in the area to improve sustainable use of pastoral land.

Background

Livestock management practices can cause significant changes in plant and animal communities. Small changes in pastoral practices can have a major beneficial effect if they occur at critical times. Other changes can have a detrimental effect on the natural environment when the ecological system is in an unstable state. Some of these changes may be irreversible in the short term.

Changes in pastoral areas include an increase in unpalatable, poor quality or poisonous plants, an increase in native grass species that can injure stock and the invasion of rangelands by woody weeds. Not all of this has been caused by the pastoralist. The European rabbit and many other introduced species have also contributed significantly to the degradation of the pastoral environment.

Better understanding of ecological processes in pastoral areas is required, including the complex relationship between the environment, animals and people. The concept of working with rather than exploiting nature must be encouraged.

Risk management of pastoral lands must take account of the long-term effects of livestock on the land. Starvation of stock and land degradation in dry times, droughts and economic downturns must be avoided. Heavy grazing pressures for extended periods should also be avoided.

Sustainable stocking rates require efficiency of production. Wastage in conversion of pasture to food and fibre product through mortalities, ill-health, ill-thrift and poor reproductive performance should be minimised.

Sustainable land use requires flexibility in stock management and selection of appropriate stocking rates. It also will recognise that pastoralism is only one of the uses of pastoral and neighbouring lands and that other community, government and indigenous users have a role to play in ensuring sustainable use of pastoral lands.

Introduced pest species, such as feral rabbits, goats, horses, donkeys and camels, must be controlled to prevent the destruction of habitat and to encourage regeneration of vegetation.

Predators of livestock and native fauna should be controlled and eradicated where possible. Feral pigs, cats, dogs and foxes should be controlled to protect native fauna.

Conservation of native flora and fauna must be an integral part of a sustainable land use program in pastoral areas.
Other relevant policies and position statements

16.4 Drought and drought management

Date of ratification by AVA Board: August, 2010
16.4 Drought and drought management

Policy

Drought must be recognised as a substantial risk factor in Australian animal production systems.

Enterprise risk management strategies must be based on contemporary animal health and welfare standards to ensure that:

- animals are not subjected to starvation or lack of safe access to suitable drinking water; and
- the local environment is not severely damaged.

Government drought strategies must ensure the welfare of animals and the protection of the environment.

Veterinarians are well placed to provide health and welfare risk management advice and compliance monitoring.

Background

Drought has always been a feature of agricultural production in Australia. Some government policies may financially reward poor planning, and management of resources, including that of live animals. There are sound financial and animal welfare reasons for veterinarians to counsel their clients against dependency on transaction-based subsidies as a foil for financial losses during periods of low rainfall. Effective planning for dry times and drought will reduce the stresses placed on farmers and ensure sustainable farm operations. This may include feed budgeting and maintenance of safe watering points.

Under most animal welfare legislation in Australia, the onus is on the producer to dispose of stock or manage them appropriately during drought. Animals should be disposed of by sale, agistment or slaughter before they suffer from poor nutrition and become too weak to cope with transport or adverse weather. Standard recommendations exist for prioritising stock disposal. Stock slaughtered under a drought management strategy should be killed humanely. They should never be left to die of starvation.

Hand feeding or on-farm feedlots can also be used provided appropriate veterinary input is obtained to ensure the welfare of the animals.

Veterinarians should incorporate the principles of animal welfare, sustainable production and land care into livestock management and herd health programs. Stocking rates and cropping practices should be flexible and responsive to the insidious onset of drought. Overstocking in normal seasons, which can produce local drought situations, should be discouraged by consulting veterinarians.

Animal welfare should not be compromised by economic factors.

Information resources

Water and vegetation predictions, as well as historical records, are available from the Bureau of Rural Sciences [www.nams.gov.au](http://www.nams.gov.au).

Other recommendations
Because Australia needs an efficient and internationally competitive agricultural industry, government assistance should encourage sustainable farming practices and effective farm management.

Resource management must be part of a drought preparation strategy and should include:

- restoration of vegetation in areas where over-clearing has occurred or where cropping has been practised in marginal areas
- research into cropping practices that are more suited to arid areas
- better use of native grasses
- integration of water management into all conservation and development projects
- stocking rate management that includes management of all grazing herbivores, including native species (for example kangaroos), and control of such pest species as rabbits, feral goats, horses etc.

**Other relevant policies and position statements**

16.3: Sustainable use of pastoral land

Date of ratification by AVA Board: February 2009
16.5 Farming of native fauna

Policy

The farming of certain species of native fauna is supported, provided that:

it is based on a sound understanding of the animal, its behaviour, its habitat and its food supply
it is carried out in a manner that promotes the welfare of the animal.

Background

Australia has a large and varied native fauna. Commercial farming of native species such as emus, crocodiles and invertebrates occurs in some states but is illegal in others.

Farming enterprises can impose stress on wild animals. However, they may also assist the conservation of native species and minimise poaching and smuggling of wild native fauna.

Commercial farming of native species may involve the capture of free-living animals which are then bred in captivity.

Guidelines

The following guidelines should be observed for the farming of native fauna.

Species selected for farming must have behavioural characteristics that allow them to adapt to the farming enterprise.

When animals are captured from the wild, capture and transport methods must minimise stress, pain and injury.

A concerted effort should be made to overcome deficient areas of knowledge regarding the behaviour, management, healthcare and nutrition of the species, as well as the effect of the farming operation on the animal.

Operators should be trained in the management and welfare needs of the farmed species.

Farm managers should work with veterinarians to maximise the health and welfare of their animals.

Veterinarians servicing native animal farms should acquaint themselves with the husbandry and health needs of the relevant species. They should acquire the necessary knowledge and skills to provide a professional service to such enterprises.

Other recommendations

The design and operation of farming enterprises should be regulated by an appropriate government body to ensure appropriate habitat, feeding, transportation and killing practices and humane management of animals.

Other relevant policies and position statements

15.2 Export of native birds

Date of ratification by AVA Board: 1 Jan 1997
16.6 Use of waste products on agricultural land

Position statement

The application to agricultural land of recycled waste products is supported only when such use complies with state and territory legislation and is based on published environmental guidelines. Recycled waste products include sewage sludge, treated waste water, abattoir effluent and other industrial or farm waste products.

The use of waste products that potentially puts human, animal, or environmental health at risk is not supported.

Background

Application of various waste products to agricultural land has increased as a result of intensification of animal production and a desire to minimise the environmental impact of human waste. Waste products have been used on land used for forestry, horticulture and animal production.

State and national guidelines have been developed to assist environmental and agricultural agencies to deal with the risks associated with the use of many of these waste products. Such risks can include traditional zoonoses such as parasites (Taenia saginata or beef measles), protozoans (cryptosporidia), bacteria (Salmonella, Campylobacter, Yersinia, Q Fever) and viruses (Norwalk-like viruses). Other risks include contamination of soil and animals with heavy metals such as lead, arsenic and chromium.

Human or animal waste products may be contaminated with antibiotics, antibiotic-resistant bacteria or hormones. Risks to animal health from ingestion of these contaminants, and to human health from transmission of the contaminants from animals, must be avoided. In particular, environmental contamination of surface and groundwater, especially where such contamination can later lead to animal contamination, should not occur.

Date of ratification by AVA Board: 10 Aug 2007
17.1 Veterinary referrals and second opinions

**Policy**
Veterinarians who refer patients to another veterinarian and those who receive such cases should communicate and cooperate closely to achieve the goal of providing quality care for their clients and patients. This applies to veterinarians in both general and specialist practice.

**Guidelines**
In these guidelines:

- The attending veterinarian is the veterinarian in charge of the patient before referral/second opinion
- The receiving veterinarian is the veterinarian to whom the patient is referred
- Referral/second opinion is the transfer of responsibility for diagnosis and treatment from the attending veterinarian to the receiving veterinarian.

**Always offer optimal treatment**
The veterinarian, whether in general or specialist practice, should offer clients what they consider to be optimal treatment for the care of the client’s animal. This may involve referral to another veterinarian or facility (including referral via telephone or e-mail), or referral of pathology specimens or radiographs. Other options, if these exist, should also be canvassed. Treatment should be carried out in line with the owner’s wishes.

In general, in the interest of maintaining harmonious relations with the attending veterinarian, the receiving veterinarian should not treat the patient for any ailment other than that involved in the referral except in emergencies or upon consultation with the veterinarian who referred the case. The welfare of the patient and the wishes of the client should be the priority for each veterinarian.

**Communication**
When referring a patient, the attending veterinarian should send the receiving veterinarian a detailed report and advice about previous treatment, and indicate if it would be in the best interests of the patient for the receiving veterinarian to offer a second opinion or to take over the case.

Upon discharging the patient, the receiving veterinarian should send the attending veterinarian a detailed written report and advice about the continuing care of the patient. If appropriate, the client should be advised to contact the attending veterinarian regarding continuing care of the patient.

Maintaining good relations between veterinarians is important in promoting quality patient care, but each veterinarian’s primary legal responsibility is to the patient and client.

**Direct accession cases**
Owners are entitled to seek specialist treatment without initial referral. Specialists should encourage owners to consult with a general practitioner initially or when the problem presented is outside their own area of speciality. With direct accession cases, the specialist should seek to determine whether the animal has been previously treated by another veterinarian and whether the client wishes the specialist to communicate with that veterinarian. Provided that it aligns with the wishes of the client, the specialist should seek
information from the previous veterinarian about matters pertinent to the case and should advise the veterinarian of the actions that the specialist has taken.

Other relevant policies and position statements

- 17.2 In-house diagnostic pathology and pathology referrals

Date of ratification by AVA Board: 15 February 2013
17.2 In-house diagnostic pathology and pathology referrals

Policy
Veterinarians offering in-house diagnostic pathology services should ensure that equipment and services are subject to regular quality control and quality assurance testing. Staff should be thoroughly trained in the correct use and routine maintenance of diagnostic equipment. When interpreting the results, staff should be aware of the limitations and interferences that may affect the test results.

Background
Many veterinary practices use in-house clinical pathology, haematology and cytology equipment to offer a range of diagnostic and treatment monitoring services to clients. When veterinarians are choosing pathology services or instrumentation, they need to be aware of the concepts of quality control (QC) and quality assurance (QA).

Guidelines

General considerations
- The judgment of the attending veterinarian about the need for pathology testing and the particular pathology tests used in an investigation or work-up will vary with each clinical situation or circumstance.
- Validated test results should be used to make judgments on the disease status and prognosis of patients at all times.
  - Results may be inaccurate or invalid if:
    - the instruments used have not been validated for samples for the common animal species tested
    - incorrect sample types or inappropriately stored and handled samples are tested.
- Precise, thorough and uniform training of staff on the correct use of diagnostic equipment is essential and must include maintenance, troubleshooting, QC and correct sample collection and handling. Ongoing competency to perform testing must also be assured.
- Qualified personnel must regularly maintain the equipment used.

Features of particular areas of diagnostic pathology

Biochemistry
All practices using in-house biochemistry equipment should undertake regular QC testing, at intervals appropriate to the equipment being used. The QC test material should be appropriate, have reference values pertinent to the equipment being used and the species being tested, and cover the range of results likely to be encountered. QC data should be checked against the expected range and the results acted upon before any diagnostic samples are tested.

Reagents and QC material should be stored under appropriate conditions. Expired reagents must never be used for diagnostic purposes.

Haematology
In-house haematology and biochemistry equipment should have QC run on a daily basis.
Blood films should be made, stained and examined by a veterinarian on all primary diagnostic cases.

_Cytology and other microscopic examinations_

The practitioner must be aware of the potential value and accuracy of techniques involving microscopic examination (fine needle aspirates, impression smears, tape preparations and skin scrapings). This includes the pitfalls and shortcomings associated with sample preparation and examination. Cytology staining solutions should be regularly replaced.

_Parasitology_

If possible, participation in an external QC programme is recommended and the results acted upon.

_Microbiology_

The incubation process, storage procedures, inoculation procedures and materials must be appropriate and valid.

_Serology_

Negative and positive controls should be run with all diagnostic serology testing.

_Urinalysis_

The diagnostic requirement for a complete or partial urine analysis needs to be considered in each clinical situation.

_Necropsy_

A necropsy should be offered to a client if the information gained could aid in the diagnosis or treatment of a wider disease situation, or in the event of an unexpected or untimely death of an animal. A necropsy may also be appropriate where the client or veterinarian requires a definitive diagnosis as to the cause of death.

The owner should be given the option of deciding who will perform the necropsy: the attending veterinarian, a veterinary colleague or an independent veterinary pathology laboratory. Necropsy must not be performed without the owner's consent.

Clients should be offered a complete necropsy to ensure that maximum diagnostic information can be gathered. Appropriate diagnostic specimens should be taken from all necropsies and stored for future reference.

_Pathology referrals_

There are three possible avenues for referral of veterinary clinical pathology and diagnostic tests:

- commercial, university and government veterinary pathology laboratories
- medical pathology laboratories, preferably with veterinary accreditation, or
- neighbouring practices with appropriate equipment.
All commercial and government veterinary pathology laboratories that perform referral testing should be accredited to ISO/IEC 17025: *General requirements for the competence of testing and calibration laboratories*. Accreditation provides independent assessment of technical competence to perform a range of testing activities. [Refer to NATA (nata.com.au) for a complete listing of accredited veterinary facilities.] If the practitioner has a choice of commercial pathology laboratories, an accredited laboratory should be used in preference to an unaccredited laboratory.

Referring veterinarians need to be aware that medical pathology laboratories may not be adequately set up for handling veterinary testing samples or have the appropriate expertise to understand the limitations and interpret the results obtained.

Practitioners who refer clinical pathology to neighbouring practices must be aware of and accept the QA and QC of the testing performed by that practice.

Practitioners who accept referral of clinical pathology from a neighbouring practice must accept responsibility for the results generated by their equipment.

Pathology samples for referral must be collected, stored and handled correctly to optimise the value of the test results. Samples must be packaged and transported to the referral laboratory in accordance with any current legislative or industry requirements.

**Other relevant policies or position statements**

- 6.8 Provision of blood supplies for use in dogs and cats

Date of ratification by AVA Board: 15 February 2013
17.3 Retention of medical records and diagnostic imaging

Policy
Medical records and diagnostic images remain the property of the veterinarian or practice, not the client, and must be retained for legal reasons. The length of time these records should be maintained varies in different states and veterinarians must be aware of their local legal requirement.

Clients are entitled to view and obtain copies of objective records and images. If a copy of the report or image is requested, it should be provided at the client’s expense. If a copy is requested by someone other than the client, such as another veterinarian, the client’s written authority to provide such a copy to that third person should be obtained.

Background
It has been well established by legal precedents that medical records and diagnostic images (e.g. radiographs and ultrasound scan printouts) belong to the person or partnership creating them. All materials (e.g. X-ray film) purchased by the veterinarian also remain the property of the veterinarian, not the client.
The veterinarian is legally obliged to retain all records and images as part of his/her original medical records and to produce them in the event of a subpoena or other call for production of the records.
The client pays a fee for the generation of medical records and diagnostic images and is therefore entitled to be informed of the results and interpretations, and shown the report/image if they desire.

Case records and X-rays can be released upon formal request to another veterinarian only with the authorisation of the client.

The Australian Small Animal Veterinary Association (ASAVA) Manual of Hospital Standards and Accreditation 2011 states that medical records must be kept long enough to comply with state and federal regulations and recommends 7 years.¹

APPENDIX

State by State requirements as of April 2012.
This Appendix is included for information only and does not constitute a legal opinion on the minimum amount of time required to keep records.

NSW

The Regulations in NSW require a veterinarian to keep all records of any consultation, procedure or treatment for at least 3 years from when they were created (cl 15 (3)).

South Australia

In relation to how long the records should be kept, the Veterinary Practice Act 2003 does not specifically identify this. However, the Code of Professional Conduct is endorsed under the legislation and this recognises the need for records to be kept for at least 2 years after the relevant treatment/consultation. This period of time would be the minimum legal requirement under the SA Act.
However, the Board recommends that veterinarians keep medical records for a minimum of 7 years. Civil claims can be made within this timeframe and hence the recommendation from the Board. It also suggests the medical records are kept on the premises for 2 years and then transferred to an appropriate storage facility for the remaining 5 years.

**Northern Territory**

On the subject of maintenance and retention of veterinary medical records, the Code of Conduct prescribed in the Northern Territory Veterinarians Regulations, states as follows:

*Code of Conduct* Prescribed in Schedule 2 of Veterinarians Regulations

Clause 4 (2) and (3) of the Code of Conduct include the following provisions on the maintenance of veterinary records:

**Clause 4 (2)**

A registered veterinarian shall keep case records in relation to each individual animal in his or her care and shall, unless parting with the record for the purposes of the provision of veterinary services by another person or at the written request of the owner, retain the record relating to an animal for a period of not less than 3 years beginning on the day on which he or she last examined or treated the animal.

**Clause 4 (3)**

Where records are provided at the written request of an owner in pursuance of subclause (2), the registered veterinarians shall obtain and retain a receipt signed by the owner in lieu of the record."

**Western Australia**

All practicing veterinary surgeons are professionally obligated to ensure they maintain appropriate clinical records. This obligation is not restricted to those instances in which scheduled drugs are prescribed or dispensed as detailed in Regulation 30 of the Veterinary Surgeons Regulations 1979, but applies to all professional services provided by veterinary surgeons to their clients.

*Regulation 30 (3):* The Registered veterinary surgeon must keep the clinical record for a period of 7 years.

**Queensland**

The statutory requirement is that case records must be kept by a veterinary surgeon for a minimum of 3 years from the day the last information about the animal is recorded. As X-rays are a part of the case record, the Veterinary Surgeons Regulation provides that the records be kept for 3 years.

**Tasmania**

The *Tasmanian Veterinary Surgeons Act 1987* at s34 requires that vets keep records for 7 years. The Act does not specify X-rays as such.

*Veterinary Surgeons Act 1987* (No. 104 of 1987)
34. Records to be kept

(1) A veterinary services company, registered veterinary surgeon or registered veterinary specialist must -

(a) keep in a form and manner approved by the Board a record of -

(i) the name and address of each person for whom he, she or it provides a veterinary service;

(ii) the nature of the service provided for that person;

(iii) the date on which that service is provided;

(iv) the identity of each registered veterinary surgeon or registered veterinary specialist who performed that service; and

(v) such other matters (if any) as the Board considers appropriate or as may be prescribed in the regulations for the purposes of this subsection; and

(b) preserve such a record for a period of 7 years.

**Australian Capital Territory**

The Health Professionals (ACT Veterinary Surgeons Board Standards Statements) Approval 2009 (No 1) states:

5.2.1 Records should be kept for at least seven years after the last occasion on which the animal received treatment.

**Victoria**

The Veterinary Practitioners Registration Board of Victoria has issued guidelines to assist registered Veterinary Practitioners in Victoria with respect to the minimum standard expected from them in their care and providing treatment to animals. Guideline 11 deals with Veterinary Medical Records. Specifically Guideline 11.2.1 states: ‘The length of time veterinary medical records must be kept is not stated in Law. Should legal action be brought against a registered veterinary practitioner, all documentary evidence would be brought to account. In that case it can be considered that veterinary medical records would be needed in defence. Records must be held for a minimum of three (3) years to comply with Drugs & Poisons legislation and should (for the purposes of defence) be held for at least six (6) years after the last occasion on which the animal received treatment."

**References**


   Date of ratification by AVA board December 2013
17.4 Use of communication technologies in delivering veterinary services

Policy

In using information communication technologies, veterinarians should ensure that they and their staff are trained and competent in the use of these technologies and that the control over and the quality of transferred information is of a high standard. Clients should be advised about the technology being used, its limitations and any issues regarding confidentiality.

Background

There has been a rapid development of communication technologies in recent years and the uptake by individuals and businesses in their daily lives is projected to increase. Telephone, fax, the internet and video conferencing may be used to transfer clinical information between veterinarians, specialists and pathologists, with practices becoming more advanced and widely used. These technologies can be helpful in facilitating expert opinion, for example, for examining radiographs and digital photographs, electrocardiograms, case notes, ultrasound or endoscopy records in a timely and cost-effective fashion. However, there is potential for mistakes in diagnosis and treatment when there is no direct contact with the patient or client, or the clinical material examined.

Guidelines

Guidelines should be observed for the use of the internet and other communication technologies:

- Direct physical examination of a patient by a veterinarian and contact with the animal’s carer are central to quality veterinary care. This applies to both primary accession and referral cases. Veterinarians using communication technologies should ensure that a bona fide veterinarian-client-patient relationship exists.
- In most cases, these technologies will be used to seek second opinions from colleagues and not to refer responsibilities.
- It may be illegal to base prescription of restricted drugs solely on information received via communication technology. Prescription of drugs must meet the requirements of individual state legislation and the individual veterinarian must be registered in whichever states they provide services including services utilising communication technologies.
- Veterinarians should check the requirements of the provider of their professional indemnity insurance, as such policies or related documents may require notification of the use of interstate services.
- Veterinary electronic discussion tools such as the AVA website forums and special interest group email lists are useful for general discussions but not for diagnosing specific cases.
- If offering opinions based on material transmitted via communication technologies, veterinarians should display their credentials, including their physical address, contact details and qualifications.
- Opinions should not be offered in areas beyond the individual's area of expertise.

Date of ratification by AVA Board: 25 July 2013
17.5 House call practice

Policy

Mobile companion animal veterinary services must follow relevant regulations set by the appropriate state and territory government. In addition, these services must have arrangements in place for the provision of surgical treatments, hospital care, diagnostic procedures, transport of animals, recording of treatments and communications with clients.

Background

Mobile companion animal veterinary services are veterinary practices that offer visiting veterinary services including house calls to premises where animals are held. The practice may be independent or a service provided from a practice where animals are treated as inpatients or outpatients or both.

Guidelines

Mobile companion animal veterinary services must keep timely and adequate records and provide an adequate history to the support practice.

Mobile companion animal veterinary services must have access to an appropriate veterinary support practice that abides by the relevant law of the appropriate state or territory and can provide the following:

Procedural services including but not restricted to: general anaesthesia, surgery, radiology, laboratory services and nursing care, and

Animal housing of appropriate size with adequate cooling, heating and ventilation.

Vehicles used for house call services must:

be clean and hygienic at all times
have temperature controlled and secure storage for drugs
carry sufficient stocks of veterinary stationery or include electronic recording equipment to enable medical and surgical records to be completed when house calls are made, and
carry sufficient instrumentation for a competent clinical examination.

Date of ratification by the AVA Board 20 January 2012
17.6 The provision of optimum veterinary services to the horse racing industry

Policy

All veterinarians involved in the horse racing industry should be members of the Australian Veterinary Association (AVA) and Australian Equine Veterinary Association (AEVA) and should abide by the Code of Professional Conduct of the AVA. They are required to follow the guidelines set out below.

Background

Veterinarians have the following roles in the horse racing industry:

to ensure the welfare of horses
to protect the safety of riders or drivers
to protect the interests of owners by skilled veterinary service to the racing horse
to assist racing officials to maintain the integrity of the industry, and therefore public confidence, by providing expert advice on all veterinary aspects of racing
to conduct research into, and to advise on, veterinary matters affecting the racing industries.

In addition to racecourse duties, veterinarians who are full-time employees in the horse racing industry might become involved in:

closer liaison with local veterinarians servicing racing on a state-wide basis
providing professional advice at racing conferences, including conferences of the Australian Association of Official Racing Veterinarians
research into drug administration and detection and matters affecting soundness of race horses.

Guidelines

*Organisation of veterinary services*

At least one veterinarian should attend all race meetings.

Veterinarians officiating at race meetings should have had reasonable clinical experience in equine practice.

The veterinarian should be a member of the Australian Association of Official Racing Veterinarians and be familiar with the AEVA publication, *The Official Veterinary Surgeon at Thoroughbred and Harness Race Meetings*.

The principal clubs, commissions, or other bodies that control racing on a regional basis in each state are encouraged to employ a full-time veterinarian who would be available at all times to consult with stewards, committees and authorities on all veterinary matters.

All veterinarians employed at race meetings should be paid at rates agreed between the racing authority and the AEVA in line with the scope and nature of their duties.
No veterinarian should work in an honorary capacity at a registered meeting. (If a veterinarian feels that a club or organisation should be financially assisted, then they could make an appropriate donation.)

As committee members are normally precluded by the constitutions of the clubs from holding positions of profit, a veterinarian who is a member of a race club committee should not officiate at meetings of that club, unless no other veterinarian is available.

Nothing in the above paragraphs should prevent the appointment of honorary consulting veterinarians to race clubs. These veterinarians would not normally be involved in the day-to-day activities of race meetings, but rather serve as consultants to the race clubs in broad matters of veterinary policy.

**Controlling bodies**

*Clubs*

Where racing is controlled by an elected committee of a club, the present arrangement of free choice in the selection of a suitable veterinarian for employment is appropriate.

*Commissions*

Where racing is controlled by a commission, the commission should employ a full-time veterinarian to provide efficient liaison between the commission and the veterinary profession. A veterinarian employed full time by a race club or commission should not be entitled to engage in clinical practice with the horses, trainers and owners under the club or commission’s control.

**Research**

Clubs should be encouraged to support research on two levels:

- on a national basis — this could be achieved by the Australian Equine Research Foundation (AERF)
- on local problems, by using or supporting employed veterinarians.

**Code of conduct for veterinarians involved in the horse racing industry**

Veterinarians involved in the horse racing industry:

- should be aware of and comply with the rules of racing
- should cooperate with any reasonable requests by stewards and racing officials to attend any inquiry and furnish any relevant records (provided there is no breach of client/patient confidentiality)
- should ensure that their conduct is not regarded as prejudicial to the image, interests or welfare of racing or the veterinary profession
- must avoid making media statements that are not based on accepted veterinary principles
- must not make or appear to make statements on behalf of the horse racing industry or the veterinary profession, unless empowered to do so by the industry or profession
- must abide by relevant federal and state legislation in relation to the supply and dispensing of medications, and ensure that drugs dispensed are approved by relevant authorities and are correctly labelled
must comply with reasonable requests from the Ethics and Advisory Subcommittee of the AEVA.

**Other relevant policies and position statements**

7.6 Equine competitive events

7.7 Jumping races

7.8 Racing of 2-year-old horses

7.9 Use of whips in horse racing

Date of ratification by AVA Board: 23 Nov 1997
17.7 Guidelines for veterinarians dealing with bats

Position statement

Veterinarians have an ethical and legal responsibility to themselves, their staff and the public to be aware of the risks associated with handling bats. They should use appropriate precautions to avoid infection with disease agents that may be carried by bats.

Background

Australian bats carry a number of disease agents that may be transmitted to people. Two of these, Australian bat lyssavirus (ABLV) and Hendra virus, have caused fatalities in people.

ABLV was first reported in 1996, and has since been reported every year. Infection with ABLV has been confirmed in all species of flying fox (Megachiroptera, Pteropus spp., or pteropid bats) in mainland Australia, and in insectivorous bats (Microchiroptera or microbats). The virus causes a fatal encephalitic disease. ABLV has caused the deaths of two people in Australia (see McCall et al 2000).

Hendra virus was first identified in horses in 1994 in Brisbane, Queensland. Antibodies to Hendra virus occur in fruit bats in Australia and Papua New Guinea. Hendra virus does not cause clinical disease in fruit bats, but if transmitted to horses it can cause serious illness, including respiratory distress, frothy nasal discharge, fever, elevated heart rate and death. The four humans known to have been infected with Hendra virus were apparently infected after exposure to large amounts of virus that had been amplified in infected horses.

The NHMRC Australian Immunisation Handbook recommends that rabies vaccine should be given pre-exposure to people who are occupationally exposed to ABLV, and post-exposure to people who have been bitten or scratched by Australian bats of any species. Guidelines for handling possible and probable Hendra virus infection in equines are available from a link at the Queensland Department of Primary Industries and Fisheries website.2

An Australian Veterinary Emergency Plan (AUSVETPLAN) disease strategy for ABLV is available.3

Guidelines

Before veterinarians and their staff handle bats (flying foxes or microbats), they should:

- be aware of zoonotic diseases carried by bats and be appropriately trained and experienced in handling bats
- take steps to avoid being bitten or scratched by bats, including wearing appropriate protective clothing and gloves and using appropriate procedures for handling bats
- be vaccinated with rabies vaccine in line with the NHMRC Australian Immunisation Handbook
- monitor their rabies neutralising antibody status at regular intervals (following the initial rabies vaccine and at least every 2 years); rabies neutralising antibody titres should be at least 0.5 IU/ml, and booster vaccinations should be received if the titre falls below this value.
Veterinarians and their staff should promptly seek appropriate medical advice in the event of potential exposure to ABLV or other zoonotic agents.

**Specific protocols**

Veterinarians who handle bats, or whose staff handle bats, should observe the following guidelines.

- Veterinarians and veterinary staff should be aware that bats may have zoonotic diseases.
- Veterinarians and veterinary staff should be familiar with the range of clinical signs associated with ABLV in bats.
- ABLV should be included as a differential diagnosis for any animal showing suggestive neurological or behavioural signs.
- Personnel should not handle bats unless they have been vaccinated with rabies vaccine, and have demonstrated a rabies neutralising antibody titre of at least 0.5 IU/ml within the past 2 years (see the vaccination guidelines for ABLV in the NHMRC Australian Immunisation Handbook (ibid)4).
- Where a person's titre of rabies neutralising antibody fails to reach, or falls below, 0.5 IU/ml, the person should avoid handling bats until booster vaccinations produce a titre of at least 0.5 IU/ml.
- Appropriate protective clothing should be worn when handling bats. This may include long-sleeved overalls, boots, glasses, face-shields, double gloves, kevlar gloves, puncture-resistant gloves, leather 'digger's' gloves, leather 'welder's' gloves or chain-mail gloves. Where possible, the bat should be held by a vaccinated, experienced bat handler (e.g. wildlife carer).
- When presented with a bat, veterinarians and staff should make enquiries to establish whether any person(s) or any other animal(s) has had contact with the bat in a way that could have transmitted ABLV from the bat. This includes contact that may have transferred the bat's saliva or bodily fluid into wounds or mucous membranes, such as fluid contact with broken skin (for both live and dead bats) and being bitten or scratched.
- If the bat is known or suspected to have had contact with people or animals in a way that could have transmitted ABLV, all possible efforts should be made by the veterinarian and client to submit the bat for ABLV testing. Advice about submitting bats should be sought from the relevant state or territory laboratory.
- If a person may have been exposed to ABLV via a bat, the situation should be considered urgent. The person should be advised to:
  - immediately and thoroughly wash any wounds (bites or scratches) with soap and water and apply a virucidal preparation such as povidone-iodine
  - immediately contact their public health authority for medical advice
  - if it can be done safely, make all possible efforts to retain the bat for ABLV testing by the relevant laboratory.
• Veterinarians who diagnose or suspect ABLV in any animal must, as soon as possible, advise a government veterinary officer of the relevant state or territory department by the fastest available means of communication.
• If it becomes known that a person has had contact with a bat that has since been confirmed to be infected with ABLV, the person should immediately contact, or be advised to contact, the public health authority for urgent advice.

A variety of options could be considered for management of an animal that has been bitten by a bat, where the bat was ABLV positive or the level of contact and ABLV status of the bat are unknown. These options are currently being updated and further developed as part of the AUSVETPLAN review process and will be available in the updated version of the AUSVETPLAN manual for ABLV. In the interim, veterinarians should seek advice from the relevant state or territory department with responsibility for animal health.

2 http://www2.dpi.qld.gov.au/health/3892.html
3 http://www.animalhealthaustralia.com.au

References


Date of ratification by AVA Board: 15th February, 2008
17.8 Appropriate use of post-nominals

Position statement

The use of post-nominals is encouraged when appropriate. Usage should follow the general rules and guidelines as dictated by convention and appropriate resources such as the Commonwealth of Australia Gazette.

It is recommended that the following specific guidelines be followed for the use of veterinary post-nominals. Inappropriate use is discouraged especially when it is potentially misleading.

Background

The use of post-nominals is becoming increasingly complex. Recently the Australian Veterinary Association (AVA) has through its VetEd scheme made available the use of the post nominal CMAVA in recognition of maintenance of a rigorous standard of continuing education. Examining bodies such as the Australian and New Zealand College of Veterinary Scientists award the higher qualifications of Member and Fellow of the ANZCVSc.

Commonly practitioners returning from practising in the UK maintain their membership of the Royal College of Veterinary Surgeons and use the post-nominal MRCVS when practising in Australia. At best this is a confusing inappropriate use of post-nominals in the wrong jurisdiction. At worst, it could be a deliberate attempt to mislead the public that a similar qualification has been achieved to the MANZCVSc which is only gained through examination.

Overseas post-nominals must only be used when they are a result of a qualification, not membership of an overseas association i.e. post-nominals are not used outside their appropriate jurisdiction e.g. Dr Brown BVSc CMAVA in Australia but not Dr Brown BVSc MRCVS (except if practising in the UK).

The exception to this would be if the veterinarian has achieved the MRCVS through examination as this would entitle the legitimate use of the post-nominal in Australia.

Veterinarians increasingly need guidance for the use of the many post-nominals that are now available.

Guidelines

The following are the guidelines for the use of veterinary post nominals.

The correct order for use of post nominals is

- Commonwealth honours and awards
- University degrees both pre- and post-graduate
- Appointments such as JP
- Memberships of associations

For example:

- Dr Brown OAM, BSvC, CMAVA but not Dr Brown CMAVA, OAM, BSvC
- J Smith, DVM, PhD but not Dr J Smith DVM, PhD.

The Australian and New Zealand College of Veterinary Scientists guidelines in relation to the use of post-nominals at July 2011 are:
1. A veterinarian who has passed examinations and been admitted to Membership of the College shall be entitled to use the letters MANZCVSc after his/her name, with the appropriate subject added in brackets eg MANZCVSc (Radiology).

2. A veterinarian who has passed more than one membership examination shall be entitled to using MANZCVSc only once, after which the subjects must be listed alphabetically eg MANZCVSc (Anaesthesia, Radiology, Small Animal Medicine).

3. A veterinarian who has passed examinations and been admitted to Fellowship of the College in the same subject as Membership, shall be entitled to use only the letters FANZCVSc after his/her name, with the appropriate subject added in brackets eg FANZCVSc (Animal Behaviour).

4. Only when a veterinarian has passed examinations for Membership and Fellowship in different subjects, shall he/she be entitled to list both the membership and fellowship qualifications. In this situation subject names must be added eg MANZCVSc (Small Animal Medicine), FANZCVSc (Dermatology).

5. Members or Fellows of the College who become unfinancial or who resign from the College are no longer permitted to append postnominals referring to College qualifications.

6. A list of accepted abbreviations for College subjects is to be provided through consultation with chapters.

Date of ratification by AVA Board: August, 2010 (College guidelines updated July, 2011). (Updated Jan 2014)
17.9 Dental guidelines for small mammals

These guidelines are overarching principles that will assist the veterinarian in their approach to dental disease in small companion mammals.

Guidelines

Dental disease in small mammals (such as rabbits, ferrets, guinea pigs and rodents) is common and treatments should be supported by evidence based medicine.

Oral care is necessary for optimal health and quality of life.

Diseases of the oral cavity can be painful and may contribute to other local or systemic diseases.

An understanding of the aetiopathogenesis of dental disease in small mammals is essential.

The objective is to identify potential or emerging pathology early rather than later for the overall benefit of the patient.

Veterinarians are encouraged to learn to recognise whether their equipment and skill level allows them to treat the oral pathology present or whether referral to an appropriately trained veterinarian is required.

Continuing education of veterinarians in the discipline of small mammal dentistry is to be encouraged.

Definitions

Dentistry: the evaluation, diagnosis, prevention or treatment of abnormalities and pathology of the oral cavity and maxillofacial region.

Dental record: a completed dental chart indicating periodontal indices, any oral pathology present and procedures planned and/or performed at the time of examination.

Dental treatment: a procedure including oral assessment under general anaesthesia, diagnosis and formulation of a treatment plan, a home care plan and subsequent follow up.

Periodontitis: the irreversible destructive process involving the loss of the supporting structures (the periodontium) of the tooth, including the gingiva, periodontal ligament, cementum and the alveolar bone.

Periodontal surgery: the surgical treatment of periodontal disease.

Oral surgery: the surgical invasion and manipulation of hard and soft tissues to improve/restore oral health, comfort and function.

Equipment, instruments and maintenance.

The dental surgical suite

- It is recommended that a dedicated space be utilised apart from the sterile surgical theatre.
• It is recommended that appropriate OH&S measures are observed with respect to operator protection, anaesthetic scavenging and infection control.

**Dental base and power equipment**

It is recommended that power equipment be used in order to perform dental procedures competently, adequately and rapidly.

**Hand instruments and mouth gags**

• A variety of mouth gags and specula should be available for oral examination.
• A recommended set of hand instruments for dental prophylaxis includes: a dental explorer, a periodontal probe, a variety of scalers and curettes, a dental mirror and a sharpening stone.

**Maintenance of power and hand equipment**

• Power equipment should be maintained in good working order on a regular basis according to the manufacturer’s instructions
• Hand instruments should be kept in good order and sharpened regularly.

**Oral examination, diagnosis and treatment planning**

• A full patient history complements any oral examination.
• The preliminary physical examination of all body systems is conducted in the consulting room.
• A full oral examination, including a visual examination, probing and radiographic examination, can only be performed under general anaesthesia.
• Findings should be recorded on a dental chart which then becomes part of the animal’s medical record.
• Based on the findings of these examinations, diagnoses will be made and appropriate treatment and home care plans will be made.

**Procedures**

**Steps for dental/oral treatments**

• Examine the oral cavity under general anaesthesia.
• Record examination findings and formulate a treatment plan.
• Findings should be recorded on a dental chart appropriate to the species being treated where suitable charts are available.
• Extra and intra-oral radiographs and stomatoscopy are useful in assessing oral pathology in small mammals (rabbits, guinea pigs and rodents).
• Perioperative adjunctive therapy (antibiotics, analgesia etc) should be administered where indicated.

**Anaesthetic care**
- It is recommended that appropriate care and monitoring is taken during the anaesthetic process.
- Intubation is the gold standard in maintaining a patent airway. If this is not achieved (as may occur in difficult to intubate species such as guinea pigs, rats and mice) adequate airway protection should be implemented.

**Perioperative care**

- Maintain an open and patent airway until the animal is swallowing and is in sternal recumbency.
- Maintain body temperature and provide fluid support.
- Maintain and record vital signs until the patient is awake.
- Maintain effective pain management.

**Post-operative communication**

Client communication is fundamental to ongoing oral care. At the time of discharge:

- Provide individualised oral and written instructions.
- Discuss operative procedures and existing or potential complications.
- Discuss immediate postoperative homecare including medications and their side effects.
- Discuss any change in diet or husbandry that might be necessary.
- Establish an appointment for a follow-up examination and further discussion.

Date of ratification by AVA Board: August, 2010
17.10 Veterinarians in the media

Policy

Veterinarians must ensure that all advice and depictions of veterinary services used in the media or for entertainment are in accordance with best practice standards of veterinary science.

Background

Veterinarians in the media and entertainment industry fulfil an important role in educating the public, and raising the profile of the profession and animal care in our community.

If the veterinary presenter has limited experience with the species or condition, prior veterinary specialist opinion or appropriate expertise should be sought on correct handling, diagnostic and treatment options.

Veterinarians who are Australian Veterinary Association (AVA) members must abide by AVA policy and the AVA Code of Professional Conduct.

Date of ratification by AVA Board: August, 2010
17.11 Indigenous community animal health program (ICAHP) model and guidelines

Model

Summary

Indigenous community animal health programs (ICAHPs) are designed to improve the health and welfare of the populations of animals in Indigenous communities while meeting the needs of their owners. They also aim to improve the overall health and wellbeing of the community through animal health management.

Frequency

It is ideal to have a permanent veterinary presence in Indigenous communities, but this is strongly dependent on financial viability. In the absence of a permanent veterinary presence, programs should be run ideally at least every 3–4 months, but not less than twice yearly, to ensure that animals are treated regularly and that animals reaching sexual maturity will receive appropriate birth control (desexing and/or contraception) and parasite control.

Treatments

Treatments should cover desexing and/or chemical contraception, parasite control (internal and external), injury/disease management and euthanasia of unwanted, sick or injured animals.

Surgical procedures

The main priority of ICAHPs is population control through surgical sterilisation of animals. Other surgeries can be performed at the owner’s request, but should follow the guidelines and policies set out by the relevant state veterinary surgeons board and the Australian Veterinary Association (AVA).

Education

ICAHPs should support education of children and adults in the responsible ownership of animals.

Guidelines

Cultural awareness

a. All veterinarians and associated ICAHP personnel should make themselves aware of the customs and traditions of the relevant Indigenous communities they choose to work with, and should respect their culture and traditions.

b. It is recommended for ICAHP veterinarians and personnel to attend cultural awareness seminars and workshops.

c. Veterinarians and other ICAHP personnel should seek the owner’s or authorised agent’s consent for any treatments on their animals.

Registration and availability
d. Veterinarians must be registered in the relevant State or Territory before performing ICAHPs in that State or Territory.

e. Veterinarians or organisations employing veterinarians should have direct access to veterinary premises near or within a reasonable distance in the relevant or adjacent State or Territory through ownership, employment or agreement. For example, if the ICAHP veterinarian is a fly-in fly-out contractor, there must be a back-up arrangement with another veterinary clinic or their own premises to provide emergency veterinary services for the remote communities in the areas in which the ICAHPs operate.

f. Veterinarians must provide telephone contact to the relevant community to advise on post-surgical issues and ongoing community animal health.

**Surgeries**

g. Spey and castration operations of dogs and cats are highly advised as a population control method in remote Indigenous communities. All surgeries should be performed such that the risk of postoperative complications, such as wound dehiscence or eversion, is minimised. Surgical techniques and materials that do not require routine postoperative care or follow-up by the owners should be selected.

h. Minor surgeries can be performed in remote community settings.

i. More complex surgeries should, ideally, be performed in a veterinary clinic where there is better monitoring, surgical and anaesthetic facilities and emergency treatments. This may not always be possible, however, and whether more complex surgeries can be undertaken will be the individual veterinarian’s judgement, based on technical ability and available equipment.

j. All techniques, facilities and treatments must abide by the relevant State or Territory’s laws.

k. Inhalant anaesthesia may not always be available or appropriate, and in such cases veterinarians must be familiar with and experienced using suitable alternatives.

**Contraceptive drugs**

l. Contraception can be an integral part of some ICAHPs and may be utilised as a means to prevent animals from breeding. Ideally, animals given contraceptives should be identified using collars and permanent marker pens stating the date of injection or tags. This will aid another veterinarian in deciding to either continue with contraception or to perform surgical desexing.

m. Chemical contraception is not ideal for long-term use because of the many possible adverse side effects. The use of contraceptives should be considered as a temporary means of population control. Surgical desexing should be considered as the first choice for population control in dogs and cats.

i. Use of chemical contraceptives as a sole agent may be acceptable if desexing is not accepted by the community.

n. It is highly advisable to give contraceptives to any un-desexed animal that is of breeding age, but only if that animal cannot undergo surgical desexing for health
reasons or because of time constraints, and only after receiving the owner’s permission.

o. Veterinarians should use minimal (sometimes off-label) dosage levels to ensure that the risk of side effects is minimised.

p. All safety measures should be maintained to ensure that personnel and community members are not accidentally administered with the contraceptive medication. Accidental administration can result in risks to pregnancy and contraceptive action in women, and reduction of libido in men. For these reasons, contraceptives should only be administered by veterinarians.

q. Any organisation or veterinarian that trains, supervises or gives authority for non-veterinarians to administer such drugs should be fully aware of the liability upon the individual or organisation for any mishap that may occur. It is advised for the organisation or individual to have suitable insurance coverage for such an eventuality.

r. Common contraceptives used include:
   i. proligestone – used every 3–5 months (females)
   ii. medroxyprogesterone acetate – used every 5 months (females)
   iii. deslerolin long-acting implant – used every 6 or 12 months (depending on the type of implant) (males, not recommended for females)
   iv. delmadinone – used every 3–5 months (males).

Medications

s. Veterinarians and associated ICAHP personnel should be:
   i. aware of risks and benefits of each medication used
   ii. aware of the inter-treatment interval of each medication used
   iii. aware of all occupational health and safety aspects of each medication and follow acceptable protocols to minimise risks to ICAHP personnel, community members and animals.

t. Veterinarians should not supply non-veterinarians who are not under their supervision with prescription medications, unless the drugs are prescribed for a specific individual animal. Prescribing laws must always be followed.

u. Veterinarians should be aware of any potential health risks associated with each medication to the community. If there are human or animal health risks from metabolites in urine or faeces, then the care and treatment of such animals should be under direct veterinary supervision and waste materials should be collected and disposed of correctly.

v. Any drug recommended or used in a manner not in accordance with its labelling should be subjected to the same supervisory precautions that apply to veterinary prescription drugs.

w. IAHPs should also ideally strive to achieve:
   i. parasite control for all animals
   ii. animal disease control through vaccination.

Euthanasia

x. Euthanasia is a component of an ICAHP.
y. At all times the euthanasiates should be in a locked container/area when not in the possession of a veterinarian.
z. Veterinarians should attempt to obtain the owner’s or authorised agent’s permission before euthanasing any animal within the community, unless under orders from police or an authorised animal welfare agent.

aa. Veterinarians should euthanase animals with pentobarbitone or other registered euthanasiate.
bb. Sedation should be considered for extremely nervous, fractious or severely injured animals.
cc. Other agents, such as suxamethonium, should not be administered by veterinarians as the sole euthanasiate, for welfare reasons. If it is to be used for fractious animals or animals that are not easily restrained or caught, it must be followed up immediately with a euthanasiate.
   i. All safety measures should be maintained to ensure that personnel and community members are not accidentally administered with the medication.

dd. Firearms may be appropriate in certain circumstances for use when the animal is deemed dangerous or a flight risk, and should only be used when:
   i. all other means of capture have been exhausted
   ii. relevant Public Discharge of Firearms laws are followed
   iii. all health and safety issues have been addressed to ensure that personnel and community members are not harmed.

ee. Non-veterinarians should not have access to euthanasiates such as pentobarbitone because of the adverse risks to animal welfare, occupational health and safety, and human safety. Alternate euthanasia techniques used by non-veterinarians may include captive bolt and firearms. These techniques should be used by appropriately trained and authorised personnel.

ff. Any organisation or veterinarian that trains, supervises or gives authority for non-veterinarians to administer euthanasiates or to perform such procedures should be fully aware of the liability upon the individual or organisation for any mishap that may occur. It is advised for the organisation or individual to have suitable insurance coverage for such an eventuality.

gg. After euthanasia, all animals should be appropriately disposed of:
   i. in accordance with owner’s requests
   ii. in accordance with relevant state/territory laws and council regulations
   iii. by deep burial or cremation.

Identification

hh. Identification techniques can be used to help identify individual animals and/or record their health status.

ii. Desexing identification – animals can be identified as being desexed through various means, including:
   i. microchips (not recommended as a sole means as it is not readily visible)
   ii. ear tattoos for surgical desexing
   iii. combination of the above techniques.

jj. Treatment identification – depending on the treatment regimen applied to each animal, forms of identification may be required. Identification options include:
i. microchips
ii. collars with tags
iii. photographic records
iv. combination of the above techniques.

kk. Registration of different techniques have been used to identify animals as being registered, including:
   i. collars with tags
   ii. microchips
   iii. combination of the above techniques.

ll. Use of microchips should be in line with the AVA's policy on electronic identification of animals.

mm. Animals that are given an implant or chemical contraceptive should be identified by well-marked collars or tags specifying the date the medication was given. The owner should be instructed on the reason why the collar must not be taken off the animal.

**Darting of animals**

nn. Darting of animals should only be performed for sedation when:
   i. all other means of capture have been exhausted
   ii. relevant Public Discharge of Firearms laws are followed
   iii. all health and safety issues have been addressed to ensure that personnel and community members are not harmed.

**Training and accreditation**

oo. Veterinarians who wish to conduct ICAHPs should receive appropriate training prior to doing programs on their own. There currently is not any nationally recognised training available, but many of the veterinary clinics involved in the conduct of ICAHPs and certain welfare organisations and not-for profit organisations offer training to veterinarians in the running of these programs. It is ideal for veterinarians to seek appropriate training to ensure that they are fully aware of all the issues and requirements for the running of an ICAHP.

pp. Accreditation should not be mandatory for registered veterinarians to conduct an ICAHP.

qq. Cultural awareness training should be received through a recognised organisation.

**Surgery and anaesthesia**

rr. The choice of anaesthetic agent and surgical technique are those of the veterinarian. However, veterinarians carrying out surgical procedures in the field must be experienced and competent in the procedures they are performing and must have an appropriately trained and experienced assistant (e.g. veterinary nurse) to manage intra-operative and recovery incidents.

ss. Veterinary students must not be allowed to practice surgery on patients in the field, but can assist an experienced veterinarian after the owner's permission has been given.
**Professional indemnity and insurance**

Vet. Veterinarians should ensure that they have the relevant professional indemnity/public and products liability coverage in place before pursuing ICAHP work.

i. If a veterinarian is doing ICAHP work in conjunction with their veterinary practice, then the practice’s indemnity should cover them.

ii. If a veterinarian is doing ICAHP work for a charity, non-government or government organisation, then the veterinarian should ensure that these organisations will indemnify them or seek their own individual professional indemnity insurance.

Regardless, veterinarians should seek the advice of their insurers before embarking on such work.

**Other relevant policies**

3.4 Use of projectile syringe equipment
4.2 Use of euthanasia drugs by non veterinarians
4.4 Euthanasia
5.1 Electronic identification of animals
6.7 Desexing (surgical sterilisation) of companion animals
7.5 Castration of horses and donkeys
13.2 Management of cats in Australia
13.3 Control of feral horses and other equidae
19.4 The diagnosis and treatment of animals by non-veterinarians

**References**

AMMRIC iConducting dog health programs in Indigenous Communities: A Veterinary Guidei


Date of ratification by AVA Board: 27 July 2012
Part 18 - Other services provided by veterinarians
18.1 Veterinarians on animal ethics committees

Policy

All veterinarians serving on animal ethics committees (AECs) must have as their primary concern the welfare of the animal.

All veterinarians serving on AECs must be registered with an Australasian Veterinary Board.

Background

Veterinarians serving on AECs will be required to act in a specific capacity depending on the category of their membership. These categories and capacities are described in the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes (2004).

There are three membership categories for veterinarians on AECs: A, B and C. (There is a category D that is for independent members only).

Category A: a person with qualifications in veterinary science

Category B: a person with substantial recent experience in animal experimentation

Category C: a person with demonstrable commitment to, and established experience in, furthering the welfare of animals. The person should not be employed by, or otherwise associated with, the institution, nor be involved in the care and use of animals for scientific purposes. Where possible, he/she should be selected on the basis of membership of an animal welfare organisation

A veterinarian should fulfil only one category at any one time, even if that individual’s background and experience allow a contribution in more than one category.

In assessing proposals, all categories of veterinarians must consider the benefits to be derived from research versus the cost to the animals, number of animals to be used, length of time the animals will be under experimentation, humane end-points, exploration (by the researcher) of possible alternatives to animal use, and disposal of animals at the end of experimentation.

Guidelines

These guidelines are based on the requirements of the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes.

Role of Category A veterinarian

The primary focus of this category of membership is the welfare, care, husbandry, management and treatment of the animals used in the institution.

Knowledge of the handling, husbandry, care, medication and treatment of the species of animals used in the institution.

If surgical procedures are used, ability to comment on the anaesthesia, analgesia and surgical techniques proposed, in terms of the likely responses of the species concerned.
The ability to provide independent assessment of the institutional veterinarian, if this is required.

Other contributions will include assessment of:

- the skills of the experimenter to carry out the experimentation proposed;
- the animal house;
- surgical and postoperative care facilities;
- the standards of animal care employed in the institution; and scientific merit of the experiment.

**Role of Category B veterinarian**

The primary focus of this category of membership is animal welfare and peer assessment of the scientific merit of experimental proposals.

The veterinarian will be required to thoroughly assess the validity of the proposal (including statistical methods to be used), the experimental design and the appropriate numbers of animals.

The veterinarian will be required to confirm that the proposal involves original work, not repetition.

The veterinarian may also comment on husbandry and animal welfare issues.

**Role of Category C veterinarian**

The primary focus for this category of membership is the welfare of the animals housed in the institution and/or bred and/or used for experimentation.

The veterinarian must be a conduit for animal welfare views and concerns between the AEC and the animal welfare sector of the community. There should be regular, ongoing contact with the animal welfare sector.

The veterinarian must be a spokesman for the welfare of the animals in the institution or under experimentation, rather than automatically accepting the scientific merits of proposals as justification for the proposed animal usage. Unacceptable proposals on animal welfare grounds (based on the views current in the animal welfare sector) must be acknowledged in the face of their scientific merit.

**Other relevant policies and position statements**

15.9: Animal experimentation

**Reference**


Date of ratification by AVA Board: February 2009
18.2 Emergency animal management

Policy

Government authorities and relevant agencies should engage veterinarians in the development and implementation of local, state and federal plans for disasters and emergencies involving animals, zoonoses, public health or other veterinary-related issues.

Veterinarians have the expertise to give advice on animal welfare, animal behaviour and biosecurity in emergency planning and response. This advice includes any implications for human health and welfare.

Background

Emergencies such as natural disasters, disease outbreaks and man-made disasters can directly affect or put at risk the welfare, behaviour and health of domestic animals, livestock, wildlife, feral animals and zoological animals.

Natural disasters

Australia is a country prone to natural disasters ranging from cyclones in the north to severe bushfires in the south. On average, 54.5 million hectares of land are burnt each year by fire1; 13 cyclones develop per year in Australian waters of which six cross the coast 2; and 2.8% of properties in Australia have moderate to severe risk of flooding. 3 Other possible natural disasters include storms, extreme heat, landslide/mudslides, earthquakes, and tsunamis. Animals, the unseen casualties, are often involved or are put at risk. People attending to animals in these disasters often endanger themselves. Frequently people will remain behind in an emergency evacuation as they are reluctant to leave their animals unattended. In hurricane Katrina, when people were ordered to evacuate, over 44% of people who stayed behind, did so because they did not want to abandon their pets. 4

Disaster management plans are already in place to address human safety, but many are lacking in the management of animals similarly involved. Animal management needs to be included as a component in all disaster management plans. 5,6 Owners need to formulate an exit strategy or safe containment and protection plan in advance of any natural disaster.

Emergency animal disease outbreaks

Australia, due to its isolation, is a country naturally free of many diseases. Through quarantine and disease surveillance, Australia maintains its freedom from these diseases. Emergencies can occur when these exotic diseases enter Australia. It is also considered an emergency if there is a severe endemic disease outbreak that may affect the health and welfare of animals, may pose a risk to human health or may have severe impacts on trade. These exotic and endemic diseases are referred to as Emergency Animal Diseases (EADs). EADs are a constant threat to animal biosecurity in Australia. When they occur, they can impact on the health and welfare of animals, and place an economic burden on animal and dependent industries. Plans such as The Australian Veterinary Emergency Plan or AUSVETPLAN, are already in place and address many of these threats. 7

Manmade disasters

Manmade disasters such as hazardous materials accidents (e.g. oil spills, chemical spills and gas leaks), manmade structural emergencies, prolonged power outages, mass motor
Vehicle accidents, and terrorism can also impact on animals hence animals need to be included in the relevant response plans.

In the event of a disaster, the behaviour of domestic animals and livestock can be greatly altered increasing zoonotic risk and the potential for animal related injuries. Disease-free areas can also be compromised.

The Australian Veterinary Association (AVA) can call upon a diverse range of expertise and manpower from its members and is able to assist in the development and enacting of policies for emergency management response in all levels of government (local, state and federal).

**Veterinary premises**

As evident with the 2009 Victorian bushfires, disasters can affect veterinary premises. Emergency management also needs to be independently addressed in all veterinary premises so that the health and welfare of patients are not compromised.

**References**


**Other relevant policies**

4.3 Humane destruction of animals

4.4 Euthanasia

5.1 Electronic identification of animals

6.3 Animal shelters and municipal pounds

7.12 Keeping livestock in peri-urban areas
13.6 Harvesting and culling of native fauna

Date of ratification by AVA Board: August, 2010
Part 19 - Education, accreditation and employment of veterinarians
19.1 Veterinary schools

Under review
19.2 Use of dogs for teaching in veterinary schools

Policy

The use of live animals in the teaching of veterinary science is essential.

Background

The use of animals in the teaching of veterinary students is subject to the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes, which promotes the principles of reduction, refinement and replacement in relation to the use of animals.

However, their use is necessary for the following reasons:

Veterinary students need animals to learn about their behaviour, physiology and anatomy. Veterinary students need animals to learn skills associated with examination and treatment. Ultimately, the teaching of anaesthetic and surgical procedures can only be done effectively on live animals.

There are limitations to the availability, functionality and usefulness of teaching mannequins, cadavers or computer models, however where appropriate veterinary students may be taught using these methods.

The use of animals for teaching purposes is covered by legislation in most states and territories.

There are four potential sources of animals for teaching:

Surrendered or unclaimed pound animals that are destined for euthanasia. Animals seen in a clinical practice situation, when supervised by a registered veterinarian. Animals held at registered pounds or shelters to be re-homed but requiring treatment or sterilization. These procedures would be supervised by a registered veterinarian. Purpose-bred animals, which is the least acceptable.

Guidelines

Surgical procedures may be carried out considering the following.

All operations must be performed under the direct supervision of registered veterinarians.

Only animals that are destined for euthanasia or client owned with informed consent, should be used.

All animals anaesthetised for non-recovery surgery must be euthanased immediately after the surgery without the animal regaining consciousness.

When animals are to be allowed to recover from the surgical procedure and anaesthetic, appropriate pain relief and post-operative care need to be managed.

Those animals destined for euthanasia and used for teaching purposes in veterinary schools should also be subject to the following conditions:

All procedures that are performed by students must have approval from an animal ethics committee of the university and must meet the requirements of the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes as well as relevant state or territory legislation.

Animals should be kept and managed in accordance with the appropriate legislation and associated codes of practice.

All animals intended for use should be submitted to a thorough clinical examination, and any animal found to be injured or diseased should be immediately euthanased.

References

National Health and Medical Research Council. NHMRC Guidelines on the care of dogs used for scientific purposes.


Other relevant policies and position statements

15.9 Animal experimentation

Date of ratification by AVA Board: August, 2010
19.3 Accreditation of private practitioners for government contracting

Position statement

The Australian Veterinary Association (AVA) recognises that services provided by government and private veterinarians must be complementary. This enables optimal use of national veterinary resources.

Background

In many countries, the government employs private veterinarians for government veterinary duties. Such veterinarians are formally authorised by the veterinary administration of the country concerned. Local Veterinary Inspectors (LVIs) in the United Kingdom and Accredited Veterinarians in the United States are examples.

Private practitioners authorised by the national veterinary administration are provided for in the International Animals Health Code of the OIE (World Organisation for Animal Health, formerly Office International des Epizooties). This Code is recognised by the World Trade Organization and is the norm for international trade in animals and animal products.

The Veterinary Committee (composed of the Chief Veterinary Officers from the Commonwealth, states and territories in Australia, New Zealand, Chief Veterinary Officer, and a CSIRO representative), through the Australian Animal Health Laboratory (AAHL) and Consultative Committee on Emergency Animal Diseases (CCEAD), has developed a program for accreditation of private practitioners working in the national animal health system. This program supports the international standing of the animal health system. Known as the Accreditation Program for Australian Veterinarians (APAV), the program is now managed by Animal Health Australia.

APAV is designed in two parts - an accreditation process to provide veterinarians with the basic information needed to participate in government and industry animal disease programs, and an operational process to provide them with the specific knowledge and skills to participate in one or more of the programs requiring accredited veterinarians.

There are (in July 2006) eight recognised operational programs under APAV. They are:

- Australian Johne's Disease Market Assurance Program for Alpaca (AlpacaMAP)
- Australian Johne's Disease Market Assurance Program for Cattle (CattleMAP)
- Australian Johne's Disease Market Assurance Program for Sheep (SheepMAP)
- Australian Johne's Disease Market Assurance Program for Goats (GoatMAP)
- Victorian Johne's Disease Agreed Test and Control Program
- Victorian Enzootic Bovine Leucosis Control Program
- South Australian Enzootic Bovine Leucosis Control Program
- AQIS (Australian Quarantine and Inspection Service) Accredited Export Veterinarian Program (AAVet)

APAV provides opportunities for veterinarians to attain additional skills and experience and provides governments with skills, expertise and regional availability. It may also assist the viability of rural practices. APAV accreditation is also a prerequisite for membership of the Australian Veterinary Reserve.

Date of ratification by AVA Board: 12 May 2001
19.4 The diagnosis and treatment of animals by non-veterinarians

Policy

The welfare of animals and the control of disease, as well as public health and biosecurity, may be compromised where non-veterinarians independently diagnose and treat animals.

Date of ratification by AVA Board: 15th February, 2008
19.5 Employment of new veterinary graduates

Policy

Veterinary graduates should be given professional support and opportunities for improving their knowledge and practical skills in exchange for demonstrating a willingness to commit to employers, practice policies and procedures, continuing professional development and engagement with their profession.

Background

The veterinary profession shares equal responsibility for the integration of new graduates into their chosen careers with the graduates themselves. New graduates in the veterinary profession are well educated, but have limited practical experience and ability to deal with the immediate demands placed on experienced practising veterinarians. It does not benefit clients, the employer, the employee, their patients or the profession in general if these recent graduates are expected to deal with situations that are beyond their experience. Their first job is formative, and may contribute to the career path chosen by that person.

Graduates must be given as much assistance as possible from employers and experienced colleagues to improve their knowledge and skills, and to interact with other veterinarians.

Employing a new graduate carries certain responsibilities and requires greater input and support from the provider of veterinary services than when employing an experienced veterinarian. Not every provider of veterinary services has the resources to employ and appropriately support a new graduate. Some practices, even with appropriate resources, may not wish to expend the time and effort to employ a new graduate.

Providers of veterinary services must demonstrate a willingness to submit to an external audit to assure new graduates that they can be relied on to provide a level of support, induction, and training that is well above minimum standards expected. Accredited providers of veterinary services may use this to commercial advantage. All employers of new graduates should at least conform to the minimum standards in the guidelines below.

Guidelines

Employer responsibilities

Employment agreement

All employees should have a written employment agreement. Employment agreements should specify responsibilities (including clinical and/or field work), salary, after-hours requirements, designated authority and the amount of support to be given to the new graduate. Veterinary practices must have current professional indemnity insurance and operate from premises that are approved by the relevant registering authority. The agreement must ensure that the employee is adequately covered or aware of all appropriate insurance, including income protection, professional indemnity, vehicle and any other insurance relevant to the particular needs of the delivery of veterinary services.
Support

Practices must take into account that new graduates may not have had the opportunity to develop sufficient competence, knowledge or communication skills to perform at all times to an acceptable standard. Practices must ensure that the inexperienced practitioner is supervised and supported at all times until both graduate and employer feel sufficient experience has been gained.

A new graduate needs immediate access to the advice of an experienced veterinarian for the first several months in practice. This time will vary depending on the new graduate, but will probably be 6-12 months longer in mixed rural practice. Advice may be available by telephone, but the physical presence of an experienced veterinarian is often required, particularly to assist and provide guidance in diagnostic and treatment procedures. In veterinary businesses with only one other veterinarian, arrangements should be made to provide meaningful support for the new graduate when an experienced veterinarian is unavailable (e.g. with a colleague or neighbouring veterinary business).

The principal and staff, including non-veterinary staff, should have a positive attitude to the employment of a new graduate and so provide a supportive work environment. The veterinary business should have regular staff meetings and provide regular opportunities for discussion of cases with peers and supervising veterinarians. There should be adequate supporting non-veterinary assistance for the new graduate from nursing and administrative staff.

When on call new graduates in rural practice should go on calls with experienced veterinarians to common client problems before attending calls alone. Because many calls will be to established clients, this also serves to introduce the new graduate to clients of the practice. This may place an economic strain on the veterinary business, and this burden should be shared with the community through internships, bonded scholarships, or tax incentives.

Experienced practitioners must be available for consultation and practical help when new graduates are on duty outside normal hours or in a sole charge position.

The employer must make time to discuss employment issues with new graduates.

Every effort should be made to involve new graduates in AVA branch activities and to allow attendance at continuing education courses and conferences.

If appropriate, the employer should assist the new graduate with finding suitable living accommodation

Working hours

New graduates should not be expected to perform after-hours duty or remain in sole charge until they are fully conversant with workplace procedure and back-up facilities and have achieved adequate levels of confidence and competence. A new graduate should not be required to attend after-hours calls without adequate support in whatever form may be appropriate for the circumstances. This may involve formal relationships with other veterinarians inside or external to the employment practice.

The new graduate’s working hours should follow current Award and contractual recommendations or better. However, the employer is encouraged to offer optional
participation in activities outside formal working hours which may improve the rate at which their employee gains skills and knowledge, and some flexibility in this area should be considered. It should also be recognised that new graduates may perform below their abilities if their inexperience and anxiety about developing skills are compounded by fatigue induced by working long hours.

**Safety and health**

Employers must ensure that new graduates are adequately inducted and trained in the occupational health and safety policies and procedures of the practice.

**Induction program**

Employers should have mechanisms in place to induct new graduates into the veterinary business. Induction should cover workplace procedures, customer service, drug prescriptions and staff responsibilities. A template induction program is contained in The Australian Veterinary Association Practice Management Induction Manual that can be adapted to meet the needs of any practice. A manual of practice policies and procedures pertaining to the day to day administration of the practice is to be commended as a basic requirement for ALL employees to follow.

**New graduate responsibilities**

New graduates should:

- realistically assess their career needs and interests before accepting employment
- make a realistic and fair commitment to their first job for at least 12 months, unless unforeseen circumstances arise or employment conditions are untenable
- be familiar with and appreciate the veterinary business philosophy and objectives (including but not limited to the payment of accounts, treatment of bad debtors, treatment of wildlife, treatment of un-owned animals, dispensing protocols, vehicle usage and dress standards)
- appreciate and respect the role that non-veterinary staff play within a veterinary business; non-veterinary staff can impart much knowledge and experience to the new graduate, and they should be respected
- fully understand the employment agreement (including pay, working hours, after hours responsibilities and holidays) before accepting a position
- appreciate that veterinary science is a profession, not just a job
- be responsible for ensuring that they are eligible to practice (i.e. that they are currently registered as a veterinarian), and
- exercise their professional judgment and accept that cases will arise where assistance from an experienced veterinarian is necessary.

**References**

Australian Veterinary Association Practice Management ï Induction Manual ï 1st Edition


Date of ratification by AVA Board: 25 July 2013
19.6 Veterinary nursing

Position statement

The use of the title ‘veterinary nurse’ should be restricted to those who hold the Australian nationally accredited Certificate IV in Veterinary Nursing or its equivalent. All other veterinary clinic employees should be called receptionists, animal assistants or animal attendants.

Qualified veterinary nurses play a significant role in the provision of veterinary services.

The AVA recognises the importance of veterinary nurse training and will continue to promote and participate in the development of training programs for veterinary nurses, and encourage their continuing education.

Veterinarians and practice owners should aim to employ qualified veterinary nurses and encourage all employees working with animals to complete the national training program and support them while doing so.

Background

Veterinary nurses, under the supervision of veterinarians, provide nursing care to sick animals and communicate with and advise owners on the care of their animals. The veterinary nurse also provides support to the veterinarian with technical work, surgical and peri-operative procedures, medical procedures and diagnostic testing. The veterinary profession benefits greatly when working as a team with appropriately trained veterinary nurses.

A national training package for veterinary nurses was developed and introduced in 1998 with input from the AVA and the Veterinary Nurse Council of Australia (VNCA) through a national industry advisory group. This program was revised, updated and expanded to include training for other animal care workers and the Animal Care and Management Training Package was introduced in 2004.

Federal Government policy requires training packages to be reviewed and updated regularly. It is important that veterinarians, as the employers and supervisors of veterinary nurses, continue through the AVA to have input into the development of the training programs.

Date of ratification by AVA Board: February 2010
Part 20 - Model codes of practice for the welfare of animals
20.1 Introduction - model codes of practice for the welfare of animals

The codes are prepared by the Animal Welfare Working Group (AWWG) of the Animal Health Committee of the Primary Industries Standing Committee (PISC).

Membership of AWWG comprises representatives from state and Australian Government departments with responsibility for agriculture and/or animal welfare, CSIRO, and other relevant committees within the PISC system. Extensive consultation takes place with industry and other animal welfare groups during the development of the codes.

The final draft of each code is forwarded for endorsement by the state, Australian and New Zealand ministers for primary industry or agriculture, meeting as the Primary Industries Ministerial Council (PIMC).

The codes are scrutinised by the Australian Veterinary Association (AVA) Committee on Animal Welfare in consultation with appropriate special interest groups and individuals. In the absence of areas of disagreement or dissent, they are then formally adopted by the AVA’s Policy Council.

The model codes of practice that have been endorsed by PIMC and supported by the AVA refer to:

- the pig
- the domestic fowl
- the goat
- the sheep
- cattle
- farming of deer
- road transport of livestock
- rail transport of livestock
- air transport of livestock
- livestock and poultry at slaughtering establishments
- sea transport of livestock
- saleyards
- intensive husbandry of rabbits
- destruction or capture, handling and marketing of feral livestock animals

These codes are available from CSIRO Publishing.1

Date of ratification by AVA Board: 1 Jan 1997

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20.2 Model code of practice for the welfare of animals: cattle

The Model Code of Practice for the Welfare of Animals: Cattle was endorsed by the Primary Industries Ministerial Council in July 1989. It was adopted by the Australian Veterinary Association’s (AVA’s) Policy Council in February 1991 on the recommendation of the association’s Advisory Committee on Animal Welfare. The code is available from CSIRO Publishing.1 A brief summary follows.

The code addresses the issues of adequate ... cool, clean drinking water, air, dust, food, drought, protection from climatic extremes and predation. It also examines housing, space and accommodation and recommends that the Australian Lot Feeders’ Association Code of Practice should be followed. There are sections on artificial rearing of calves, cattle handling facilities, mustering and yarding.

Recommended management practices are described for supervision, milking practices, castration, spaying, tail docking, identification, dehorning, mating, calving and weaning practices and marketing of bobby calves. Other sections cover health, agistment, feral cattle and humane destruction of cattle. The appendixes to the code are:

Water for livestock
Feed requirement guidelines.

Other relevant policies and position statements

8.8 Beef and sheep feedlots

8.9 Minimum requirements for trough and yard space in intensive animal systems (cattle)

Date of ratification by AVA Board: 1 Jan 1997

20.3 Model code of practice for the welfare of animals: pigs

The Primary Industries Ministerial Council has adopted and published a Model Code of Practice for the Welfare of Animals: Pigs. Codes of welfare and practice for the road, rail and air transport of livestock have also been adopted, and include guidelines for transport of pigs.

Having reviewed the contents of these codes and recognising that they do adequately cover the welfare of domestic pigs, the Australian Veterinary Association (AVA) endorses the codes and supports their adoption by the pig industry and those who service it.

Other relevant policies and position statements

9.2 Sow housing

Date of ratification by AVA Board: 1 Jan 1997