EDMONTON, AB – In recent years, there has been a constantly increasing movement of dogs into Canada from various regions of the world, as well as relocation of dogs within our country. There is little doubt about the passion and desire of people to help animals in unfortunate situations, acknowledged Duane Landals DVM, B.Sc. Ag., President of the Alberta Society for Prevention of Cruelty to Animals, speaking at the Alberta Veterinary Technologist Association Conference. However, Dr. Landals advised that we also see an increasing awareness of the risks presented by these activities. What is necessary, he said, is to balance the need to help with the need to prevent harm.

The need for importation
The need to import dogs to Canada has resulted from existing or emerging necessity, he said, is to balance the need to help with the need to prevent harm.

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Making international animal rescue safe

Evaluating 87.5% American Staffordshire Terrier. The dog’s Dr. Susan Walker, owner Don Gillingham, and client care specialist Wendy Jensen. “Life is like a box of chocolates. You can’t have just one.”

Etiologies and developing a diagnostic plan for seizures

HALIFAX, NS – Seizures are an important clinical problem in both dogs and cats and account for a substantial proportion of admissions to both general and referral veterinary hospitals, explained Christopher L. Mariani, DVM, PhD, DACVIM (Neurology), speaking at the Atlantic Provinces Veterinary Conference. A seizure is the clinical manifestation of excessive and/or hypersynchronous neuronal discharge within the brain; it may be manifested as episodic impairment or loss of consciousness, abnormal motor phenomena, psychic or sensory disturbances, or autonomic signs such as salivation, vomiting, urination or defecation.

Seizures are classified according to the areas of the brain that they affect:

**Generalized seizures**
- Involve abnormal electrical discharges affecting the cerebral hemispheres bilaterally.
- Possible manifestations include generalized tonic-clonic (“Grand mal”), or exclusively tonic, clonic or atonic activity.

**Focal or partial seizures**
- Involve abnormal electrical discharges of neurons in

Seizures continues on page 8

The Montreal SPCA’s fight against breed specific legislation

MONTREAL, QC – Breed specific legislation (BSL) prohibits or restricts ownership of certain dogs on the basis of breed or physical characteristics. While BSL currently tends to target ‘pit bull’ type dogs, it has targeted many other breeds in the past, acknowledged Sophie Gaillard, B.A., M.SC.(A), B.C.L., LL.B., Director of Animal Advocacy at the Montreal SPCA during her presentation at the National Animal Welfare Conference.

BSL is often the result of a bias in media reporting that makes it seem that every dog that bites seems to be of the targeted breed. For example, in December of 2008 an Arizona woman was killed by two dogs identified by authorities as Labrador Retrievers. Only one local newspaper published a report following the discovery of her body. That same month, a California man was attacked by one or two dogs that the media identified as his grandson’s pit bulls. This incident was reported by at least 285 media outlets, in 47 States and 8 other countries.

The incident that started it all in Montreal occurred on June 8, 2019 when 55-year old Christiane Vadnais was fatally mauled by a dog that was confirmed to be 87.5% American Staffordshire Terrier. The dog’s

Breed specific legislation continues on page 10
This dog you saved

Loves a boy
Who needs a friend
Who needs to learn to trust
Who will learn to love
Because of
This dog you saved

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Some recent cases have given rise to a renewed concern for legal exposure in the context of prescribing and dispensing veterinary pharmaceuticals. The prudent veterinary hospital would be well advised to remind all staff of the appropriate protocols in this regard so as to avoid potentially catastrophic results.

**Regulatory compliance**

At the most basic level, every practitioner should ensure that he or she is very familiar with the regulatory requirements for the prescribing and dispensing of medications found in the applicable provincial veterinary legislation, regulations, bylaws and recommended standards that are set out by the provincial regulators. Among other rules, some of the fundamental regulatory requirements include the following:

1. Medications should only be dispensed once an appropriate veterinary/client/patient relationship has been established, including the physical examination of the animal or an appropriate knowledge of its condition through the taking of an appropriate history.
2. Every purchase of a drug by the clinic must be recorded including the name, dosage, supplier name and purchase price.
3. An appropriate prescription must be provided recording the name, dosage and quantity, the name of the patient and the owner, the name and address of the clinic, clear directions for use, the date of the dispensing, the number of permitted refills, if any, the veterinarian’s name and, if for food-producing or equine patients, the appropriate withholding time.
4. Controlled drugs must be kept in a secure location and be separately recorded.
5. One should never sign a blank prescription form.
6. One must consider the potential necessity for the use of child-resistant containers.
7. If a client requests that the medication be dispensed elsewhere, then a written prescription must be provided.

**Extra-label or compounding drug use**

Veterinarians in Canada have the privilege of electing to employ a drug that may not be specifically labeled for the use which he or she wishes, either in terms of the species of animal or the dosage. In such cases, there may be an accepted standard for the ‘off-label’ use, which has developed over time within the veterinary community; in each case though, it is critically important for the practitioner to thoughtfully discuss its use with the client and point out the material and probable risks, if any, associated with such use and to seek a specific consent of the client after such disclosure. One should approach extra-label or compounding issues as one would approach informed consent to treatment, ensuring that evidence of the consent is available in writing from the client.

**Dispensing protocols**

Although infrequent, there are a number of examples where the incorrect medication or an erroneous dosage has been dispensed to a client; in some rare cases, the medication has been dispensed to the wrong patient. Ultimately, it would appear that staff to whom the dispensing function has been delegated may become somewhat cavalier in this activity, giving rise to some potentially grave results. It must be emphasized with all staff that the exercise of filling a prescription is not to be taken lightly; an in-clinic protocol for second-party verification may be appropriate so as to avoid misadventures.

**Inventory surveillance**

Through regular inventory checks one can identify lapses in medical record-keeping when drug logs become contradictory. As well, expired drugs can be identified and appropriately disposed of. Potential very serious problems related to drug theft can be identified at an early stage through regular and sometimes random inventory counts.

Mr. Jack is counsel at the law firm of Borden Ladner Gervais, LLP (“BLG”) with a mandate to serve the needs of the veterinary community and enhance it on a national basis. Mr. Jack chairs a focus group relating to veterinary legal matters within the firm’s Healthcare Group. He can be reached by email at dcjack@blg.com or by telephone at 1-800-563-2595.

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**International animal rescue continued from page 1**

as social concern and reaction to animal population reduction programs. Animals may require global help as a result of cultural practices in the home country, poor economic conditions, natural disasters, and social-disorder and/or war in the home country.

**Increasing awareness**

Media coverage and social media engagement have increased global awareness; international events such as the Pyeong Chang Olympics in 2018 have raised awareness of the plight of animals. Tourism allows for many people to see the reality of the area visited. Volunteerism has spread globally, with growing engagement of people in programs to improve animal welfare.

**What are the risks?**

Dr. Landals noted that key risks of international animal rescue include disease introduction to animals, disease exposure to humans, animal welfare concerns, transportation hazards, right of ownership issues, and the possibility of creating an animal surplus here in Canada.

**Disease risk:**

**Rabies** rescue work increases rabies risk in the receiving country since infected animals may incubate the virus for many months before they develop clinical signs and become contagious. Despite rescue vaccination efforts, dogs previously exposed to rabies will not be protected by the vaccine and can still develop the disease. As well, dogs will not respond to vaccination younger than 3 months of age and it takes another full month for immunity to develop from vaccination. Although infrequent, there are a number of examples where the incorrect medication or an erroneous dosage has been dispensed to a client; in some rare cases, the medication has been dispensed to the wrong patient. Ultimately, it would appear that staff to whom the dispensing function has been delegated may become somewhat cavalier in this activity, giving rise to some potentially grave results. It must be emphasized with all staff that the exercise of filling a prescription is not to be taken lightly; an in-clinic protocol for second-party verification may be appropriate so as to avoid misadventures.

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**Echinococcosis** is an important zoonotic disease caused by tapeworms. Dogs are a definitive host and, while they may carry adult tapeworms in...
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their intestine, they rarely show symptoms. Dogs are particularly important in the transmission to humans, pointed out Dr. Landals, due to their close relationship with people.

Heartworm disease is a life-threatening vector borne disease of dogs diagnosed by a blood test. The presence of infected dogs substantially increases the risk of transmission to healthy dogs. An average of 7 in 10 mosquitos in a heartworm-positive dog’s kennel carry heartworm.

Lyme disease is spread by certain species of ticks. It is caused by a blood borne infection of mammals, including humans ad dogs, as well as birds. Speculation is that ticks may be arriving on migratory birds or perhaps on dogs that have lived in areas where the tick is plentiful.

Foot and mouth disease is a viral disease of ruminant animals. Canada is free of this disease. However, a single diagnosis would close Canada’s borders to all export, having a substantial economic impact. Foot and mouth disease can be introduced by a single incident such as contamination on the fur of the feet of dogs, said Dr. Landals.

Other disease risks:
- Internal parasites: round worms, hook worms, and tapeworms, etc.
- External parasites: demodecic mange, sarcoptic mange, fleas, lice, etc.
- Viral diseases: distemper, parvo virus, hepatitis, canine influenza, etc.
- Bacterial diseases: leptospirosis, resistant strains such as MRSA, TB.

Transportation risk:
When considering international travel for an animal, Dr. Landals said the rescuer must first determine:
- Is the animal fit to withstand the demands of the journey?
- If multiple animals, are they able to be segregated for transportation?
- Is the mode of transportation safe, and will it provide protection form extreme temperatures?
- Is the physical structure of the conveyance and kennels safe and comfortable for the expected travel?
- Is the duration of travel appropriate for the species and age of animal and stops for food, water and exercise provided?
- Is there suitable accommodation available for the animals at their destination?
- Will their situation be improved by the relocation?
- Is it assured that the animal was actually un-owned and is not being inappropriately removed?
- Will the importation of these animals cause a reduced ability of local animals to find a home?

Existing safeguards:
The Canadian Food Inspection Agency (CFIA) has import requirements for all animals entering Canada. Pets may be import-ed under two categories:

Personal importation: animals accompanied by the owner may be imported into Canada as a personal pet to live with them or someone they know as a family pet.
- No dog import permit is required.
- No rabies vaccination certificate required for dogs less than 3 months of age; rabies certificate required for dogs 3-8 months; rabies certificate is required for dogs over 8 months or they must be vaccinated upon arrival within a set time period.
- No other requirements apply, regardless of the country of origin.

Commercial importation: all animals destined for welfare organizations or shelters are in this classification, as are dogs for show, sale or research.
- An import permit is required for dogs under 8 months. These dogs also must have a rabies vaccination certificate.
- The dog must be microchipped or tattooed. They must come from a registered kennel and cannot be less than 8 weeks of age.
- Dogs over 8 months require a valid rabies certificate only.

Deficiencies in the safeguards:
The safeguards in place are not without deficiencies. Although to falsely classify an animal as ‘personal’ to avoid the health requirements of ‘commercial’ is illegal and fraudulent and poses a risk to Canadians and our animals, personal importation has been misused as a cover for commercial import. As well, no restrictions are in place to address movement of animals within Canada, despite regional differences in disease occurrence.

Another important concern is that vaccination and health certificates require the signature of a licensed veterinarian – but many countries do not have a system of licensure for veterinarians, so we simply cannot confirm that the veterinarian is legitimate. Canadian veterinarians working abroad are not licensed in these jurisdictions.

Vaccination certificates require the trade name, serial number of the licensed vaccines used and duration of immunity of the vaccines. However, many developing countries do not have a system of quality control or registration of pharmaceuticals and vaccines. Thus, no license number exists and there is no assurance of protection at any level let alone duration.

Further the veterinary certificate or health must state that the animal was vaccinated, not younger than 6 weeks of age, for distemper, hepatitis, parvovirus and parainfluenza virus. This in no way reflects the immune status of the animal since there is no assurance of the quality of the vaccines; an animal must receive the required sequence of vaccines to develop immunity with the final vaccination being after a defined age; and immunity is not considered to be established until up to 30 days post vaccination.

Import requirements for animals over 8 months are insufficient; they were set to safeguard against puppy mill animals arriving from the USA but fall critically short with regards to worldwide stray animal import.

Dog importation checklist for veterinarians
The CVMA continues to work with the federal government in an effort to improve the standards for importation of dogs into Canada. In support of this effort, they have created a Veterinarian’s Dog Importation Checklist for veterinary professionals that outlines points to discuss with clients before or after they import dogs into Canada:

Before dogs enter Canada:
- Examination by a qualified veterinarian in the country of origin.
- Rabies vaccination (as required by the Government of Canada).
- Other core vaccinations.
- Deworming, including tapeworm.
- Treatment for external parasites
  - Ear, Flea and Tick.
- Heartworm testing.
- Tests for diseases that may be present in country of origin, but not present or uncommon in Canada
  - E.g., L. Longipalpis in the Mediterranean basin and South America, Brucella canis in US midwest.

After dogs enter Canada:
- Quarantine dogs for 10 days (minimum 3-4 days) in a house or a facility away from other animals and high risk people
  - E.g., young children, elderly, compromised immune systems.
- Monitor closely for signs of any illness and consult a veterinarian as needed.
  - Rabies: risk may persist for up to six months.
  - Culture suspected bacterial infections due to risk of multi-drug resistant organisms.
- Examination by a veterinarian as soon as possible (even before going home).
  - Repeat vaccinations or tests as needed.
- Behavioural assessment.
  - Repeat heartworm test after six months.
  - Sterilized.

canadianveterinarians.net
Cognitive dysfunction syndrome is becoming an increasingly recognized condition in senior pets. This condition, also called CDS, encompasses many behaviour changes in senior pets which are indicative of confusion, anxiety, and memory loss. Many pet owners notice changes in their pet’s behaviour as they age, and some may assume that these changes are inevitable.

There are over 8 million dogs and 8 million cats currently living in Canada.¹ With at least one dog or cat present in over 57% of Canadian households, this represents a large population of senior pets.² A study performed by the University of California, Davis, found that 28% of dogs showed evidence of cognitive impairment by age 11–12, and that this number increased to 68% in dogs who were 15–16.³

Dogs and cats with CDS may appear confused or lost at times. They may spend more time alone or seem more clingy and dependent on their owners. Their sleep patterns may change, and pets may bark or howl at night. It is common to display a loss of basic training, and owners may notice changes like the pet urinating where they’re not supposed to. Activity levels can also change, with many pets pacing or seeming restless.

Several treatment options are available in Canada for cases of cognitive dysfunction syndrome. Some pets may be put on a prescription diet, and others may be prescribed a medication called selegiline.⁴ Supplementation with S-adenosyl methionine, a molecule commonly called SAMe, is an avenue of treatment that has been explored in response to several promising studies in humans with cognitive impairment.⁵,⁶ Many veterinarians are familiar with the use of SAMe supplementation in cases of liver disease, for which this is a commonly used treatment.

Dogs with cognitive impairment demonstrate many clinical signs similar to humans with Alzheimer’s disease and they also show similar changes to their brain tissues. Both humans and dogs with cognitive impairment have been shown to have low levels of a protective antioxidant called glutathione in the cerebrospinal fluid (fluid that surrounds the spine and brain).⁵ Supplementation with SAMe has been shown to increase these antioxidant levels.⁵ Studies in humans supplemented with SAMe showed improvement in cognitive symptoms and possibly delayed cognitive decline in people with Alzheimer’s disease.⁵

A randomized, double-blinded, placebo-controlled clinical field trial of 36 dogs conducted at 5 veterinary hospitals found that oral SAMe supplementation resulted in clinically meaningful improvement in level of activity and awareness, and moderate improvement in sleep disorders.⁷

Summary
Veterinary professionals are in a unique position to be able to provide information to clients and the public about what they need to know when considering adopting an animal from outside of Canada. It’s important to take all the necessary steps before and after importation to insure the health and welfare of the animal itself as well as other animals that will be in contact, including humans. CVP

Duane Landals DVM, B.Sc. Ag., is a fourth generation Albertan with deep roots in the province’s pioneer history. Dr. Landals graduated from the University of Alberta with a Bachelor of Science degree in Agriculture with a major in animal and soil science, in 1971. In 1975, he obtained his Doctor of Veterinary Medicine degree from the Western College of Veterinary Medicine in Saskatoon. He spent 25 years in rural mixed veterinary practice in Alberta. After leaving private veterinary practice, he served 13 years as Registrar and Secretary-Treasurer of the Alberta Veterinary Medical Association. Subsequently he acted as Senior Advisor to that organization until 2018. He is Past-President of both the Alberta and Canadian Veterinary Medical Associations and served as Vice-President of the World Veterinary Association as well as chair for the 29th World Veterinary Congress in Vancouver, Canada. Aside from a career in veterinary medicine, his commitment to improving the care and welfare of animals extended to several years as Director and Vice- Chair for Alberta Farm Animal Care, Director for Veterinarians Without Borders, Canada. Currently he is a Director and President of The Alberta Society for Prevention of Cruelty to Animals.

He lives on a small farm near Onoway, Alberta, with his wife Lucille. While they no longer have their herd of beef cattle, they share their life with 19 head of riding and driving horses and a joyful golden retriever. Their farm is conveniently located close to the families of their three daughters and six grandchildren.

Seizures continued from page 1

• May result in asymmetric motor or sensory signs such as twitching of the eyelids, lips, ears or one limb.

Epilepsy is a chronic neurologic condition characterized by recurrent seizures, with an intracranial origin.

Seizures versus seizure imposters
A number of other clinical conditions can mimic seizures, including syncope, acute vestibular dysfunction, tremors, narcolepsy/cataplexy, rapid eye movement (REM) movement disorders (e.g., distemper myoclonus), and behavioral disorders. The majority of patients presenting for seizures are normal in the veterinary hospital, said Dr. Mariani, and the clinician’s first task is to decide whether the events in question are true seizures, or seizure ‘mimics’.

Guidelines for diagnosing a ‘true’ seizure
• Seizures frequently involve alterations in consciousness and autonomic signs.
• Most seizures occur when animals are at rest or sleeping.
• (Syncope and narcolepsy/cataplexy occur predominantly with exercise or excitement).
• Animals with seizures and loss of consciousness usually have postictal alterations of mentation.
• (Animals with syncope and narcolepsy/cataplexy have brief episodes with loss of consciousness but are usually normal on recovery).
• REM behavior disorder occurs during sleep, but the animal is normal when awakened/roused.
• Vestibular dysfunction usually has characteristic signs including head tilt and nystagmus.
• (Animals with tremors, movement disorders, and behavioral disorders will have a normal mentation and level of consciousness).

Differential diagnosis for seizures
Once the clinician is reasonably certain that the events are true seizures, differential diagnoses may be considered. These can be broadly categorized into extracranial and intracranial etiologies.

Extracranial causes of seizures
These causes originate from outside the central nervous system, causing dysfunction in an otherwise normal brain, and include metabolic, nutritional and toxic causes.

• Hypoglycemia: main causes are juvenile hypoglycemia, hyperinsulinemia (secondary to insulin overdose or an insulin-secreting tumor), and sepsis.
• Hypocalcemia: causes include eclampsia, hypoparathyroidism and ethylene glycol intoxication.
• Hyponatremia: results from loss of sodium rich fluids (e.g. vomiting, diarrhea, diuretics), hypoadrenocorticism or increased water intake (psychogenic polydipsia).
• Hypernatremia: results from the loss of free water or sodium poor fluids (diabetes insipidus, excessive panting, high temperatures), decreased water intake (primary adipsia or limited access) or rarely through ingestion of high levels of salt.
• Hepatic encephalopathy: results from altered filtration of gastrointestinal portal blood by the liver. Main causes are the presence of an anomalous portosystemic shunting vessel or severe parenchymal hepatic disease with secondary shunting.
• Hypertriglyceridemia: primarily a disease of Schnauzers, which have a congenital enzyme deficiency, allowing triglyceride accumulation in the blood.
• Nutritional disease: rare cause of seizures; historically thiamine deficiency has been implicated.
• Intoxication: a wide variety of toxins may lead to nervous system dysfunction and seizures. Examples include ethylene glycol, lead, heavy metals, metaldehyde, strychnine, and organophosphates.

Intracranial causes of seizures
These etiologies cause structural alterations of the forebrain itself, and include degenerative, anomalous, neoplastic, inflammatory, infectious, idiopathic, and traumatic causes.

• Degenerative disease: very rare causes of seizures; include lysosomal storage disorders and neuronal abiotrophies
• Anomalous conditions: hydrocephalus is the most common and occurs predominantly in toy and brachycephalic breeds. Less common conditions include epidermoid, dermoid, and arachnoid cysts, and lissencephaly.
• Neoplasia: common cause of seizures in older animals. Brain tumors may be primary (arise from brain itself) or secondary (metastatic or arise from adjacent structures [e.g., skull]). It is common to see seizures as the sole clinical sign of a brain tumor.
• Inflammatory disease: common cause of seizures in animals of any age. Encephalitis may be infectious (viral, fungal, protozoal, bacterial, rickettsial, or parasitic) or more frequently, non-infectious. Common non-infectious causes in dogs include granulomatous meningoencephalitis (GME) and necrotizing meningoencephalitis.
• Idiopathic disease: common cause of seizures.
• Traumatic disease: seizures can occur immediately at the time of head trauma or as a late sequela after recovery.

Epilepsy
Idiopathic (genetic) epilepsy
Idiopathic epilepsy is a well-recognized clinical condition of recurrent seizures without other neurologic signs and without any identifiable underlying cause, said Dr. Mariani. He noted that it is considered to be an inherited or familial condition, and it appears to be very rare in cats. The seizures almost always begin between 1 and 5 years of age, and onset is insidious - seizures initially occur weeks to months apart and gradually become more frequent. Many dogs progress to develop cluster seizures or status epilepticus. Although certain breeds of dogs are predisposed to the development of genetic epilepsy, Dr. Mariani noted that this condition can probably occur in any dog.
In the absence of a genetic test, diagnosis is based upon an appropriate signalment and description of seizure onset and character, and by ruling out other potential etiologic diagnoses with appropriate tests; typically, cerebrospinal fluid (CSF) evaluation and brain imaging are performed. Outside of the ictal and immediate post-ictal periods, the neurologic examination should be normal.

**Unknown epilepsy**
This condition is synonymous with acquired, cryptogenic, and probably symptomatic epilepsy. An acquired structural lesion within the brain is suspected to be causing the seizures but cannot be detected with the available diagnostic tests. Examples include those patients with a previous intracranial disease such as head trauma or meningoencephalitis that have since recovered but are left with recurrent seizures because of assumed scarring or fibrosis within the brain.

The seizures may be focal, focal with secondary generalization, or generalized, and may occur at any age. Dr. Mariani said that all breeds of dog and cat can be affected, and that the majority of these patients have a normal neurologic examination. The diagnosis is based on signalment, neurologic examination, and by ruling out other causes of seizures with appropriate diagnostic testing.

Unless concerned about the potential for breeding a patient and passing on the trait, it is not that critical to differentiate unknown epilepsy from genetic/idiopathic epilepsy, as the treatment for both is identical.

**Seizure signalment and commonly associated etiologies**

**Less than 1 year of age:**
- Head trauma, intoxication, hypoglycemia, meningoencephalitis, hepatic encephalopathy, hydrocephalus, lysosomal storage disease, other congenital disorders.

**From 1 to 5 years of age:**
- Genetic epilepsy, unknown epilepsy, head trauma, intoxication, meningoencephalitis, hydrocephalus, hepatic encephalopathy, cerebrovascular disease, cerebral neoplasia.

**Greater than 5 years of age:**
- Cerebral neoplasia, unknown epilepsy, meningoencephalitis, cerebrovascular disease, hypoglycemia.

**Diagnostic testing and developing a plan**
The signalment, history and physical and neurologic examinations are critical when deciding which diagnostic tests are appropriate, stressed Dr. Mariani. Questions about character, onset, frequency and progression of seizures; evidence of asymmetry; evidence of prodrome or post-ictal period, neurologic status between seizures, vaccination status and travel history, seizures; evidence of asymmetry; evidence of prodrome or post-ictal period, neurologic status between seizures, vaccination status and travel history, previous illness and medications are important considerations. Physical examination should look for evidence of cardiovascular disease, evidence of hepatic disease, and include retinal (fundic) examination. Altered mentation, focal cranial nerve deficits, circling or turning in one direction, focal postural reaction or conscious proprioceptive deficits, visual deficits, cervical hyperesthesia are important neurologic examination findings.

**Diagnostic testing for seizures can be divided into three steps:**

**Step 1** – CBC, serum biochemistry, urinalysis
- should probably be performed on any patient with seizures

**Step 2** – Thoracic and abdominal imaging, serum bile acids, toxin assays (e.g., lead, ethylene glycol, cholinesterase), infectious disease titers, skull radiographs
- tests may be chosen in certain cases depending on the index of suspicion for a certain disease.

**Step 3** – CSF evaluation, computed tomography (CT) or magnetic resonance imaging (MRI), electroencephalography (EEG)
- consists of specialized tests that specifically evaluate the nervous system and are usually only available at specialty referral hospitals

When to choose Step 3? An important decision point is when to refer a patient with seizures to a specialty hospital. Dr. Mariani said his opinion is that this may be considered in any animal with seizures where extracranial etiologies have been ruled out, if the owners are so inclined. However, he noted that other patient circumstances may increase the suspicion of an active intracranial process, and thus the urgency for referral; these include focal seizure activity, focal neurologic deficits, dogs less than 1 year or greater than 5 years of age, and all cats.

**Summary**
Dr. Mariani followed with a presentation on treatment plans for the routine and difficult to control epileptic, cluster seizures and status epilepticus.

For an article on this topic in the next issue of Canadian Vet Practice newsmagazine. CVP

Chris Mariani DVM, PhD, DACVIM (Neurology) graduated from the Ontario Veterinary College in 1996. After his small animal internship and time in general small animal practice, he completed a residency in neurology and neurosurgery at the University of Florida, followed by graduate work in brain tumor immunotherapy at the College of Medicine. Dr. Mariani is currently an Associate Professor of Neurology & Neurosurgery at North Carolina State University, where he directs the Comparative Neuroimmunology and Neurooncology Laboratory. His professional interests include epilepsy, inflammatory brain disease and brain tumor therapy.
owner admitted that the dog was aggressive and therefore kept permanently muzzled and often kept in a cage in the backyard. Neighbours claim the dog was never walked. The dog had previously attacked two friends of the owner, less than a year prior to the fatal attack, causing significant injuries that required hospitalization of one of the victims. Police notified the City but there was no follow-up to this incident. Later, the Coroner’s report indicated that Mrs. Vadnais’ death could likely have been prevented by municipal authorities properly enforcing the bylaw already in place prior to BSL.

The fight against BSL
Shortly after the fatal mauling of June 8, both the city of Montreal and the provincial government announced that they would be looking into banning ‘pit bulls’. The Montreal SPCA responded with government lobbying efforts and the launch of evidence-based solution oriented public education programs. These included a ‘Safer, Kinder Communities campaign that provided facts on dog bites, dispelled BSL, provided tips on dog bite prevention, outlined procedures for defining dogs as dangerous on the basis of behaviour and expert opinion, and recommended strict penalties for owners of dangerous dogs, regardless of breed.

Despite these efforts, a new animal control bylaw that included BSL was adopted on September 27, 2016, coming into effect on October 3.

Montreal’s municipal by-law affected:
• ‘At risk dog’: bites or attacks / attempts to bite or attack / exhibits behaviour susceptible to jeopardize the safety of person or animal
• ‘Dangerous dog’: causes death of a person or animal / ‘at risk dog’ who is declared dangerous
• ‘Pit bull type dog’: American Put Bull Terrier / American Staffordshire Terrier / Staffordshire Bull Terrier / Any mix of these breeds / Any dog presenting several morphological characteristics of dogs listed in 1 and 2
• ‘Prohibited dog’: Dangerous dog / Pit bull type dog whose owner doesn’t have a special permit

Special permit requirements were implemented for owners of ‘Pit bull type dogs’:
• Proof of sterilization, vaccination, microchip
• Proof of negative criminal background check (no weapons, drug or violence offences in the last 5 years)
• Proof that the dog was owned prior to October 3, 2016 and that the owner was a resident of Montreal
• Payment of a $150 annual fee
• Non-transferable except in the case of death
• PBTĐ must be muzzled at all times until a special permit is obtained

Additional special conditions and restraints for ‘Pit bull type dogs’:
• Muzzled at all times when outdoors
• Leashed at all times except in dog park or fenced in area with 2m high fence
• Special permit immediately revoked, and euthanasia of the dog automatically ordered in case of non-compliance
• No special permit for 3 dogs available if one of the dogs is a pit bull type dog (PBTĐ)
• Shelters cannot place a PBTĐ into adoption
• If a PBTĐ becomes a stray, it cannot be reclaimed by the owner

Arguments against BSL
1) Lack of scientific basis:
• Historical evidence on dog attacks does not show any evidence that breed predicts dangerousness of a dog.
• In Canada, fatal dog attacks from 1990-2007 (total of 28 cases) included 7 cases involving Huskies/Husky mixes/ Malamutes; 5 cases of Rottweilers/Rottweiler mixes and 1 case each of an American Staffordshire Terrier, Chow Chow, Border Collie, Bull Mastiff and Labrador. Breeds of the remaining dogs were unknown.
• The problem with breed-specific statistics is that breed may not accurately be recorded, and most dogs are mixed breeds. Also, dogs from large popular breeds tend to be overrepresented.
• Majority of canine behaviour experts and veterinary bodies oppose BSL.
• The Canadian Veterinary Medical Association (CVMA) position statement supports dangerous dog legislation provided that it is not discriminatory of a specific breed.
• The American Veterinary Society of Animal Behaviour (AVSAB) position is that BSL is ineffective and can lead to a false sense of community safety as well as welfare concerns for dogs identified (often incorrectly) as belonging to specific breeds.
• BSL has been found to be ineffective in decreasing incidence or severity of dog bites

2) Unfairness:
• BSL is unfair to responsible dog owners whose dogs have no history of aggressive behaviour, as it imposes restrictions on these dogs. The restrictions increase the relinquishment rate of these dogs.
• Adoption of targeted dogs is prohibited. This leads to euthanasia of healthy and behaviourally sound dogs in shelters.

3) Costs:
• BSL results in costs related to the seizure and impoundment of dogs and to costs incurred for litigation.
• It takes funds away from evidence-based programs to help enforce animal control bylaws and animal welfare legislation, publicly-funded low-cost spay and neuter services, and school education programs.

4) Unenforceability:
• Enforceability of BSL depends in the ability to correctly identify targeted dogs. Studies have shown that visual breed identification is highly unreliable.
• DNA testing is the only objective tool available to determine breed.

Test your skills at visual breed identification!

The black dog on the left is a mix of Saint Bernard, Alaskan Malamute, Irish Setter and Bull Terrier.

The white and black dog on the right is a mix of Chinese Shar-Pei, Siberian Husky, Labrador Retriever and Border Collie.

Montreal’s municipal bylaw: the legal battle
The Montreal SPCA filed an application for stay and judicial review of the BSL bylaw, asking for an emergency suspension of the contested bylaw provisions and declaring that the contested provisions were illegal, null and without effect. Key legal arguments included:

1. Contested provisions go beyond the scope of the City’s legal power. (Enables the impounding and elimination of animals who are not, in fact dangerous)
2. Contested provisions conflict with provincial law. (Civil Code of Quebec recognizes animals as sentient beings that have biological needs. Muzzling at all times and forced euthanasia for all PBTĐ dogs interferes with their biological needs and welfare)
3. Contested provisions are vague and imprecise. (Visual breed identification is unreliable)
4. Contested provisions are arbitrary and unreasonable. (Systemically apply treatment reserved for ‘dangerous dogs’ to all dogs fitting the description of PBTĐ)
5. Contested provisions violate both the Canadian Charter and the Quebec Charter.
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In response to the SPCAs application, the Quebec Superior Court issued a stay (suspension) of the bylaw on October 5, 2016, acknowledging that the City may indeed have exceeded its powers and that there was risk of serious or irreparable harm if the provisions were not suspended. The stay was then partially reversed by the Quebec Court of Appeal on December 1st. The contested provisions came back into effect, but the deadline to obtain a special permit was pushed to March 31, 2017. Hundreds of confused dog owners contacted the City to determine whether their dog was targeted or not! Many veterinarians simply refused to identify dogs’ breed. The City responded by holding ‘pit bull identification clinics’ during which ‘experts’ visually examined dogs and issued certificates.

The Montreal SPCA then implemented a policy to not allow adoption of dogs 20kg or more in Montreal. Instead, these dogs would be sent for adoption outside Montreal or sent to rescues. Further, they made a decision to terminate the canine component of their animal services contracts.

Municipal elections were held on November 5, 2017 and the main opposition party ran an animal-friendly, anti-BSL platform. This Party - Projet Montreal - won the election. Initially, they suspended BSL; later it was fully repealed.

**Bill 128 in Quebec**

Bill 128 was introduced in April 2017. In it were provisions governing dogs whose behaviour causes them to be a risk for public safety. In the Bill, certain breeds were deemed to be ‘potentially dangerous’; these included American Pit Bull Terriers, American Staffordshire Terriers, Staffordshire Bull Terriers, Rottweilers and cross-bred or hybrid dogs. Bill 128 only protected dogs that were already owned on the date the ban was put into effect and the adoption of targeted dog was prohibited after that date. Since many shelter dogs would have at least one of the targeted breeds in their DNS, the impact was that hundreds of thousands of dogs would be abandoned in shelters every year across Quebec and the Bill increased this because restrictions on owned dogs increased the relinquishment rate and targeted dog snow had to be sent outside the province for adoption and there was simply not enough resources for this. This put the burden on shelters to euthanize healthy and behaviourally sound dogs.

The Montreal SPCA launched the ‘My dog, My family’ campaign to raise public awareness about BSL. They also presented evidence that any legislation aimed at reducing the incidence of dog bites should focus on owner responsibility and education of the public, rather than on breed specific measures. Scientific literature was presented to show that any dog, regardless of breed, can be dangerous due to aggression resulting from factors such as inadequate socialization, improper training and being unsterilized.

At last, in June 2018, Quebec abandoned the ban on Pit Bulls, deeming that “there is no scientific consensus that the idea of going so far as the designate a ban on a specific breed is applicable...”. CVP

**Sophie Gaillard B.A., M.SC (A), B.C.L., LL.B.** joined the Montreal SPCA in 2013, after having graduated from McGill University’s Faculty of Law and articling at the Crown prosecutors’ office in Montreal. In her role as director of animal advocacy, she supervises the Montreal SPCA’s cruelty investigations division, as well as acting as a liaison with prosecutors and other law enforcement. Sophie also works on initiatives to strengthen animal protection legislation at the municipal, provincial and federal levels. She is named one of the instigators of the Animals are not Things manifesto which led to the adoption of a new disposition in the Civil Code of Quebec recognizing animals as sentient beings.

**The red, cloudy and painful eye: uveitis, glaucoma and cataracts**

**HALIFAX, NS** – Having the highest blood flow by weight of any organ, the eye is the ‘window’ to systemic information about the body said David A. Wilkie DVM, MS, Diplomate ACVO, presenting at the Atlantic Provinces Veterinary Conference. Speaking about the red, cloudy and painful eye, the focus of Dr. Wilkie’s talk was on uveitis, glaucoma and cataracts. He also presented on corneal, eyelid, retinal and feline diseases in other lectures.

**Anterior uveitis**

Clinical signs of anterior uveitis include miosis, flare, redness, photophobia, pain, keratic precipitates and hypopyon. Etiologies can be either ocular or systemic. There are four primary ocular causes, and these should be ruled out first. Ocular causes are corneal ulceration, lens-induced causes, ocular trauma and primary ocular neoplasia. If a primary etiology is ruled-out, then an ocular manifestation of a systemic disease must be considered. Systemic etiologies include, but are not limited to, bacteremia, viremia, or septicemia, systemic mycosis, autoimmune diseases, abherent parasitic migration, or metastatic neoplasia. A complete physical examination of the patient is essential as is a travel history. In approximately 50% of cases, when a primary ocular etiology is ruled-out, in both dogs and cats, there is a systemic infectious or neoplastic disease causing the uveitis, advised Dr. Wilkie.

When examining a patient for uveitis it is useful to find out about their local environment and ask about travel history. Canine uveitis of a systemic etiology is most often caused by idiopathic or immune-mediated diseases (58%), neoplasia (24.5%) and systemic infectious disease (17.5%). Differentials may include systemic mycosis, tick-borne diseases, lymphosarcoma, histiocytic sarcoma, multiple myeloma, uveo-dermatologic syndrome, abherent parasitic migration, protothecosis, bartonellosis, infectious canine hepatitis, Brucella canis, and Lyme disease.

**Glaucoma**

The first things to determine when examining a patient with glaucoma are:
- Is the glaucoma primary or secondary?
- Is it acute or chronic?

Primary glaucoma is not associated with any other ocular disease and has no antecedent cause. It is generally seen in predisposed breeds:

**Dog presenting with photophobia**

**Dog with hystiocytic sarcoma**

Dr. Wilkie said that intraocular neoplasia is classified as primary or secondary. Melanoma, adenoma/adenocarcinoma and spindle cell sarcoma (cat) are primary; lymphosarcoma, carcinoma and sarcoma are the most common secondary types. The most commonly seen metastatic canine intraocular tumours are lymphoma (42%), histiocytic sarcoma (24%) and carcinoma (10%), followed by melanoma (7%), hemangiosarcoma (5%) osteosarcoma (3%) and other tumour types (9%).

For feline uveitis, systemic etiologies are similar to the canine and include idiopathic / immune-mediated, metastatic neoplasia and systemic infectious disease with infectious etiologies more frequent than in the canine. A cat presenting with uveitis may have one or more feline infectious disease including FELV, FIP, Toxoplasmosis, FIV, Crypto, or Bartonella.

Diagnostic evaluation for anterior uveitis with a systemic etiology involves taking a detailed history of the patient to determine environment, travel history, duration and progression of the disease, performing a thorough physical examination, and complete blood count including WBC count, differential and platelet count. Other diagnostic tests can include a biochemical profile, serology, radiology, ultrasound and cytology/histopathology. It’s important to remember co-infections when performing serology, Dr. Wilkie noted.

Common ocular sequelae of anterior uveitis include anterior and/or posterior synchia, cataract, glaucoma, retinal detachment, blindness and phthisis bulbi.
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Patients are predisposed to bilateral involvement, with a 50% risk in the contralateral eye within 2 years. Dr. Wilkie instructed that the unaffected eye requires prophylactic topical therapy and frequent IOP monitoring.

Secondary glaucoma is the result of some other event in the eye which results in a decrease in aqueous humor access to the drainage angle and a decrease in outflow. Etiologies are anterior lens luxation, synechia, uveitis, and pre-intral fibrovacular membrane (PIFM). PIFM results from chronic uveitis, intraocular neoplasia, or retinal detachment/degeneration. A common feature of all of these is angiogenesis.

Acute glaucoma needs immediate treatment. Redness, deep corneal vessels, dilated pupil and diffuse corneal edema may be evident. Initial treatment can include a topical prostaglandin such as latanoprost, an osmotic agent and a topical mydriatic. Maintenance therapy often consists of topical latanoprost, oral antiglaucoma medications, and frequent IOP monitoring. For best outcomes, the practitioner should perform early intervention. Patients are predisposed to bilateral involvement, with a 50% risk in the contralateral eye within 2 years. Dr. Wilkie noted that for owners interested in potentially considering cataract surgery for their animal, referrals to specialist should be done early. For best outcomes, he said, the practitioner should refer early immature and all cataracts that are progressive.

Cataract

Cataracts are generally of hereditary or metabolic (diabetes mellitus) etiology in the canine, secondary to uveitis in the feline, or due to traumatic, toxic, nutritional, radiation or electric causes in either species. The cataract location can be capsular, cortical, nuclear, or equatorial, with equatorial and anterior cortical the most likely to be progressive. Cataracts are categorized by age of onset as congenital (at birth), developmental (<6 yr) or senile (>6-9yr) and by severity as incipient, immature, mature and hypermature. As cataracts progress from immature to mature or hypermature they are associated with inflammation, vitreous degeneration, retinal detachment and secondary glaucoma. Dr. Wilkie explained that vitreous degeneration will be seen in about 20% of hypermature cataracts, and less frequently in immature and mature cataracts. Retinal detachment is also most frequently seen in hypermature cataracts (12-15%) and in some immature and mature cataracts. Ocular ultrasound can be used to assess for vitreous degeneration and/or retinal detachment. An electroretinogram can be performed prior to cataract surgery to assess retinal function.

There are 3 treatment options for vision significant cataracts

2. Anti-inflammatory treatment: no surgery. (failure 4x greater than #1)
3. No treatment: no surgery. (failure 25% greater than #1 and 65x greater than #2)

Dr. Wilkie noted that for owners interested in potentially considering cataract surgery for their animal, referrals to specialist should be done early. For best outcomes, he said, the practitioner should refer early immature and all cataracts that are progressive.

References:
2. Coplow: Comparative Ocular Pathology Laboratory of Wisconsin

David A. Wilkie D.V.M., M.S., Diplomate A.C.V.O., obtained his D.V.M. degree in 1984 from the University of Guelph. He spent one year at the University of Pennsylvania as an intern and, in 1985, he began a 3-year residency and Masters degree in comparative ophthalmology at the Ohio State University. He received both his Masters degree (MS) and ophthalmology specialty boards (ACVO) in 1988. He was hired in 1988 as an Assistant Professor in the Department of Veterinary Clinical Sciences at The Ohio State University, was promoted to Associate Professor and then to Professor of Veterinary Ophthalmology. He served as the Department Chair of Veterinary Clinical Sciences from 2015-2018. In addition, Dr. Wilkie served a Professor in the College of Medicine at The Ohio State University. He is currently Professor Emeritus at The Ohio State University.

Dr. Wilkie has trained 21 residents who are Board Certified in the American College of Veterinary Ophthalmologists or the European College of Veterinary Ophthalmologists and 3 Diplomates in Japanese Comparative Ophthalmology. In addition, Dr. Wilkie has provided advanced training in ophthalmology to 20 graduate students and over 34 veterinarian ophthalmologists from 12 countries.

Dr. Wilkie is author of 103 articles, 104 abstracts and 46 textbook chapters, and serves as a research consultant to numerous national and international research facilities. He has served as an editor of several textbooks and is currently a reviewer for 25 Veterinary and Human ophthalmology and research journals and serves on the Editorial Board of 9 Veterinary and Human ophthalmology and research journals. He is the past chairperson of the American College of Veterinary Ophthalmologists, Examination Committee and Past-President for the American College of Veterinary Ophthalmologists. Dr. Wilkie currently serves on the American College of Veterinary Ophthalmology Foundation board. In addition, Dr. Wilkie has served on the Editorial Review Board and as Associate-Editor for Veterinary Ophthalmology. Dr. Wilkie is currently the Editor and Chief of the Journal of Veterinary Ophthalmology. He is an international speaker having presented seminars in the USA, Canada, Japan, Austria, Germany, Belgium, Italy, Spain, Norway, Denmark, Netherlands, Great Britain, Russia, Slovenia, Finland, Ireland, Taiwan, Thailand, China, Portugal, Switzerland, Israel, Slovakia, Hungary, South Korea and the Czech Republic. Dr. Wilkie is a respected teacher both at the University and internationally. He has twice been nominated for the Norden Distinguished Teacher Award and for the Merck/AgeVet Award for Creativity in Teaching. He received the Omega Tau Sigma Alumni Gamma Award in 2000, the Dr. Charles W. Fox Award for Distinguished Teaching in 2012, and the National Gamma Award for Distinguished Service in 2014 at Ohio State University. He was awarded
the North American Veterinary Conference - Equine Speaker of the Year Award in 2013. He has been twice nominated for the AAVC Faculty Achievement Award (2016/2017) and received this award in 2017.

Dr. Wilkie’s areas of interest include ocular surgery, inflammatory diseases of the eye, ocular pharmacology, cataract surgery, intraocular lens implantation, glaucoma, and comparative ophthalmology. He is married to Dr. Susan Johnson, a Professor in small animal internal medicine, and they have 2 children in university. In addition to work, Dr. Wilkie plays hockey and enjoys downhill skiing, wilderness canoeing, windsurfing, scuba diving and life at the cottage in Canada.

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**Canadian Veterinary Medical Association News**

By Tanya Frye, Manager, CVMA Communications and Public Relations

The CVMA’s advocacy and resources can help make you more successful. This information is provided to update you on the CVMA’s recent activities and resources across Canada.

Don’t miss out on this great joint congress between CVMA and the World Small Animal Veterinary Association from July 16 to 19, 2019 in Toronto. Register here: wsava2019.com/registration.

CVMA was invited to present at the House of Commons Standing Committee on Agriculture Presentation on Public Perception of Canadian Agricultural Sector. Dr. Henry Ceelen, CVMA’s National Issues Committee chair, stated the veterinary profession has a responsibility to help ensure public perception of the agri-food system remains positive. In March, CVMA was one of 30 representatives from government, industry and academia that participated in a Vector Borne Disease Surveillance Workshop, convened in Winnipeg by the Canadian Animal Health Surveillance System. The National Farmed Animal Health and Welfare Council and the Canadian Food Inspection Agency (CFIA) co-sponsored the workshop, which was preceded by an interdisciplinary symposium on vector-borne diseases.

CVMA submitted comments to Health Canada during the Open Consultation on Cannabis Edibles/Extracts/Topicals, which were originally sent in January 2018: 1) Sale and access of cannabis for medical purposes: CVMA strongly urges Part 14 of the Cannabis Regulations – Access to Cannabis for Medical Purposes be amended to allow veterinarians to provide necessary medication to their patients, while maintaining an arms-length oversight on its dispensing. 2) CVMA requests a warning statement on THC-containing products.

CFIA published amendments to the Health of Animals Regulations on Animal Transportation in February 2019. CVMA welcomes the amendments, but acknowledges the complexity of the topic, and feels some sections could have been improved with more discussion; the regulations on compromised animals will place some animals at risk of suffering.

CVMA created the Guidelines for Veterinary Antimicrobial Use online platform to help Canadian veterinarian’s decisions on antimicrobial use in animals. Access the platform using canadianveterinarians.net/AMU-UAM. Send comments/questions about the online platform to AMU-UAM@cvma-acmv.org.

In March, we launched TickTalkCanada.com to help increase public awareness about ticks.

2018 CVMA Practice Owners Economic Survey results are out. The Canadian veterinary economy chalked up a year of modest growth, culminating in a three-year period of overall strong growth.

The 2019 Report on Veterinarians in Government, Industry and Academe is now available. Find the complete report under the Practice & Economics tab of canadianveterinarian.net.
TIPS FROM YOUR VETERINARIAN:
PROTECTING YOUR PET FROM TICK-BORNE DISEASES

TICKS and your pet’s health

Ticks are a health threat both to your pets and to the human members of your family. It’s important to proactively protect your pets from ticks in order to minimize the risk of them contracting serious tick-borne diseases.

- Ticks transmit a large variety of disease agents that can result in illnesses such as Lyme disease, Ehrlichiosis, Anaplasmosis, Rocky Mountain Spotted Fever or Babesiosis.
- Tick-borne diseases are on the rise in Canada.
- It’s important to implement effective tick control protection for dogs and cats. Your veterinarian will be able to recommend the best products for your pet, based on their overall health and lifestyle.
- Signs that your pet may have a tick-borne disease include tiredness and a reluctance to move, muscle and/or joint pain, itchiness, skin irritation, decreased appetite, and fever.

Control of tick-borne diseases

Tick control products prescribed by your veterinarian are the best way to help protect your pet from tick infestation and tick-borne diseases.

Topical tick control products:
The main benefit of topical tick control products is that they work on contact and start to kill ticks before they attach to the dog and begin feeding. If the tick does not bite, it won’t spread disease to the pet. Many topical products also repel ticks, providing an additional measure of security against transmission of disease.

As a pet owner, be aware that although topical products start to kill the ticks on contact and stop them from biting, ticks may remain and even walk on the pet before they die. As well, dead ticks may be found in places such as the family car.

Oral (systemic) tick control products:
Tick control products that are fed to the pet, in the form of a pill or chewable treat, must be absorbed by the pet’s system in order to work. With these products, the tick will attach to the pet and start feeding on its blood, consuming the product that way.

As a pet owner, realize that the tick will still attach itself to the pet, but it will die within a few hours to a day. Transmission of tick-borne diseases takes longer than this, from 24-48 hours, while others may be transmitted faster, within 3-6 hours.

While both topical and oral tick control products will help protect your dog or cat from disease, it’s important to keep in mind that:

- Tick control products should be administered to pets well before exposure to ticks.Ticks will be out throughout the year whenever temperatures are above freezing and patches of grass are visible, even while there is still snow on the ground.
- In addition to being effective, the chosen tick control product must be safe and non-toxic to your pet. Your veterinarian can recommend the best product for your pet.
- Ticks are very small and often go overlooked. Don’t assume that, just because you don’t see them, your pet does not have a tick burrowed underneath its fur.

Where to check your pet for ticks:

Tick bites on dogs may be hard to detect. Signs of tickborne disease may not appear for 7-21 days or longer after a tick bite, so watch your dog closely for changes in behavior or appetite if you suspect that your pet has been bitten by a tick.

To further reduce the chances that a tick bite will make your dog sick:

- Check your pets for ticks daily, especially after they spend time outdoors.
- If you find a tick on your pet, remove it promptly to minimize the chance of disease transmission.
- Reduce tick habitat, such as leaf litter, in your yard.
- Avoid walking your dog in high-risk areas such as deer trails and grassy fields.
How to remove a tick

1. Use fine-tipped tweezers or a tick removal device to grasp the tick as close to the skin’s surface as possible.
2. Pull upward with steady, even pressure. Don’t twist or jerk the tick; this can cause the mouth-parts to break off and remain in the skin. If this happens, remove the mouth-parts with tweezers. If you are unable to remove the mouth easily with clean tweezers, leave it alone and let the skin heal.
3. After removing the tick, thoroughly clean the bite area and your hands with rubbing alcohol or soap and water.
4. Never crush a tick with your fingers as this may result in exposure to infectious material.
5. Save the tick for identification by putting it in a jar with rubbing alcohol, placing it in a sealed bag/container, or wrapping it tightly in tape.

Reporting ticks

All ticks found on pets should be reported to the Pet Tick Tracker at www.petsandticks.com/tick-submissions. This is a surveillance study designed to track the presence and spread of ticks on pets in Canada. No personal information will be asked and you will not be contacted after entering data.

Information you will be asked to provide includes what type of animal the tick was removed from, location of the tick on the pet, number of ticks that were found on the animal, the date the tick was removed, location the tick was likely picked up by the pet, the species of tick, if known, and a photo of the tick if available.

Additional resources
www.petsandticks.com
www.ticktalkcanada.com

This veterinary toolkit on Ticks and Your Pet’s Health is provided with support from Virbac Animal Health as part of their commitment to excellence in pet care.

This veterinary toolkit was reviewed by Dr. Susan E. Little, DVM, PhD, DACVM (Parasitology). Dr. Little serves as Regents Professor and the Krull-Ewing Chair in Veterinary Parasitology at Oklahoma State University’s Center for Veterinary Health Sciences.

Dogs with a large number of attached ticks should be taken to their veterinarian for chemical tick removal.

Keeping the tick for identification is important. If the pet or the person who removed the tick from it develops signs of a tick-borne disease, knowing the type of tick may assist with prompt diagnosis and treatment.

### Ticks found in Canada

<table>
<thead>
<tr>
<th>Tick Species</th>
<th>Adult Male</th>
<th>Adult Female</th>
<th>Habitat</th>
<th>Disease Transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black-legged tick a.k.a. Deer tick</td>
<td><img src="image1.png" alt="image" /></td>
<td><img src="image2.png" alt="image" /></td>
<td>Needs moist habitats to survive. Prefers leaf litter (wooded areas) but can be found in tall grasses too</td>
<td>Lyme disease, Anaplasmosis, Babesiosis, ...a few others</td>
</tr>
<tr>
<td>American dog tick</td>
<td><img src="image3.png" alt="image" /></td>
<td><img src="image4.png" alt="image" /></td>
<td>Hardier than the deer tick &amp; can survive in drier habitats where there are tall grasses (open fields)</td>
<td>Rocky Mountain Spotted Fever (RMSF), ...a few others</td>
</tr>
<tr>
<td>Brown dog tick</td>
<td><img src="image5.png" alt="image" /></td>
<td><img src="image6.png" alt="image" /></td>
<td>Needs warm, protected indoor locations where there are dogs (its preferred host). Doesn’t like our cold climate but has been seen in several areas in Canada</td>
<td>RMSF, Babesiosis, Ehrlichiosis</td>
</tr>
<tr>
<td>Lone Star tick</td>
<td><img src="image7.png" alt="image" /></td>
<td><img src="image8.png" alt="image" /></td>
<td>Wooded areas, especially in second-growth forests with thick underbrush; also found in transition zones between forests &amp; grasslands</td>
<td>Ehrlichiosis, RMSF, ...a few others</td>
</tr>
</tbody>
</table>

If you suspect that your pet has been bitten by a tick, your veterinarian will be able to test for disease transmission and administer appropriate treatments. Vaccination to prevent Lyme disease in dogs is also available.
It’s that time of the year when we receive large packages couriered to us from our accountants, filled with our financial reports. But it’s the spring, the busiest time of the year for most of us, so if you’re like me, you sign any documents your accountants need and put the reports away telling yourself that you’ll look at them when it slows down. That would be a mistake because your accountant has given you the diagnostic information for you to really understand your business, and since the year is still relatively young you can use this information to improve your business while you still have time to make some changes.

Typically, year end financial statements include the troika of income statement, cash flow statement and the balance sheet. These documents tell us different information about our veterinary practices, and yet they are very integrated.

The income, or profit and lost statement, tells the relationship between revenue, or sales, and expenses over the previous year, although you can have these results over any time frame. I look at them monthly and quarterly throughout the year so I can have a close to real time pulse on the health of my practice. This statement tells us how much revenue, or sales, we have and how we spent these proceeds on the day to day operations of our business. For example, we can analyze how much we have spent on medications, or payroll, or the fixed expenses we need to just open our doors, like insurance, rent, advertising, etc. The income statement is a great tool for comparing a particular section of expenses as a percentage of total revenue, so that you can compare this to industry benchmarks, or compare your results year to year. For example, your payroll might be 33% of total revenue, which may be in line with industry standards, or it might be 2% higher than it was the previous year. Ultimately, the income statement is how your accountant determines how much income, or profit, your business made so they can determine your tax obligation, and how much net income you have at the end of the year.

Your net income for the previous year is then used as the first line of your cash flow statement. Simply put, it tells you more about how you spent or received money over the year. It is broken down into 3 activities: operating, investing and financing activities. Operating activities starts with your net income and adds back non-cash related items from the income statement. The most significant of these is the amortization of equipment and other assets. This is the process where your accountant will write off the value of large equipment or asset purchases over a number of years. It is considered an expense on our income statements, but doesn’t involve the exchange of money; rather, it is an accounting mechanism that reduces our overall profit, so we pay less taxes. In veterinary practices, the most interesting part of the cash flow statement is in the financing activities section. This is where our equipment loans, bank debt payments, and shareholder loans are deducted from cash available from operating activities. If you ever found yourself looking at the net income line on the income statement and asked, “why don’t I have that money in the bank” this is where you need to look. If you have $200,000 in net income and have paid $50,000 back in equipment and bank loans you now know where some of your money went. The last section is investing activities, which would reflect the purchase or sale of capital assets. If you bought a new radiology machine in the past year the amount would show up here. Eventually, we are left with any changes in the cash we have on hand in our business which is the first line on our balance sheet.

The balance sheet reflects the assets in a business against the liabilities and shareholder equity, and as the name applies, they must balance. Assets and liabilities are broken down into current and long term. Current reflects assets that can be sold or collected in a year, like inventory or accounts receivables. Similarly, it shows liabilities that are be paid within the year like accounts payables to vendors, income taxes, HST payments, and the current portion of long-term debt. The long-term sections reflect large assets and their cumulative amortization and remaining long term debt.

Finally, we have shareholders equity which typically is the cumulative retained earnings from the net income part of the income statement. Ultimately, total assets must equal the total liabilities and shareholder equity. The balance sheet is critical for measuring how well you are using assets or managing debt. As well, your banker will review this statement keenly as they assess your mix of assets and debt when you apply for a loan.

A simple way to look at the relationships between these three financial tools is to think of the income statement as the detailed summary of your daily business activities over the year. Without having a business, you don’t have a profit and the amount of profit at the end of the year is used to service equipment debt or pay back loans. Any money left at the end of the cash flow statement has a direct impact on the amount of assets and liabilities you have in your balance sheet. The mix of assets and liabilities will have a profound effect on the ability of your business to borrow money to purchase new equipment or upgrade your hospital, or the value you will receive if you sell your business because buyers typically don’t buy debt. If your business has been valued at $1,000,000 and you have $300,000 of debt you can only expect to receive $700,000.

In the next article, we will look at each of these financial statements and show how you can easily glean key information to help you manage your business better now, and in the future. Consider them as diagnostic tools to help you understand the health of the business and certain diagnostics give us different information. Until then, open up the package your accountant sent you and start looking at how money flows throughout your business and what little actions in your income statement activities can have a huge impact on the flow of money through all of the financial statements.

Prior to becoming a veterinarian, Dr. Mike Pownall worked as a farrier. His interest in equine lameness led him to attend the Ontario Veterinary College, graduating in 2001. In 2002 he and his wife, Dr. Melissa McKee, started McKee-Pownall Equine Services, an organization represented by three equine veterinary clinics with 11 vets and 20 support staff spread across the Greater Toronto Area. He is also a partner with Oculas Insights, offering business education to veterinarians throughout the world.

Dr. Pownall received his MBA from the Richard Ivey School of Business at the University of Western Ontario, and was the class valedictorian. He presents internationally on business strategy, pricing, digital marketing, and technology for veterinarians. He also contributes to numerous journals on business management topics.

You can visit Dr. Pownall’s website at www.veterinarybusinessmatters.com, on twitter @dvmbusiness, and the Veterinary Business Matters Facebook page. The website for McKee-Pownall Equine Services is www.mpequne.com and for Oculas Insights is www.ocularsimnsights.net.
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Bites bite! How to avoid getting bitten

HALIFAX, NS – Animals can be unpredictable; vet techs need to be prepared for the unexpected. No matter what the emergency, take the time to look at the animal and read its behaviour, advised Amy Newfield, CVT, VTS (ECC), speaking at the Atlantic Provinces Veterinary Conference. She said it’s imperative to ensure your personal safety first, as well as the safety of those working with you and the animal.

Avoiding dog bites

No handling is the best policy when dealing with dogs; the more you handle an animal the more chance you have of being injured. It’s best to work with dogs in an enclosed area and to use appropriate restraint devices. Most dogs that bite, do so out of fear and would rather be left alone than attack. However, dogs often give notice, sometimes very subtle, before they become aggressive.

Behaviours that may signal conflict in dogs include:

- Yawning
- Licking Lips, Nose (dry mouth syndrome)
- Staring upwards or away
- Scratching at self
- ‘Smiling’ (teeth are bared, but tucked back against mouth)
- Freezing/Unable to move
- Shaking (wet dog shaking)
- Licking at self
- Rolling over
- Urinating
- Cowpering/tucking tail
- Barking/whining
- Spinning/Tail Chasing
- Play bow
- Some types of aggression or threats

A happy, relaxed dog will come into your space on its own, said Ms. Newfield. Relaxed dogs will have their ears up, the whites of their eyes will not be show-
ing, and their tails will be up. Tail wagging can have many different meanings so it’s important to focus on the head to understand if the dog is happy or not.

To say hello to a dog and judge its behavior, offer an open palm, slightly away from your side. Never reach up over the dog’s head. Instead, let the dog come and investigate you. If the dog continues forward to engage you, they likely want to be in your space. If they sniff you and back off, they likely do not.

If a dog shows any conflict signals, using an appropriate restraint is important for your safety, advised Ms. Newfield. She stressed that muzzling does not hurt a dog. Rather, the dog at the veterinary clinic is likely going to have a medical procedure done that will evoke fear or pain or both – giving it every reason to bite!

Tips on dog restraining techniques

- Never stand in front of a dog when attempting to muzzle the dog.
- Never attempt to deal with a highly aggressive dog by yourself.
- Never use nylon/cloth/woven collars and leashes often provided by the owner as they are never appropriately sized or fastened. Always use a slip lead (ideally two).
- Never yell or scream at a dog. Always act calm and speak to the dog in terms they know.
- Never use physical force to punish a dog. Show appropriate behaviour.
- Never stare or ‘growl’ at a dog. Always barely make eye contact.
- Never grab a dog by its collar. This is the #1 way to get bitten! Use slip leads.

Restraint methods for dogs

Muzzle: Commercial muzzles should be used. Basket muzzles allow the dog to breathe better, feel less constrained and are safer for veterinary personal. You can also make a muzzle out of a roll of rolled gauze, a shoelace or even rope.

Blankets: Large blankets can be used for fractious dogs under 40lbs. A blanket may not protect you from getting bitten.

Elizabethan collar: These can be easily placed on highly aggressive dogs.

Some companies make them using Velcro so you can quickly put them over the dog’s head and secure them in seconds.

Wildlife gloves: Can be used in dogs less than 20lbs and may help protect against bites.

Rabies/catch pole: Can be used on any size dog and is useful when needing to extricate an unwilling dog from a small space, like a dog run, or for a dog that is actively aggressive.

Lying a dog down: Remember to hold the ‘down’ leg. Two people for a big dog.

Ms. Newfield shared some ‘tricks of the trade’ that she uses when dealing with dogs that show signs of aggression:

Aggressive dog in crate: Slowly tip the crate up on its end so the door is at the top. Carefully open the door and loop the leash around the dog’s head. Slowly tip the crate back down to its normal position. Remove the dog. This technique can be done with a rabies (catch) pole as well for large dogs. For small dogs you can take the crate apart. Never reach in!

Fear aggressive dog: Always encourage this type of dog to come out to you. Avoid making eye contact, move slowly and be calm and quiet around the dog. Don’t step in to the kennel of the fear aggressive dog in an effort to “make friends”. Instead consider a catch pole if the dog is in the corner of the run and you are unable to coax it to you.

Short-nosed dogs: Treat more like a cat. Most of these breeds are small (under 20lbs) and you can throw a blanket over them or use an Elizabethan collar. Muzzling is often ineffective due to the lack of nose.

Avoiding cat bites

Cats are faster and more unpredictable than dogs, sometimes giving little to no notice before they become aggressive. Cats often bite and scratch in response to fear. While some cats do better with ‘less’ restraint, all cats should be restrained, stressed Ms. Newfield.

Our primary tool to restrain a cat is by restraining their neck, but not by scruffing them as this usually causes cats to become more aggressive. Keep a gentle hand on the back of their neck. They may walk around while you have a hand on their neck area. Do not use a leash to restrain a cat as it may result in strangulation. At no time should a cat be carried up near your face or hugged like a baby. All cats should be carried like a football, with head and feet restrained. Carrying a cat in a blanket is one of the safest methods. Reading a cat’s behavior is equally as important as knowing how to restrain it, said Ms. Newfield.

Behaviours that may signal conflict in cats include:

- Hissing
- Growling
- Shaking
- Flicking the tip part of the tail quickly back and forth
- Unable to move/frozen
- Hair standing on end
- Ears back
- Hiding

Tips on cat restraining techniques

- Never stand in front of a cat when trying to do any procedure unless someone is there to help restrain the pet.
- Never attempt to deal with a highly aggressive cat by yourself.
- Never yell or scream at a cat. Always act calm and quiet.
- Never use physical force to punish a cat.
- Never let go of a cat’s head. Always have at least one hand on their neck at all times.
- Never place a leash on a cat’s neck. This will likely cause the cat to strangle itself.
Life of a Vet Tech  My unexpected journey as an RVT

Like many of you reading this, my journey into veterinary medicine started from a young age, with a deep love of ALL animals. I grew up on PEI, and when the Atlantic Veterinary College was being built as part of the UPEI campus, I figured they were building it for me, because of course… I was going to be a vet!

I attended UPEI and graduated with a Bachelor of Science in Biology. During the last year or two of my degree, I started to question whether I wanted to pursue being a DVM. I just wanted to get out there and start working with animals and needed to think of options! I came to the conclusion that if I wasn’t going to be a vet, I would go to tech school to become an RVT. With that realization, I continued on with my studies at the Nova Scotia Agricultural College, in their Animal Health Technology program. I’d always had an appreciation for travel, and knew that I wanted to move out to the West Coast. So, a week after my last day of classes of tech school, I flew to British Columbia for some working interviews, and then flew back to the Maritimes to write the VTNE. Within two months, I packed my bags and moved to BC to start my new career, not knowing a soul or where I was going to live, only that I had a job at a veterinary clinic.

I spent the next four years at a small animal practice in Delta that did both general medicine, and canine reproduction. During that time, I was able to build my knowledge base about different diseases and understand how a clinic functions. Part of my duties was meeting with different reps, and I’d often get encouraged to consider working in sales. When I was in tech school, one of the things that really struck me was how flexible an RVT career could be in the future and I wanted to diversify my skill set as much as possible. With that in mind, during my last year at the clinic I worked full time in clinic and also instructed three days a week at a veterinary assistant program in the area.

The trajectory of my career in animal health shifted when I heard about a Territory Manager position available with PetPlan Insurance. It was something that appealed to me because I could see the benefits of pet insurance from the clinic and healthcare perspective, and I liked the idea that I would be talking about a concept that I truly believed in. I was with PetPlan for 6 years, working with clinics all over BC, and it created an amazing chance to build relationships with the clinics/healthcare teams, while promoting the idea of pet health insurance.

After PetPlan, I was offered a sales rep position with Novartis Animal Health, as a Territory Manager. I loved using different sides of my brain, and talking about medicine, diseases, innovation and science! I was passionate about the products that we had in the market, and I was so grateful to be able to work alongside veterinary hospitals. The challenge of sales was definitely fun, but really it was the relationships with the clinics that I thrived on. Six years into my time with Novartis, the company was sold to Elanco Animal Health and I stayed there for another two years as a sales rep.

The next shift in my career as an RVT was leaving the sales side of things altogether, and joining the management team at Associated Veterinary Purchasing (AVP), the buying group for the veterinarians in B.C. It was the first time AVP had hired an RVT to join their team, and the new position was as a Customer Service Manager. My main focus now is to work in the field, partnering with our clinics and customers, representing AVP and our entire team. We deliver services and programs that help contribute to the overall success and growth of the practices we work with.

When I first heard the job description at AVP, it was like my dream opportunity – being a ‘rep’ without the obligation of selling products to clinics as a part of my job. With this new position, I am able to take all of my previous experiences and the skill sets I acquired and wrap these into one amazing role. Now, instead of working with clinics with the end result of them buying something from me, I am able to walk in as a partner in their business and simply ask what we can do to help! I would never have imagined that all of the experiences I had would lead to where I am now, and I couldn’t be happier. It’s vital for RVT’s to know that there are so many different kinds of experiences out there for your career in animal health, and to always be open to new things!

Reducing stress within the hospital is important. Having a separate waiting area for cats/dogs, where they cannot hear, smell and see each other is recommended.

Over the cat’s carrier to reduce stress.

With dogs, have puppies come in for free visits to desensitize them early in life! Let the puppy hang out in an exam room and meet someone with a white coat - who gives them treats.

For the older dog, getting them into a room is key to reducing environmental stressors. Treats can be offered, and praise is helpful. Dogs are generally more manageable than cats, but Ms. Newfield said that if needed, they do make a pheromone infuser to help destress dogs.

Use of pheromones (Feliway), catnip, warm towels, dim lighting and quiet rooms can all help to decrease stress in cats. Encourage owners to bring in kittens to get used to the sights and sounds of the hospital. Have them explore exam rooms. Offer treats and playtime. Let the staff in white coats handle them. Let owners know that top drop plastic carriers are best and covering the carrier in a towel reduces stress. Ms. Newfield advised having a closed kennel area in the hospital for just cats, with infusers. She said keeping the area warm and sprinkling catnip will help, as will ensuring that cats are not facing other animals and using privacy curtains. Less stressed cats mean less bites and injury to staff members.

Ms. Newfield concluded by reminding vet techs that by decreasing stress in dogs and cats, they can work with them better to reduce their suffering and increase our safety. CVP
There are many reasons that body temperature decreases under anesthesia, explained Tasha McNerney BS, CVT, CVPP, VTS (anesthesia), presenting at the British Columbia Veterinary Technologists Association Spring Conference. Perioperative and postoperative hypothermia is a serious complication that should be proactively prevented and treated. There are strategies that vet techs can use to help maintain a patient’s body temperature while under anesthesia.

Normal body temperature for dogs is 38.3 to 38.8 °C. For cats, normal body temperature range is 38 to 39.2°C. Hypothermia occurs when the body temperature drops below 36.0 °C.

Why does body temperature decrease under anesthesia?
There are many reasons that body temperature decreases under anesthesia, including drugs that cause vasoconstriction (such as acepromazine, Propofol, and inhalants) and allow for heat loss at the extremities and limbs, open body cavities during surgical procedures, cold (room temperature) intravenous fluids, and a cold environment in the operating room. It is also important to remember that small patients lose heat faster because the body surface area is proportionately greater than the surface area of larger patients. Also, patients on non-rebreathing systems or circle systems with high flows of oxygen (which is cold and dry) will expend more energy warming and humidifying this gas. All of these factors cause heat loss that can lead to hypothermia, said Ms. McNerney.

There are three phases of heat loss:
1. An initial decrease in temperature due to vasoconstriction.
2. A progressive linear decline in temperature.
3. A vasoconstrictive response occurs, reducing blood flow and therefore heat distribution.

After the initial decline due to vasoconstriction, temperature continues to fall until vasoconstriction reduces blood flow, and therefore heat distribution, to the periphery. The morbidity associated with these stress responses most typically occurs during the postoperative period. Hypothermia impairs platelet function, decreases activity of the coagulation pathways, and increases fibrinolysis. Post-anesthetic shivering results in increased oxygen consumption during recovery (when most animals are no longer on 100% O2).

Monitoring body temperature in the post-operative period
Ms. McNerney stressed that a low temperature must be vigilantly watched in the post-operative period, as hypothermia contributes to decreased ability to process anesthetic drugs, and therefore prolonged recovery from anesthesia. She said the ACVA recommendation is: “Temperature should be measured periodically during anesthesia and recovery and if possible, within a few hours after return to the wards.” She advised that body temperature should be monitored at least every 15 minutes during anesthesia, using a thermometer. A thermometer probe in the rectum or esophagus allows for constant temperature measurement. Accidental placement in the stomach or mouth can reduce the accuracy of a core body temperature. Digital thermometers are preferred as mercury thermometers are fragile and, if broken, cleanup of mercury is hazardous.

While monitoring body temperature, it is important to adjust vaporizer settings and anesthetic doses in order to minimize anesthetic complications of hypothermia. A drop of 2°F can decrease the minimum alveolar concentration (MAC) by 5%. MAC is most commonly used to describe the anesthetic potency. The lower the MAC, the higher the potency of the anesthetic gas.

Preventing and treating hypothermia during the intraoperative period
One of the most widely used products for preventing and treating hypothermia during the intraoperative period is the Bair Hugger®. The Bair Hugger® warms patients by blowing warm air through porous blankets to surround the patient in warmth. It also has a feature that uses warm air to actively warm IV fluids. Blankets for the Bair Hugger® are available in many sizes and can be used under the patient or over top of patient to warm. Body temperature must be monitored while using these devices as they can increase temperature rapidly, cautioned Ms. McNerney.

The Hot Dog® warming blanket uses a reusable, easy to clean, heavyweight nylon ‘blanket’ that is flexible and puncture resistant. It can be used over, under, or wrapped around the patient. The flexible blanket features electrically conductive fabric for even heat distribution. Ms. McNerney commented that an advantage of the Hot Dog® over the Bair Hugger® is that there is no blowing air on the surgical site, and it won’t dry out EKG leads.

Many practices choose to warm their IV fluids; warmed fluids must be used with caution. If fluids are warmed in the microwave, temperatures can become damaging to tissues. Devices are available to provide a more controlled temperature for IV fluids. One such device is the I-Warm IV Fluid Warmer using dry heat exchange, the I-Warm quickly brings the temperature level of the fluid up to that of the patient.

The oxygen flow rate plays a large role in temperature regulation while under anesthesia. Fresh gas delivered to the breathing circuit is cold and dry. The gas is then heated to body temperature upon entering the lungs and humidified via the vaporization process. If lower fresh gas flows are utilized, the loss of heat and moisture is minimized. This humidification and warming of anesthetic gases can also have a significant influence on the function of the ciliated epithelium of the respiratory tract. Low flow rates are from 10-15mL/kg/min. Low flow anesthesia has an O2 flow greater than the patients O2 consumption of 4-7mL/kg/min.

There are also passive warming methods that can be used on patients, especially during the pre-operative and recovery periods. Bubble wrap can be used to help keep the patient’s own body heat close by trapping it within the bubbles. Additionally, blankets and towels warmed in a dryer can be used to preemptively warm patients while they are awaiting their surgical procedure.

Patients that do suffer from hypothermia will also have a prolonged recovery period because these patients will have slower drug clearance, cautioned Ms. McNerney. All attempts should be made to return the patient to normal temperature. She said it’s important to take rectal temperature readings until the patient is normothermic. Temperatures can be obtained axially or aurally if peri-rectal surgery has been performed.

Summary
To conclude, Ms. McNerney emphasized that intra-operative hypothermia must be prevented and aggressively treated when it develops. She said there are many options on the market available to help maintain a patient’s body temperature while under anesthesia. CVP


Tasha McNerney CVT, CVPP, is a Certified Veterinary Technician from Glenside, PA. She is also a certified Veterinary Pain Practitioner and works closely with the IVAPM to educate the public about animal pain awareness. Tasha became a veterinary technician specialist in anesthesia in 2015. She loves to lecture on various anesthesia and pain management topics around the globe. In her spare time, Tasha enjoys reading, spending time with her son, and waiting patiently for the next season of Game of Thrones to return.
2. Transmission:

Visceral pain and secondary hyperalgesia. These changes can also recruit non-noxious signals that propagate, they ‘windup’, producing prolonged responses to painful stimuli such as Substance P and activate NMDA and NK receptors. As these signals contribute to stimuli in the spinal cord. This contributes to secondary hyperalgesia and painful sensations outside the territory of the original tissue damage.

Normally, slightly noxious stimuli are transmitted to the dorsal horn of the spinal cord and brain and perceived as pain, explained David Liss, RVT, speaking at the Atlantic Province Veterinary Conference.

The four basic steps of the pain signal cascade involve:

1. Transduction: The alteration of chemical signals into electrical signals by nerve endings.
2. Transmission: The movement of the pain signal in an afferent (towards the CNS) direction.
3. Modulation: The uptake and processing of the pain signal in the dorsal horn of the spinal cord.
4. Perception: The ultimate interpretation of the pain signal at the level of consciousness by the brain.

Types of pain

Physiologic pain is a pain signal sent to the CNS and processed relatively normally. A sharp prick or poke would result in a response typical of any creature defending itself and would not last indefinitely.

Physiologic pain consequences can tax the body and involve multiple organ systems including the cardiovascular, pulmonary, gastrointestinal, renal, endocrine, nervous and immune systems. See Chart 1.

Pathological pain involves a deranged diseased response to a stimulus; it is the majority of pain treated in veterinary medicine. Several mechanisms, such as peripheral and central sensitization, and ‘windup’ phenomenon, contribute to a prolonged, exaggerated response to a painful stimulus. Mr. Liss described that locally, at the area of tissue damage, many inflammatory mediators are released to facilitate blood flow, WBC mobilization, and to perform other signaling duties. All of these chemicals create an ‘inflammatory soup’ and terminal endings of nociceptors lie in that soup. Peripheral nociceptors become increasingly sensitive to signals - altering the amount and amplitude of signals sent to the CNS.

Primary hyperalgesia occurs as the nerves are damaged and are exposed to the inflammatory soup, and this damage and heightened sensitivity to signals can spread to surrounding tissues, termed secondary hyperalgesia. These heightened responses occur as a result of the inflammatory soup and this produces neuroplastic changes in nociceptors, changing some of the high-threshold fibers into low-threshold fibers, and activates silent and sleeping nerve endings/nociceptors.

Central sensitization occurs with changes in the excitability and response to stimuli in the spinal cord. This contributes to secondary hyperalgesia and painful sensations outside the territory of the original tissue damage. Normally, slightly noxious stimuli are transmitted to the dorsal horn of the spinal cord by Aδ and C fibers and mediated by glutamate (excitatory) acting on AMPA and KA1 receptors. This signaling is modulated additionally by GABA and glycine (inhibitory) released to dampen the signal. Pathologic pain signals or chronic signals activate additional excitatory neurotransmitters such as Substance P and activate NMDA and NK receptors. As these signals propagate, they ‘windup’, producing prolonged responses to painful stimuli and secondary hyperalgesia. These changes can also recruit non-noxious nerve fibers (Aβ) fibers to now contribute to and carry nociceptive signals. Visceral pain seems to be mediated by Aδ and C fibers traveling along sympathetic and parasympathetic networks to organs. Viscera do not seem to have nerve endings with nociceptive specificity. Mr. Liss explained that this means that much input from trauma/damage/disease in organs is not sent to the CNS for processing. Clamping or cutting directly into viscera produce little response, but diffuse processes (peritonitis) produce severe pain.

Recognizing pain in dogs and cats

Many behaviors can indicate pain in dogs and cats and, to some extent, response to pain is individualistic, noted Mr. Liss. He said that, in general, patients that have an abnormal body posture, abnormal gait, abnormal movement and/or vocalizing can be considered to be in pain. See Chart 2.

Using pain scales to assess pain

Although behaviours such as having abnormal body posture or vocalizing are proven signs that an animal is in pain, they are still highly open to interpretation as to the degree of pain being experienced. Pain scales help objectively the level of pain in our non-verbal patients and help to identify pain in patients where it might be overlooked, such as with cats or stoic dogs.

Pre-emptive pain scoring can help categorize procedure or disease pain:

- **Minor pain:** is associated with (but not limited to) minor surgical procedures (abscess), dental prophylaxis, ear cleanings and placing of sutures.
- **Moderate pain:** procedures include anal sac surgery, mass removals, cystotomy, ovariohysterectomy, castration and severe laceration repair.
- **Severe pain:** includes ear canal ablation, thoracotomy, fracture repair, limb amputation and exploratory laparotomy.

Mr. Liss acknowledged that many pain scales are available, but he prefers the Colorado State University Canine and Feline Acute Pain Scale. This relies on a 0–4 rating, with 0 being no pain and 4 being severe pain. The scale includes psychological, behavioral, and pictorial descriptions of animals in varying levels of pain. It additionally has a category for response to palpation: this helps to objectively measure a continued response to palpation of an affected body part.

To properly use this pain scale, the staff member should start with a quiet observation of the patient in its cage, while not disturbing or rousing it. After the observation period, the patient should then be handled, and the affected area palpated to assess the response. The scale provides little room for disagreement as it contains very objective language and artist renderings of varying levels of pain. However, it’s important to keep in mind that it lacks solid validation, noted Mr. Liss.

Creating pain plans for individual patients

When constructing a proper pain plan for a patient the veterinary technician must possess some requisite knowledge prior to starting the evaluation.
process. This knowledge includes anatomy, procedural technique, and the available products that can be used for an analgesic effect. As an example, Mr. Liss said that a femoral fracture repair where the practice has the ability to do an epidual might be a much different approach than if a patient is undergoing an ovariohysterectomy and the practice only has buprenorphine.

To develop an appropriate pain plan the veterinary team must ask themselves:
1. What type of pain is being treated (physiologic, pathologic?)
2. What is the location of the pain? Will there be (or is there currently) surgical pain?
3. Visceral or somatic pain?
4. Is there evidence of allodynia, primary or secondary hyperalgesia?
5. Is there peripheral or central sensitization?
6. What is the patient's physical exam and pain assessment like?
7. What medications has the patient been on? Have they been effective?
8. Will you be using allopatic techniques or a combination of allopatic and adjunctive (rehab, massage, TENS, etc.) techniques?

Summary
By understanding pain, we are better able to intercept, treat and block pain for our patients. It’s important to keep in mind that although common signs will help us recognize that an animal is in pain, response to pain can differ and thus an individualized pain plan should be developed for each veterinary patient. Pain scales are useful to help objectify the level of pain a dog or cat is experiencing. And when formulating a pain plan, it is imperative to first gather knowledge about the pain being treated, the patient, and resources available in the clinic. CVP

David Liss, RVT, VTS (ECF, SAIM), CVPM is a renowned technician educator, double board-certified veterinary technician specialist in emergency/critical care and internal medicine, and a certified veterinary practice manager. He has a diverse background in emergency and critical care nursing including lecturing internationally, authoring numerous articles and book chapters, and serving on various technician association committees. He has also received numerous awards including the Veterinary Technician Educator of the Year by Western Veterinary Conference and the Southern California Technician of the Year.

David spent many years in emergency/critical care veterinary nursing and was technician manager at two different 24-hour referral/specialty facilities in the Los Angeles area. David is currently pursuing his Master's degree in Biomedical Science and currently is the Program Director for the Veterinary Technology Program at Platt College in Los Angeles. He also stays clinically relevant by working relief as an ICU technician at VCA Veterinary Specialists of the Valley in Woodland Hills, CA.

TEAM
Enhancing access to quality rental housing for pet owners

MONTREAL, QC – Positive health outcomes have been linked with pet ownership; dog walking is a source of regular physical activity, and dog walks can result in friendly interactions with neighbours and even strangers in public places. Yet, barriers to pet-friendly housing still exist, which can negatively impact human health and animal welfare. In fact, housing issues in public places. Yet, barriers to pet-friendly housing still exist, which can

A total of 28 dog owners, aged 21 to 31, were interviewed for the study. Each of these participants had recently moved into rental housing within Calgary, which is one of Canada’s youngest cities. Most were born in Canada; however, a quarter were born elsewhere before coming to Calgary. Sixteen kept one dog, 5 kept two dogs, and the remaining kept a combination of dogs and cats.

Complementing these interviews, survey responses were received from 24 landlords and 6 property managers, all of whom were pet owners themselves. The number of units rented out by landlords and property managers varied substantially, from one landlord renting out only a basement unit in their own home to a property manager who was responsible for 382 apartment units.

Study on pets in rental housing

The study, led by Dr. Graham and published in 2018 in the journal Animals, compared the perspectives of younger tenants with dogs with those of landlords and property managers. Millennials were chosen for the study given that they are the most interested in desiring home ownership. That said, younger tenants described settling for substandard properties. Before moving in, many were asked to pay non-refundable pet fees, on top of regular security deposits. Rental properties that accepted pets were also typically located in less desirable neighbourhoods with less access to parks and public space for dog walking.

Overall, younger adults had trouble finding a rental that would accommodate their dog(s). Because of this, once they rented a place they generally stayed put for as long as possible, even if they had concerns for their safety or possible eviction.

Landlord and property manager perspectives

Most of the landlords and property managers agreed that pet owners tend to stay longer in their rentals as compared to tenants without pets. Overall, they seemed aware of the difficulties that dog owners face in trying to find rental housing, noting that listings advertised as ‘pet-friendly’ tend to receive more applicants.

Yet, they said difficulties were sometimes realized when renting to pet owners. Although rare, pets had sometimes been kept without permission and neighbours had complained about dogs barking.

Tips to be successful when renting to pet owners

When perspectives were brought together, Dr. Graham presented the following suggestions for improvement:

Meeting pets prior to signing the lease.
• Is the pet well cared for and groomed? Have tenants ensure that their pets are up-to-date on vaccinations and free of any communicable infections or parasites such as fleas.
• How do the owners interact with their pet? Do they take the time to have it properly trained? Pets should be house-trained and well socialized.
• Keep in mind that size is not an indicator of how well a pet will behave in a rental. Larger dogs can sometimes be quieter than smaller dogs.
• Have the pet meet other pets in or around the premise, if they will be interacting on a regular basis.

Get everything in writing*
• Be clear in the terms of the lease as to how many pets are allowed.
• Include up front how nuisances and damages from pets will be dealt with, should they occur. Partner with cleaning services, to help provide resources.
• Note where dogs need to be on leash on the property, and where dogs can

*Dr. Graham shared the following suggestions for improvement:
Case Study: Animal Welfare and Ethical Issues

Ethical Case Study #6: Surgery that does not benefit the health of the pet
The Alberta Veterinary Medical Association (ABVMA) just recently banned unnecessary surgery for pets, joining several other provinces including British Columbia, Saskatchewan, Manitoba, Quebec, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and Labrador. Surgeries banned by the ABVMA include declawing, ear cropping, cosmetic dentistry, devocalization, tattooing not for registration or identification purposes, body piercing and tail docking. The ABVMA voted overwhelmingly in favour to outlaw surgeries that do not benefit the health of an animal.

The ABVMA noted that their decision reflects modern attitudes towards treatment of animals. They said the veterinary profession is changing, and things that were acceptable 40 years ago are no longer acceptable. They explained that tail docking, for example, began in the 18th Century in order to identify working dogs. Then pet owners started having their pets tails cut off, because non-working dogs were longer acceptable. They explained that tail docking, for example, began in the 18th Century in order to identify working dogs. Then pet owners started having their pets tails cut off, because non-working dogs were...
use the bathroom.

- Impose reasonable, pet-related rules. For instance, have tenants ensure that their pets will not be left alone for extended periods of time, which may cause them to become stressed and to act out. Partner with local dog walkers and trainers, to help provide resources.

**Steer clear from furnished units and charge utilities to tenants**

- Steer clear from furnished units since pets may damage furniture and since future tenants may have allergies.
- Charge utilities to tenants with pets since they may leave the lights, heat, or TV on for their pets while they go out.

**Speed up the pet approval process of condominium boards**

- Waiting for pet approval may result in lost rental income. Have clear policies in place when dealing with condominium boards.

**Study summary**

Dr. Graham’s study has the potential to reduce animal relinquishment due to housing issues. Previous research has shown that landlords who are reluctant to open their properties up to pet owners are most concerned over possible damage and nuisance, even if they have never rented to pet owners. All the landlords and property managers who participated Dr. Graham’s study had prior experience renting to pet owners, thus offering useful suggestions for improvement.

Dr. Graham’s study also has the potential to promote housing security for people with pets. Housing discrimination and financial exploit of pet owners needs to be addressed by legislation, noted Dr. Graham. On its own, however, policy change is not enough to reduce the number of animals that are relinquished to shelters every year, she said, nor is it enough to ensure the proper treatment of pets once they are housed. Rather, a number of different strategies and actions are needed to support and enable people to keep and care for their pets when living in rental housing.

Greater collaboration between animal professionals and housing authorities could help tenants as well as landlords and property managers get all the support available, she suggested. For instance, reputable dog trainers and animal behaviourists could help with meeting and evaluating pets prior to signing the lease and could provide services for pet owners once housed. In their neighbourhoods, tenants need access to nearby parks and public space for dogs to get the exercise needed for health and good behavior.

**Conclusion**

A pet is a commitment for life, not a negotiable family member. In order to enhance access to quality rental housing for pet owners, we must strive to ensure that enough housing options exist for families with pets; that pet ownership in rental housing is not restricted by breed or size bans; and that programs and policies are in place that help support responsible pet ownership.

**Dr. Taryn M. Graham** is a research associate in the School of Social Work at York University. She holds degrees from Concordia University (BA), University of Waterloo (MA) and University of Calgary (PhD). Her research looks into the challenges and opportunities that Canadian cities face when it comes to sharing spaces with dogs. Taryn is also the founder of PAWSitive Leadership, a humane education program that teaches kids the life lessons we can learn from dogs. For the past decade, she has been actively involved with numerous animal rescue organizations. She also has experience training dogs.

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**TEAM Social and email marketing can drive digital visibility for your veterinary brand: what you need to know**

Should you market your veterinary practice through email or social media? The answer is simple. Yes! Diversity is a key factor in digital visibility. It may be tempting to streamline your marketing plan by using just one platform. However, that would severely limit your reach.

A strong online presence is no longer an optional part of marketing. Nearly 90 percent of the American population is now online, and they are using the internet more than ever. They are also using technology in more ways, and your practice needs to be wherever people are looking.

Most internet users maintain several social media profiles, but they are rarely active on every network. Similarly, some people respond to emails, but others do not. A multi-faceted approach can reach a greater number of potential clients. You can also increase loyalty and brand awareness by connecting with people on multiple platforms.

**No, email marketing isn’t dead**

Several years ago, the buzz in digital marketing was the death of email. Inboxes were inundated with spam, newsletters, and advertisements, in addition to a high volume of electronic correspondence. People were simply discarding the majority of their messages. With decreasing open rates, and increasing spam complaints, many experts predicted that email would lose its effectiveness. Instead, they recommended focusing on social media, the new frontier of digital marketing.

Those who predicted the death of email marketing were wrong. It continues to be one of the most effective methods of connecting with your audience and building customer loyalty. In fact, email has a higher return on investment (ROI) than most print, television, or digital advertising.

The secret to increasing open rates and avoiding the label of ‘spammer,’ is delivering emails that people will want to read and share. Rather than just sending out an advertisement, offer discounts, special deals, useful pet health information, and other content of value to the reader.

**Yes, social media marketing still matters**

Industry analysts may have misjudged the future of email, but they were right about social media. It has experienced phenomenal growth in recent years, with seven in ten adults active on at least one social network. The numbers are increasing annually and show no signs of slowing down. Furthermore, 65 percent of pet owners post about their animals on social media.

In addition to its large audience, social media presents a unique opportunity to engage with current and potential customers. In traditional advertising, you have few options to judge people’s response to your message. However, social media allows for real-time interaction and developing relationships with your clients.

Don’t limit yourself to just one network, but also avoid stretching your resources too thin. You need to be active and regularly post quality content in order to benefit from social media. Each network also needs to be monitored for new messages and comments. If you fail to provide prompt responses, you are missing the benefits of engagement, and possibly even presenting an image of poor customer service.

**Better together – tips for integration**

The desire to simplify your increasingly complex marketing strategy is understandable. However, you can streamline without eliminating any important channels. Instead, opt for integration, which makes your marketing more manageable and more effective. Here’s how:

- Add social sharing links or buttons to your emails. Encourage readers to share your content if they find it valuable. Don’t forget links to your website and blog.
- Encourage email subscribers to connect with you on social media. Try a dedicated campaign, or even a featured section in your newsletter.
It is hard to think that the spring is on the way and that the summer is at our doorstep – especially when sitting here in Calgary, looking outside of the window and seeing snow covering the lawn!

Every April, we celebrate the World Veterinary Day (WVD). It is a good reminder to celebrate all that we do in veterinary medicine. The World Veterinary Association (WVA) created the World Veterinary Day in 2000, as an annual celebration of the veterinary profession. This year the theme for WVD is Value of Vaccination. “Vaccination is an essential tool for preventive veterinary medicine, promotion of animal health and welfare, and reducing the risk of human exposure to many zoonotic pathogens”, according to WVA.

Let’s honour this important day by assuring all those around us, humans or animals, are well informed and properly protected.

The warmer months are not all about thinking about antiparasitics and vaccinations. These are the months of travel, for fun and for work - as I like to call them, ‘work-ations’ - the months for re-connecting, networking, and for learning about new opportunities. From conferences and annual general meetings (AGMs), through practicum and organized volunteer spay and neuter opportunities in the country and internationally, the choices seem to be endless. What a great profession to be in right this moment!

Upload your mailing list. Twitter and most other social networks will allow you to import contacts. You can then follow your mailing list subscribers.

Looking at the big picture
Despite expert predictions, email marketing has not slipped into obscurity with the rise of new platforms. In fact, the opposite is true. It has a more valuable role than ever. In addition to direct marketing, email can boost your web traffic and social following.

Naren Arulrajah is President and CEO of Ekwa Marketing, a complete internet marketing company that focuses on SEO, social media, marketing education, and the online reputations of veterinarians/practice owners. With a team of 180+ full time marketers, ekwa.com helps practice owners who know where they want to go, get there by dominating their market and growing their business significantly year after year.

Registered Veterinary Technologists and Technicians of Canada News

By Ivana Novosel, RVT, MSc
RVTTC/TTVAC Vice President

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On that note, I would like to update you with some of the events the RVTTC board has been involved with and some that are coming up in the near future.

RVTTC was in Brisbane, Australia this April

The SAVT (Saskatchewan Association of Veterinary Technologists) representative for RVTTC, Carolyn Cartwright, RVT, VTS (Anesthesia/Analgesia) was invited to join the rest of the IVNTA (International Veterinary Nurses and Technicians Association) Board for the in-person strategic meeting, where she delivered greetings on behalf of RVTTC. This was an excellent opportunity for networking and promoting the RVTs of Canada and the Proudly RVT message. Stay tuned for the official updates from this meeting!

RVTTC board members and their executive director continue building strong relationships across the country

One of the efforts the RVTTC leadership is embracing is attending important local conferences and events in order to build new and nurture established relationships with its members and stakeholders. From one coast to the other, RVTTC’s mandate is to be there for its members. Visit our booth and stop to say hello next time around – perhaps in Toronto, 16-19 July at the WSAVA/CVMA 2019 Conference.

PROUDLY RVT t-shirts are now for sale!

We still have a limited number of ‘ProudlyRVT’ t-shirts available for purchase. These are available on a first come, first served basis. However, if we receive a significant number of requests, we will consider ordering more. To order, go to our website at: https://rvttcanada.ca/proudlyrvt-t-shirt-order-form/

RVT TALK – the new RVTTC monthly e-newsletter is not to be missed.

Have you received it? Have you read it? RVT Talk is our new way of assuring you are kept most up-to-date with relevant content and information. Please send us your feedback and let us know what you think. What would you like to ‘talk’ about? We would love to hear from you. Send us an email at info@rvttcanada.ca with your suggestions and ideas.

For more information visit our website at www.rvttcanada.ca, and the RVTTC Facebook page at: https://www.facebook.com/RVTTC/ to stay up to date with all our events, latest industry information and member support!
Alberta Veterinary Technologists Association News

By Amanda Barker, RVT, 2019 ABVTA President

Summer is almost here and I’m left wondering where the first half of the year has gone. The ABVTA has had a busy and productive start to 2019. In March, the Board of Directors met to review and outline our Strategic Plan for the next three years. Upon reflection of our accomplishments since our last planning session, we were proud to fill a page with several achievements!

In May, we hosted our ‘40 and Fabulous’ conference at the Delta in Edmonton. The conference had a great turnout, and it was truly wonderful to see so many of our members in attendance. We were also joined by veterinarians, support staff, and RVTs from across Canada. My highlight of the weekend, aside from all of the amazing lectures, was the anniversary celebration and fun money casino on Saturday night. I always love the opportunity to meet new people in our industry and network with our colleagues.

The Board of Directors said goodbye to our outgoing student reps in the spring and welcomed some new faces to the Board for the upcoming year. On behalf of our association, I would like to thank Brittany Baldock (NAIT), Shelby Bennett (Olds College), Kirby Zimmer (Lakeland College), and Reagan Boulter (GPRC-Fairview) for the time they gave to the ABVTA; we hope to see you back as voting Directors once you’ve graduated! I would also like to welcome Becky Peters (NAIT), Hayley Warren (Olds College), Sydney Frost (Lakeland College), and Courtney Stevens (GPRC-Fairview) to the team. We are all looking forward to your input and ideas during your term.

Eastern Veterinary Technicians Association News

By Stephanie Hall, RVT

We are so happy that spring has finally arrived on the East Coast! We just wrapped up another fantastic conference weekend at the Atlantic Provinces Veterinary Conference (APVC), in Halifax, Nova Scotia. At this event, you can always look forward to amazing CE, reunions with past colleagues, and an overall great time; they fulfilled all of this again this year! Out general dinner meeting had our highest turnout of the year and was followed by a Board of Directors breakfast meeting the following day.

We are working hard on our 30th anniversary conference, to be held in Truro, Nova Scotia on June 14 and 15th. We are so pleased to offer talks from our own RVTs with specialties in a variety of areas. From anesthesia to general practice to dentistry - we have it all! We’ll kick off the conference with an awards banquet and presentation by our keynote speaker, Kathleen Dunbar, RVT. We’ll host a trade show throughout the day on Saturday and end the day with a roundtable discussion.

We would like to congratulate New Brunswick on becoming the latest province to ban declaws, effective July 1, 2019! Veterinarians from across the province met on April 6th to vote on the proposal of banning declawing in cats. The votes are in and we are happy to announce that declawing will be banned!

If you have questions regarding EVTA please feel free to contact myself at step_smiling@hotmail.com or our ED Bev at bev@evta.ca

Saskatchewan Association of Veterinary Technologists News

By Tamara McLoughlin, RVT, SAVT President-Elect

The Saskatchewan Association of Veterinary Technologists (SAVT) is always looking for opportunities to achieve our mission of promoting and advancing Registered Veterinary Technologists and our profession. In March, we had a booth at the Western College of Veterinary Medicine’s VIP Days; this gave us the opportunity to talk to 3rd and 4th year vet students about the value of RVTs as colleagues in their future careers.

This year at our annual retreat in January we formed 7 committees:

Bylaw/Policy Committee - Last year, all of our bylaws were reviewed and this year the committee will continue their work on updating our policies to better reflect our current practices.

Advisory Committee - This is a standing committee that is called upon when the Board of Directors need direction and support.

Veterinary Technician Specialties (VTS)/Mentorship Committee – This committee is in place to put RVTs in touch with other RVTs, students, or new graduates when guidance when needed. This can include, but is not limited to, help with the Veterinary Technologist National Exam (VTNE), more information on pursuing a veterinary specialty, and also workplace or personal issues. The SAVT is always looking for more RVTs to join this committee.

Continuing Education Committee – Last year, this committee improved and expanded our CE structure. This year, they will be focusing on educating RVTs on the new structure, assisting the Executive Director with implementation and review of CE credits and making changes, if necessary.

Public Relations Committee – This committee is focused on continuing to improve the image of the SAVT and RVTs at public events throughout the province, and promoting the veterinary technology profession. This year, that will include updating the banners and brochures that we present at events such as WCVM VIP Days, Vetavision, Agribition, etc.

35th Anniversary of the SAVT Committee - This year, we’re excited to celebrate our 35th anniversary and will be highlighting that success at our annual conference, to be held November 1st to 3rd, in Saskatoon, Saskatchewan.

Recertification Committee - I have the pleasure of sitting on our final committee, the recertification committee. We are working on a new policy and procedure that will allow veterinary technologists to be able to come back as Active Members after a hiatus, without having to rewrite the VTNE. This is a very exciting task and we hope that it will allow us to expand our membership.

We’re looking forward to the great ideas and innovation that will come out of these committees.

As always, our Executive Director, Jasmin Carlton, is ready and willing to answer any questions you may have on these initiatives or any other SAVT related business.

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Dr. Scott Weese takes on role of Director for the Center for Public Health and Zoonoses

Ontario Veterinary College (OVC) Pathobiology professor Scott Weese, an infectious disease expert and Canada Research Chair in Zoonotic Disease, began a five-year term as Director of the University of Guelph’s Centre for Public Health and Zoonoses (CPHAZ) on April 1. The goals and strategic directions of CPHAZ are focused around three broad areas - research, education, and knowledge dissemination. Dr. Weese is a leading researcher on two important zoonotic pathogens — methicillin-resistant Staphylococcus aureus, also known as “MRSA,” and Clostridium difficile— as well as other established and emerging pathogens. By simultaneously studying people, animals and food, Weese’s research team is learning about the frequency of and factors associated with transmission of infectious diseases from animals to humans. Learn more about the CPHAZ Annual Symposium being held May 30, 2019 at the University of Guelph, at www.cphaez.ca

New Brunswick to ban cat declawing

The New Brunswick Veterinary Medical Association has voted to ban cat declawing in the province. The ban will go into effect on July 1, meaning only professional and licensed veterinarians will be able to perform this procedure. A spokesperson for the NBVMA said the move was made to “address animal welfare concerns” and to ensure that the practice is performed only by qualified veterinarians. The association has also launched a public awareness campaign to educate cat owners about the procedure and its potential risks. The ban will cover both domestic and wild cats, and the association is working with local animal control agencies to ensure compliance. The decision is a significant one, as New Brunswick is the second province in Canada to ban declawing, following Alberta, which enacted a similar ban in 2017. Since then, other provinces have followed suit, including British Columbia, Nova Scotia, and Saskatchewan. The New Brunswick ban will join these initiatives in protecting cats from the pain and suffering associated with this invasive and unnecessary procedure.

Zoetis - the first human-animal bond certified company

The North American Veterinary Community (NAVC) and the Human Animal Bond Research Institute (HABRI), which jointly founded the Human-Animal Bond Certification program last year, announced today that Zoetis has become the first Human-Animal Bond Certified Company. “For years, Zoetis has been a leader in the field of human-animal bonding, and we are honored to have earned this important certification,” said J. Michael McFarland, DVM, DABVP, Executive Director, Zoetis Petcare Marketing and Chair of the HABRI Board of Trustees. “Veterinarians play a key role in strengthening the relationship between animals and people, and Zoetis is committed to helping them, their clients, and the animals they care for experience the benefits of the human-animal bond.”

To learn more about the Human-Animal Bond Certification and to find out how you or your clinic can become certified, please visit NAVC.com/HAB.

Veterinary clinic scam reported in the Toronto area

Attention all veterinary hospital clinic staff: in April, there were reports of a group of three individuals entering clinics in the Toronto area and making a series of refunds on their point-of-sale (POS) systems. The group reportedly distracts the receptionist while one individual makes the transactions. One clinic claimed a loss of just under $10,000. Toronto Police have been notified and are investigating. Doing simple things like keeping the key of your wireless terminal out of reach could make a difference. You may want to contact your POS system provider for more tips on how to prevent fraud.

Manitoba veterinarian wins international award

WCVM graduate Dr. Jonas Watson is one of six recipients of the World Veterinary Association’s (WVA) Animal Welfare Award for 2019. Watson is the second Canadian to receive this prestigious award. In the past 13 years, Watson has made philanthropy a priority throughout his veterinary career. “To be recognized for work in the area of animal welfare in particular is especially meaningful and gratifying to me,” he says. “It means a lot to be recognized for trying to do my part to make the world a better place.”

His work extends to multiple community organizations both at home and abroad — his service has taken him to remote places in Northern Canada, to First Nations reserves across Manitoba, and abroad to Mexico and Madagascar. These travels have inspired him to make a difference close to home: “We have big problems in our own backyard. We don’t need to travel to the most remote of locales to make real, meaningful change for a community,” he says.

Watson is president of the Manitoba Veterinary Medical Association, the vice chair of the Winnipeg Humane Society board, a director on the board of the Canadian Animal Blood Bank, and a regional co-director of Community Veterinary Outreach for Manitoba, an organization that provides veterinary and human health services to homeless or marginally-housed populations.

Watson was nominated for the international award by the Canadian Veterinary Medical Association. He accepted the honour on April 28 at the annual WVA Congress in San José, Costa Rica. The award, which includes a $5,000 Euro prize, was sponsored by Ceva Santé Animale.
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HERE’S WHAT SOME VETERINARY PROFESSIONALS HAD TO SAY ABOUT THE 2018 VET CONFERENCE...

It was my first time to attend but overall I am happy with my experience and was able to attend some really good lectures with good speakers. Was able to also network with some colleagues.
Ronadine Pusong, Banks Animal Hospital: DVM/ Practice Owner

This conference was put together very well. All of the speakers in my talks were great and full of very useful information. I could have listened to each one all day and not ever been bored. Thank you for a great show!
Kerry Winn, Simcoe Animal Hospital Office Manager

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