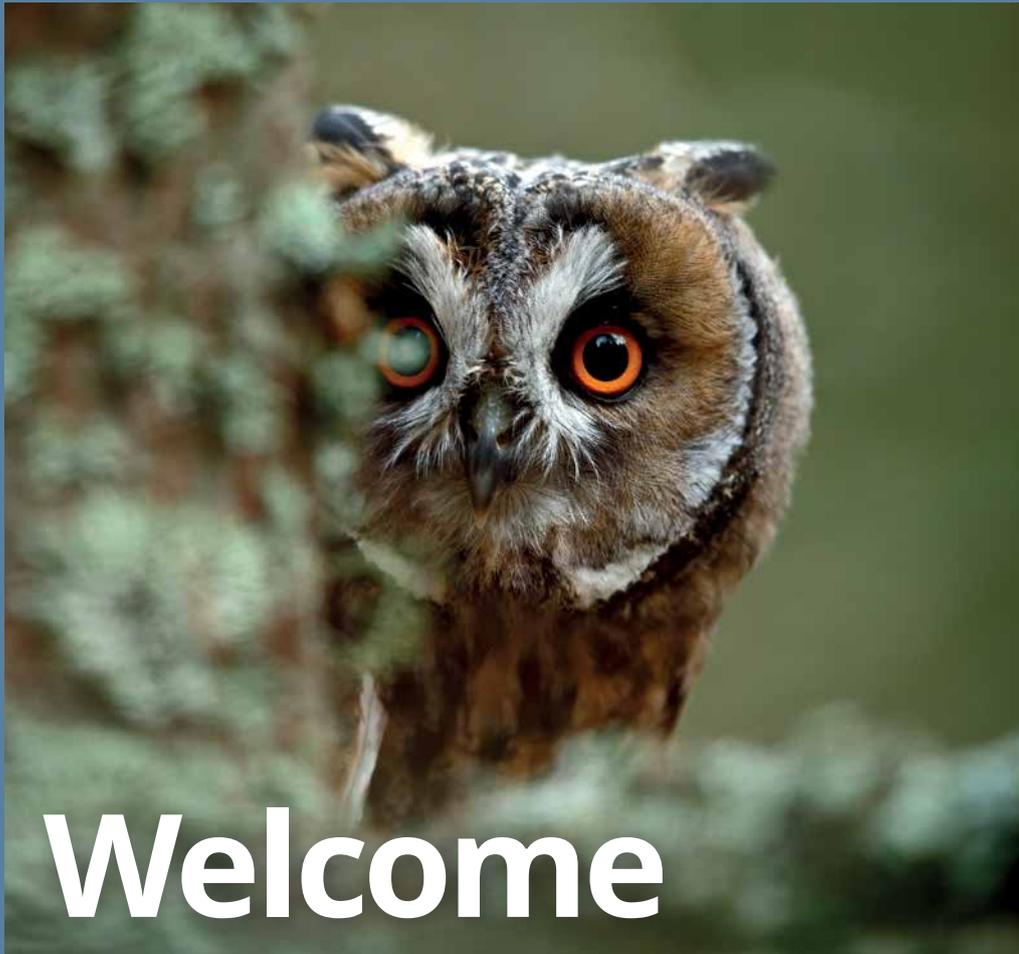
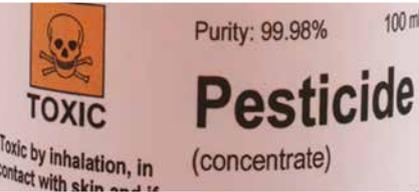


Toxic Times

AUTUMN/WINTER 2017 ISSUE



Welcome

As the cooler temperatures become the norm, and we reluctantly put away our summer clothes, this issue will consider some of the seasonal risks to our pets.

Gastric decontamination is one of the mainstays of initial poisoning treatment, but it should never be a knee-jerk reaction. We'll discuss when to use, when not to use, along with some cautions.

As always, knowing where to obtain antidotes is crucial to a successful outcome and VPIS can help source less commonly stocked treatments.

Dovonex Ointment, a psoriasis treatment was recently given Over the Counter status, being previously available only

on prescription- we look at the implications for animal poisoning.

A budgerigar features in Case Corner in this issue - we are always happy to help with species other than cats and dogs, and to date this year have assisted in 15 bird cases, ranging from penguins to parrots, canaries to cockatiels.

Finally, as always, details of the 2018 CPD courses, with next year's dates featuring some new locations.

2018 CPD COURSES

Key Areas Covered (six hours of CPD)

- Case histories for potential poisons cases
- Decontamination for poisons cases
- Toxicology information resources

Cost and Bookings

Standard fee: £295 + VAT
Early bird fee: £250 + VAT*

Each delegate will receive course notes and a CPD certificate (equates to 6 hours CPD training). Lunch and refreshments are provided.

Bookings: To reserve a place, please visit the link below and download the booking form.

<https://vpisglobal.com/class-based-courses-2018/>

Date	Location
January 25th	Brighton
February 22nd	Cardiff
March 22nd	London
May 24th	Liverpool
June 8th	Winchester
July 19th	Glasgow
September 13th	London
October 18th	Exeter
November 29th	Birmingham

* Early bird discount applies to bookings made up to 8 weeks prior to the course date or for all customers booking additional places on an annual contract



Seasonal risks

Horse chestnuts (conkers)

Although horse chestnuts do contain a toxin, aesculin, severe cases of poisoning are rare. Vomiting is the most common clinical effect in dogs and there is also the risk of obstruction if sufficient quantities are ingested.

An emetic not likely to be required, and the use of activated charcoal is contraindicated as it may increase the risk of constipation. A laxative may help the indigestible plant material pass through the gastrointestinal tract.



Fireworks and Sparklers

5th November is not the only day for fireworks to be let off with the whole of the month seeing a prevalence of these mini explosives.

Sparklers will generally only cause gastrointestinal upset; toxicity is not expected as the quantity of chemicals present is small. Obviously a burning sparkler has a high temperature and will cause burns if chewed or touched.

Other fireworks may cause vomiting, diarrhoea, abdominal discomfort and ataxia, although most animals remain asymptomatic. There is a potential risk of metal toxicity but this is rare.

The ingestion of a used firework is unlikely to result in any significant signs as the chemical components will have been burnt or dispersed during the explosion.

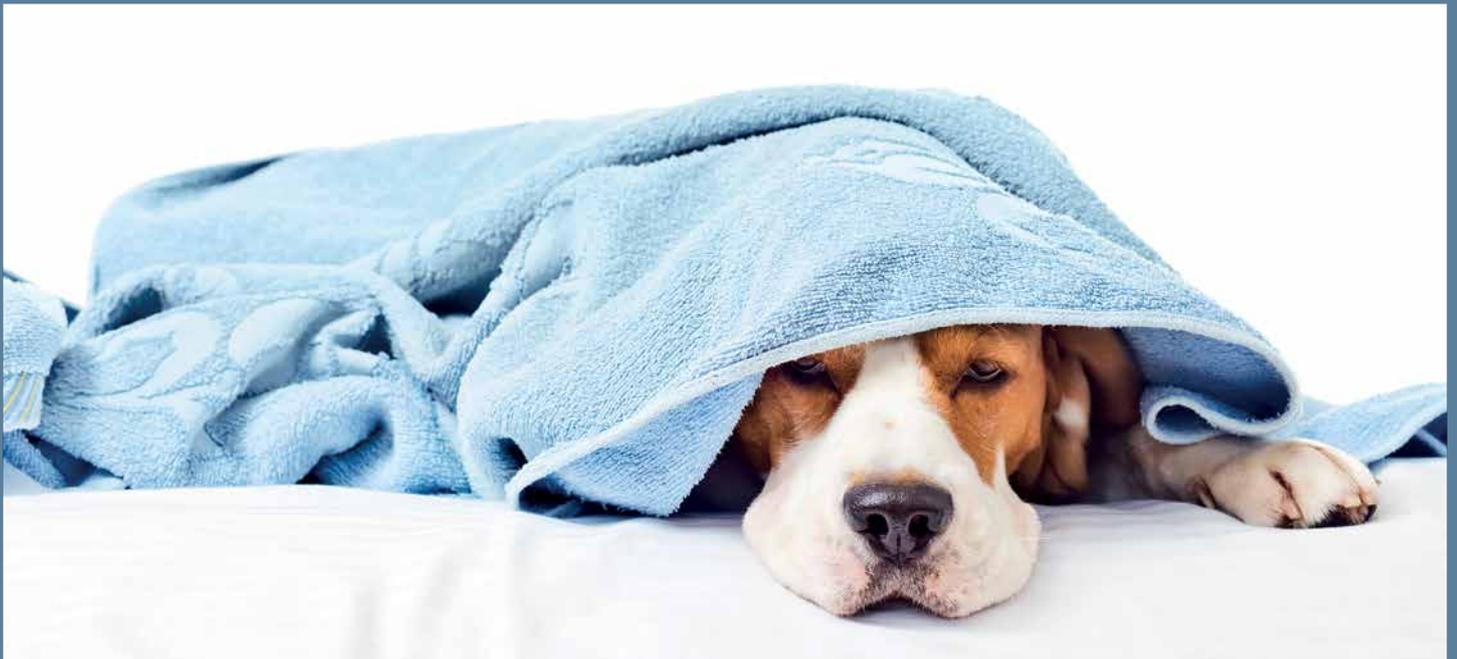
Most animals can be observed at home, although the VPIS can advise on specific treatment for animals with clinical signs. Activated charcoal is not recommended as it does not adsorb metals (the toxic component of fireworks).

Christmas Foods

As always, be careful of the Christmas favourites:

- Chocolate – never leave chocolate on or under the tree if there are pets in the home. This would include boxes of chocolates, chocolate advent calendars and chocolate yule logs.
- Grapes and their dried fruit products (currants, sultanas, raisins) including Christmas pudding, Christmas cake and mince pies.
- Onions (and garlic, leeks, shallots and chives) including sage and onion stuffing.
- Alcohol
- Macadamia nuts
- Leftovers, particularly mouldy foodstuffs





Gastric Decontamination: **when and when not to!**

Emesis and activated charcoal remain important and significant treatments in poisoning cases, but it is imperative to think carefully if they are appropriate, as they are not safe or effective in all situations.

A number of factors should be considered: the time since ingestion of the poison or agent, the chemical nature of the agent involved, and the clinical effects that are likely to develop as a result of the specific agent ingested.

For emesis (apomorphine for dogs, xylazine, medetomidine or dexmedetomidine for cats), the most effective **time** to administer is within 2 hours of ingestion. There are some exceptions to this: any drug that is slow or modified release, and drugs that slows gastric emptying such as opioids, or any agent that stays in the stomach for a prolonged period, such as grapes and raisins or onions. In these cases, it is worthwhile inducing emesis beyond the 2 hour time window.

If the **chemical nature** of the agent is caustic or corrosive, emesis is contraindicated, as the oesophagus will be re-exposed to the chemical, causing additional or further injury. If the agent is a solvent, detergent or volatile such as white spirit or essential oils, emesis is again contraindicated due the risk of

an aspiration pneumonia or chemical pneumonitis. These situations may require an *antiemetic* (metoclopramide or maropitant) to be given, to ensure the animal does **not** vomit.

With regard to **clinical effects**, when the agent involved suppresses the CNS or respiratory systems, or is likely to induce convulsions, such as metaldehyde, great care and thought must be given as to whether an emetic is safe to give.

The use of activated charcoal must also be carefully considered. It does not work on all things, requiring a charged, polar molecule to be effective. It will not work on xylitol, alcohols, solvents or heavy metals, caustics, corrosives or detergents.

Any additional treatments to be used in the case may also be bound to the

activated charcoal, so thought must be given to the timing of drugs after the administration of charcoal. Any existing therapeutic medications that the animal requires may also fall into this category.

If the case is going to require endoscopy or surgical intervention (as in the case of an obstructive hazard) it is probably not the best idea to pack the gut full of charcoal ahead of the procedure.

For situations where emesis is not safe or the animal is incapable of vomiting, it is useful to have a familiarity with gastric lavage. Metaldehyde poisoning would be a prime candidate for gastric lavage as it has the potential to cause convulsions within 30 minutes of ingestion. An additional advantage would be that activated charcoal could be administered via the endotracheal tube and left in the stomach after lavage.

Whilst undoubtedly having a prominent role in the treatment of poisoning cases, it is crucial that the use of emesis and activated charcoal should not be a default, knee-jerk reaction in situations where safety and efficacy is in question, or where the substance involved is either of low acute toxicity, or has not reached or crossed the treatment threshold and thus does not warrant treatment.



Drugs used in the treatment of poisonings

There are some drugs that you will not routinely stock on your shelves, but it is important to know where to obtain them when they are required for poisoning cases.

Methocarbamol (Robaxin™):

A centrally acting muscle relaxant used in the treatment of cerebral palsy and multiple sclerosis. It is very useful as an adjunct treatment to control convulsions in cases involving metaldehyde, tremorgenic mycotoxins or permethrin.

Acetylcysteine:

A precursor of glutathione, essential for the treatment of paracetamol poisoning in cats and dogs.

Lipid Infusion (Intralipid™) : highly effective in the treatment of cases involving permethrin, tremorgenic mycotoxins, baclofen, high dose NSAIDs, and moxidectin/ivermectins.

These treatments should be available from the VPIS/Vets Now scheme ToxBox. Please call us on **0207 3 055 055** to find out the location of the Tox Box nearest to you.

Again, full information is also on our website:
<https://vpisglobal.com/toxbox/>

CASE CORNER

Shoe waterproofer in a bird

A 33 g budgie was in the room when Kiwi AquaStop (waterproofing spray for shoes) was used. He became lethargic with weakness 4 hours later and by 8-12 hours had head pressing and laboured respiration with increased effort. He was taken to a veterinary surgery where he was given oxygen and meloxicam. He deteriorated with severe head pressing and then opisthotonus and was euthanized 20 hours post-exposure.

Comment: Birds are very susceptible to respiratory toxins due to their efficient respiratory system, rapid metabolic rate, low body fat content and small size.

Waterproofing spray in a cat

An owner used a waterproofing spray on his hiking boots in a room without good ventilation (against the manufacturer's instruction). The cat was in the room at the time and about 1 hour later the owner noticed a change in the cat's breathing pattern. On admission there was mild cyanosis and pale mucous membranes. The cat has increased respiratory rate with short in and out breaths. It was difficult to listen to the lung sounds due to purring. He was treated with IV fluids, furosemide and dexamethasone. An X-ray was taken and he was given oxygen for 2 hours. The next day the respiratory rate was 80-100/minute and he had not eaten, although he seemed bright. He remained stable but tachypnoea continued.

These cases highlight the need for awareness and caution from owners when using waterproofing treatments on shoes or bags, or stain protector sprays on upholstery.



DOVONEX PSORIASIS OINTMENT

Vitamin D ointment (Dovonex) can now be bought over the counter, being previously a Prescription Only Medicine. The active ingredient is calcipotriol, a Vitamin D analogue, and these compounds were discussed fully in the Spring 2017 Toxic Times

This raises the potential of more poisonings from pets either ingesting the cream from the tube or licking their owner's skin after the ointment has been applied. The VPIS has dealt with a number of fatal cases over the years, particularly distressing because of the pain involved for the animal.

Always ensure that owners who suffer from psoriasis understand the risk to their pets of any ointment ingestion by an animal, be it direct from the tube, from licking the affected area treated by the owner, or by licking the owner's hands that have not been thoroughly washed after ointment application.

Toxic Times Spring 2017 and other back issues, available to download from our website.

<https://vpisglobal.com/toxic-times-publication>

