With our fabulous summer fast becoming a distant memory, it’s time to look ahead to autumn and winter and all the associated challenges those seasons bring for keeping pets safe.

We’ll look at OTC cough and cold preparations, numbers of which will be increasing in households and handbags as we do battle against the yearly round of poorly-ness.

Our case corner focuses on monensin, to which dogs on countryside walks in fields where cattle are or have been present, may be at risk of exposure.

The manufacturers of laundry capsules are highlighting the risks to children in their advertising and have improved the closure of lids- we’ll re-visit the risks to our pets.

Finally, we have the yearly reminder of the autumn and Christmas risks to pets - always good to remember the issues!
MONENSIN EXPOSURES
The ionophoric antibiotic monensin is widely used in cattle and poultry, and farm dogs or dogs on countryside walks may be at risk of exposure. Clinical signs may present after several hours or days depending on the dosage and sudden death may be the first presenting sign. Chronic low dose exposure (e.g. when eating feed over several days) can result in a higher death rate than a single larger dose. Recovery may take days, weeks or months.

Typical features of ionophore toxicity are anorexia (animals may not eat anything for several days after overdose), lethargy, depression, muscular weakness, shortness of breath and dyspnoea, myoglobinuria, progressive ataxia and inco-ordination, tremor, sternal recumbency and hypovolaemic shock. Treatment is intense supportive care and intravenous lipid infusion, which may require more than one infusion.

Here are 2 cases reports of monensin exposure.

KEXXTONE® IN DOGS
A 24 kg 6 year old Labrador ingested a white pasty substance that was in a plastic sausage-shaped tube on a farm. Within 3 hours she had severe hind-limb paresis, moderate hypophosphataemia, severe hypokalaemia, hyperglycaemia, pale mucous membranes and tachycardia. We were sent pictures of the substance she had eaten (see below).

The substance was not identified initially but VPIS were able to identify it later by its appearance. This is Kexxtone an intraruminal device containing monensin (an ionophore) for the reduction of ketosis in cattle. The dog was given potassium and phosphate supplementation (toldimphos, Foston®, IV fluids and lipid and recovered.

A 5 year old Labrador was walked in a field where dung from a dairy farm had recently been spread. She was seen to chew some plastic ‘for a week’. She presented with ataxia and initially improved following 24 hours of IV fluids and she was sent home. She re-presented 48 hours later much worse and gradually deteriorated. She had severely elevated ALT and neutrophilia (no other signs were described). She was treated with charcoal, S-AMe, antibiotics and lipid emulsion.

Unfortunately, the owner did not link chewing the unknown plastic object in the field to the dog’s illness and there was a delay in determining what the dog was exposed to - Kexxtone continuous-release intraruminal device for cattle contains monensin. She was euthanised at 5 days.

CASE CORNER
Kexxtone is a veterinary medicine that contains the active substance monensin. Available as a continuous-release intraruminal device and used to reduce the incidence of ketosis in cattle.

LAUNDRY CAPSULES: Heightened awareness, better closures on packaging

“Keep them Up, Keep them Closed, Keep them Safe”

This is the advertising campaign aimed at preventing the poisoning of children with laundry capsules, but of course pet owners should also be aware of the risk to their animals, and follow the same Up, Closed, Safe rule

Dogs and cats are attracted to these squidgey, soft gel capsules, and given the size of the packaging, often have access to more than one.

The capsules or pods contain highly concentrated amounts of liquid detergent, which will cause irritancy to the skin if/once the pods are split open or burst. In addition, any ingestion of the pods, or the contents, either from direct ingestion, or from grooming of the fur, puts the animal at risk of an aspiration pneumonia, if the animal coughs, retches or vomits post exposure.

As such, any ingestion should not be treated with an emetic, and in fact an antiemetic should be given. Activated charcoal plays no role in the management of such cases and should be avoided.

If coughing, retching or vomiting has occurred, lung sounds should be checked along with a chest x-ray if required.

To prevent foamy bubbles forming in the gastrointestinal tract, give a dimethicone/simethicone preparation such as Infacol™, the colic treatment for babies, as this lowers the surface tension of the bubbles, reducing the risk of aspiration.

Wash the animal's fur thoroughly and consider the addition of a collar to prevent grooming.

Encourage all owners to keep their pets as safe as their children.
With Halloween, Bonfire night and Christmas all on the horizon, it’s a busy time for pet owners and they need to be vigilant and attentive with their animals.

**Halloween**

There is often an abundance of sweets at Halloween, so make sure they are kept away from animals, in case they contain xylitol.

Pumpkins, if eaten in sufficient quantities, may cause gastrointestinal upset of varying degrees, although this is usually self-limiting.

**Bonfire Night**

Most fireworks, used or unused, do not contain sufficient chemicals to cause more than mild, self-limiting gastrointestinal upset. Keep animals (dogs especially) away from dropped onions from bonfire night parties.

**Christmas**

Food Alert! Keep animals away from chocolate, raisins (mince pies, Christmas cake/pudding), alcohol, leftovers, nuts and grapes.

Plants such as ivy, mistletoe and poinsettia should cause little more than gastrointestinal upset unless huge quantities have been ingested. Holly would represent an obstructive and mechanical injury risk.
Cough and Cold medicines

Although sadly there is currently no cure for the common cold, many preparations exist to alleviate the associated symptoms (sneezing, coughing, sore throat, fever, headache, general malaise, runny or blocked nose and watering eyes). Many preparations are readily available (tablets, capsules, drops, sachets, sprays and syrups) and these may contain several active constituents. The types of drugs commonly encountered are analgesics, antihistamines, cough suppressants, decongestants, essential oils, expectorants and stimulants. In any case of overdose or accidental ingestion each component of the preparation must be considered separately, and it is very important that we have the exact trade name of the product involved so that we can identify the medicines and their precise quantities in any given situation.

The analgesics commonly found are paracetamol and ibuprofen, but also include aspirin.

We shall be covering the analgesics more fully in the next edition of Toxic Times, given that they present year-round risks to animals.

**Antihistamines** such as diphenhydramine and chlorphenamine (chlorpheniramine) provide symptomatic relief of allergic signs but in overdose may cause vomiting, hypersalivation, inco-ordination, ataxia, lethargy, tremor, depression, hyperthermia, tachycardia and weakness. Each antihistamine has its own specific treatment dose, which is why it is vital that we establish which product is involved and the type and amount of antihistamine it contains.

**Cough suppressants** such as codeine or dextromethorphan, generally present in dry or tickly cough medicines, are present in varying amounts, and although the commonly seen side effects may include drowsiness, lethargy, depression, ataxia and vomiting, severe cases are rare.

Ephedrine, phenylephedrine and pseudoephedrine are present in products formulated to act as decongestants, as the sympathomimetic effect of phenylephrine produces vasoconstriction which in turn relieves nasal congestion. Severe effects are generally not expected because of low oral bioavailability, however some animals may exhibit signs of vomiting, lethargy and hyperactivity.

**Essential oils** are present in vapour rubs or inhalant drops which are added to bedding or hot water.

The main risk following ingestion of these products is one of aspiration pneumonia, and because of this, it is important NOT to induce vomiting in such cases, and possibly even administer an antiemetic.

Any animal that is coughing, retching or vomiting should have lung sounds checked and if necessary, a chest x-ray.

Animals with the products on their fur should be thoroughly washed with a mild detergent and collared so that ingestion via grooming is prevented.

**Expectorants** such as guaiphenesin are generally present in small amounts and of low acute toxicity. If a large quantity is ingested, there may be some vomiting and lethargy seen.

**Stimulants** such as caffeine may cause signs of cardiac stimulation and CNS excitation if sufficient quantities are ingested. Treatment would be dependent on the amount ingested, but the prognosis would be good as long as treatment is promptly given.

**Essential oils** are present in vapour rubs or inhalant drops which are added to bedding or hot water.

The main risk following ingestion of these products is one of aspiration pneumonia, and because of this, it is important NOT to induce vomiting in such cases, and possibly even administer an antiemetic.

Any animal that is coughing, retching or vomiting should have lung sounds checked and if necessary, a chest x-ray.

Animals with the products on their fur should be thoroughly washed with a mild detergent and collared so that ingestion via grooming is prevented.

**Expectorants** such as guaiphenesin are generally present in small amounts and of low acute toxicity. If a large quantity is ingested, there may be some vomiting and lethargy seen.

**Stimulants** such as caffeine may cause signs of cardiac stimulation and CNS excitation if sufficient quantities are ingested. Treatment would be dependent on the amount ingested, but the prognosis would be good as long as treatment is promptly given.