



The dangers at home

Dr Justine Lee, Associate Director of Veterinary Services at Pet Poison Helpline and Toxcall Veterinary Helpline, reveals the top ten toxins to avoid in your household

Thanks to the curious nature of cats, it's often harder than it looks to pet-proof your home adequately. Even the most experienced cat owner can still have common household poisons lying around. Make sure to educate yourself on the common poisons that we see in cats here at Toxcall Veterinary Helpline, an animal poison control helpline available for veterinary surgeons in the United Kingdom. Among the most frequently encountered feline poisons managed by Toxcall Veterinary Helpline are:

- Lilies (*Lilium* and *Heimerocallis* spp.)
- Canine flea and tick medications – intended for dogs
- Salicylates
- Liquid potpourri
- Glow sticks/glow jewellery
- Tinsel, string or ribbon – linear foreign material
- Non-steroidal anti-inflammatory drugs (NSAIDS)
- Paracetamol
- Ibuprofen
- Antifreeze/ethylene glycol

By being aware of these top 10 toxins, cat owners can better pet-proof their homes to avoid accidental poisoning to their feline friends. Some of these toxins are further reviewed in this article.

Lilies

The common lily plant – from the *Lilium* spp. and *Heimerocallis* spp. – is often found in gardens, floral arrangements or as fresh cuttings. These beautiful, fragrant flowers are known as the common Easter lily, tiger lily, Japanese show lily, stargazer lily, rubrum lily and day lily. All parts of the plant, including the pollen, are toxic to cats and result in severe, acute kidney failure. Cats have been poisoned by brushing up against the pollen of the plant and grooming it off. As few as one or two leaves or petals can result in

severe, potentially irreversible kidney failure. Unfortunately, cats aren't aware that this species of plant is poisonous and are not 'smart' enough to stay away from it. When ingested, cats don't show any clinical signs immediately. Often, vomiting, inappetence and lethargy are seen within the first few hours to days and then progresses to kidney failure in one to three days – including signs like severe halitosis; not drinking or drinking too much water, not urinating or urinating too much. In general, the sooner you realise your cat has ingested any part of a lily, the better the prognosis when you seek treatment immediately. Treatment includes emptying the stomach and binding up the poison – with activated charcoal – and treating with intravenous fluids for several days to prevent kidney failure. Blood tests should be performed daily, while hospitalised, to evaluate kidney function. The easiest way of preventing this deadly poisoning is by making sure that poisonous plants are not available in the household. As florists often use lilies in bouquets, it is imperative that freshly cut flowers or bouquets never be brought in a house without accurate plant identification first.

Flea and tick medication

Topical flea and tick medications commonly contain insecticides called pyrethrins or pyrethroids – eg permethrin, cypermethrin, cyphenothrin etc. While these chemicals are derived from the chrysanthemum flower and are very safe for use in dogs, cats are extremely sensitive to these products. Accidental poisoning often occurs when pet owners apply 'small dog' topical flea and tick products to 'large cats'. Cats can also be exposed if they live with dogs that have had recent topical flea and tick medication placed; if the cat grooms the product off the dog, it can result in severe drooling, tremors and even life-threatening seizures. When in doubt, always read the flea and tick label

well before applying a product to your cat. If the product is intended for a dog, it should never be used on a cat without veterinary recommendations. If accidental application has occurred, the topical product should be washed off with washing-up liquid immediately and your cat should be taken to your veterinary surgeon for further treatment.

Human medications

Human medications including salicylates – aspirin, oil of wintergreen etc – NSAIDs, paracetamol, and ibuprofen should never be given to cats without direct consent from a veterinary surgeon. Cats have an altered liver metabolism and can be easily poisoned by common drugs. Salicylates and NSAIDs – eg ibuprofen – can result in severe stomach ulcers and kidney failure when ingested by cats. One paracetamol tablet can kill a cat and results in severe anaemia – low red blood cell count – a swollen face and potential liver failure. Treatment includes aggressive intravenous fluids, an antidote called N-acetylcysteine to help the liver metabolise the drugs – for paracetamol poisoning – stomach protectants, anti-ulcer medication and follow-up blood tests. When in doubt, pet owners should always keep these out of reach of cats by storing them in an elevated medicine cabinet out of reach.

Liquid potpourri

Filling your house with the smell of liquid potpourri warming on a candle burner may seem relaxing, but it is quite toxic to cats. They appear to be extra sensitive to these chemicals as dogs aren't typically affected. Due to their curious nature, cats will often examine and lick the melting potpourri which contains chemicals – cationic detergents and essential oils – that can cause severe burns – corrosive injury – to the mouth, oesophagus and intestinal tract. Cats typically acutely and profusely drool when even a few licks are ingested. As this poisoning can cause severe respiratory signs – including difficulty breathing or increased breathing – and neurologic signs – like tremors or seizures – immediate veterinary care should be sought. Treatment includes flushing out the mouth well, pain medication, anti-ulcer medication, blood work and possible X-rays.

Glow sticks/jewellery

During certain holidays, glow sticks and glow jewellery may be more readily available. These contain dibutyl phthalate – often nicknamed 'DBP' – inside, which is the clear to yellow, oily liquid that has a very bitter taste. One bite from your cat can result in DBP leaking from the glow stick and result in profuse drooling, gagging and retching. DBP can also cause irritation to the skin and eyes, resulting in a burning or stinging sensation, making your cat paw at their face, skin, or mouth. As cats are fastidious groomers, they end up ingesting more and more as they clean the DBP from their faces and fur. Thankfully, the chemical itself isn't particularly 'toxic', but can result in dramatic signs. Most of these cases can be managed at home. First, remove the product and clean up any remaining DBP liquid. Next, dilute the taste out of your cat's mouth by offering him some canned tuna water – not oil – or chicken broth. Lastly, if your cat will tolerate it, a bath is in order, or at least a thorough wipe down, to remove any remaining DBP. You can even move your cat into a dark room to look for any glowing liquid left on him – once you see it,

make sure to remove it with a damp cloth to prevent further ingestion. Keep in mind that a trip to the veterinary surgeon may be necessary if your cat shows any signs of redness to the eyes, squinting, or rubbing, as he may have some ocular irritation. Also, if large amounts of plastic are swallowed, it can result in a foreign body or cause stomach irritation and vomiting.

Tinsel, string or ribbon

Cats like to play with ribbon, string and tinsel, particularly around Christmas. Unfortunately, while tinsel may look benign enough to you, it's a fun, shiny, sparkly chew toy to many cats. Tinsel ingestion doesn't actually pose a poisoning risk, but it can cause severe damage to the intestinal tract if swallowed, resulting in a 'linear foreign body' that requires emergency surgery to correct. In any cat household, tinsel should never be used in order to help minimise this risk.



Photo: iStockphoto.com/EEL_Tony

Antifreeze

Antifreeze contains ethylene glycol which is a sweet, sticky liquid that is extremely toxic to cats. Just one teaspoon can be fatal. When antifreeze is metabolised by the body, it causes abnormal calcium crystals to form in the kidneys, resulting in severe kidney failure one to two days later. While there is an antidote – fomepizole or ethanol – it is only effective when used within the first three hours of exposure in cats; after this time has elapsed, it is no longer effective. Once cats develop kidney failure from antifreeze, the prognosis is grave. For this reason, cats should be kept away from garages or areas where antifreeze is stored. Ideally, they should be kept indoors to prevent any malicious poisoning.

Cat owners should be aware of these common poisons readily available throughout the household. Immediate treatment at a veterinary surgeon is imperative with a majority of these poisons, as the sooner treatment is initiated, the better the prognosis. Your veterinary surgeon can always call Toxcall Veterinary Helpline for specialised help with a poisoning case. With any type of poisoning, delayed treatment or the development of clinical signs results in a poorer prognosis. For that reason, the best way to protect your cat is to pet-proof your house, avoid exposure to any of these common toxins and to seek veterinary advice immediately once something has been ingested! ●

This article was provided courtesy of Toxcall, a 24/7 animal poison control service available in the UK for veterinary surgeons. Dr Justine Lee is the Associate Director of Veterinary Services at Pet Poison Helpline and Toxcall Veterinary Helpline and is also the author of *It's a Cat's World... You Just Live In It*.