

Updates on Essential Oils

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Natural. Organic. Healthy. These are some of the thoughts that come to mind when one hears the words “essential oils”. However, though they are derived from natural sources, essential oils are not always safe for dogs and cats and their presence in our homes can pose a toxic hazard.

What are Essential Oils?

Essential oils are found in virtually all parts of a plant, and are distilled or extracted directly from plants. Use of essential oils has dramatically increased recently, and they can now be found in a great many products designed for many purposes - for aromatherapy, in cleaning products, as pest repellants, in liquid potpourris, as part of herbal remedies, and in personal care products.

This means that well-intentioned pet owners may accidentally or purposefully use an essential oil without knowing the consequences or risks involved to their pet. Essential oils are readily and rapidly absorbed through the stomach, skin and lungs. Using oils for dog or cat flea and tick treatment/prevention, or using them to try and treat various skin conditions can prove dangerous to pets.

Oral and Dermal Exposure

Even when essential oils are just applied to the skin, they are able to be absorbed by the body and can cause multiple side effects. The higher the concentration of the essential oil (e.g. 15%, 100%), the greater the risk to the animal. Concentrated essential oils should never be directly applied to cats or dogs.

Cats are especially at risk from essential oils. They lack an essential enzyme in their liver making it difficult to metabolize and eliminate essential oils. Their natural grooming behavior also places them at further risk for both dermal and oral exposures. Dogs do not have the same enzyme deficiency as cats; however, they can still be at risk from exposure to essential oils.

Symptoms that develop in dogs and cats depend on the type of oil and concentration of the oil involved in the exposure. Common signs include drooling, vomiting, tremors, ataxia (wobbliness), respiratory distress, low blood pressure, GI ulcers, low heart rate, low body temperature, seizures, rear limb paralysis, skin irritation, and liver +/- kidney failure.

Essential oils that are known to cause poisoning in cats include oil of wintergreen, oil of sweet birch, citrus oil (limonene), pine oils, Ylang Ylang oil, peppermint oil, cinnamon oil, pennyroyal oil, clove oil, eucalyptus oil, and tea tree oil (aka melaleuca oil). Essential oils known to cause poisoning in dogs include oil of wintergreen, oil of sweet birch, pine oil, cinnamon oil, pennyroyal oil, eucalyptus oil, and tea tree oil (aka melaleuca oil).

Inhalation Exposure

No actual droplets of oil are emitted from passive diffusers (e.g. reed diffuser, candle). Unless the oil in a passive diffuser gets onto an animal’s skin or is ingested in some way (e.g. the diffuser tips over onto or near the pet), the main hazard to cats and dogs from passive diffusers is respiratory irritation.

Inhalation of strong odors or fragrances can cause some dogs and cats to develop a watery nose or eyes, a burning sensation in the nose/throat, nausea leading to drooling and/or vomiting, and difficulty breathing including coughing or wheezing.

Coughing is more obvious in dogs than in cats. In fact, a coughing episode in a cat can be mistaken by owners for the cat trying to vomit up a hairball. However, when coughing the cat crouches low to the ground, with little to no abdominal movement that is more typical of vomiting. No hairball is produced. Dogs and cats suffering any respiratory issues need to be moved immediately into fresh air, and require emergency veterinary treatment should their symptoms not quickly resolve. Animals with pre-existing respiratory issues such as feline asthma, airborne allergies, chronic bronchitis, or those exposed to second-hand smoke are at greater risk for developing severe respiratory irritation than animals without prior conditions.

With active essential oil diffusers (e.g. nebulizing or ultrasonic diffusers) actual microdroplets or particles of oil are emitted into the air. Such diffusers pose an extra risk in addition to inhalation exposure, especially for cats. The microdroplets of oil released by active diffusers may collect on a pet's fur if the pet is in the same room as the active diffuser. The oil can then be either absorbed directly through the skin, or ingested when the animal either licks or grooms itself or other exposed animals in the same household. The resultant signs are the same as those described in the oral and dermal exposure section above.

Like oil and water, essential oils and animals really do not mix. Owners should be cautious using essential oils, products containing essential oils, and essential oil diffusers in their homes in order to protect their dog or cat from a toxic risk. Prevention is the best medicine in limiting essential oil toxicities.

If a cat or dog has been exposed to an essential oil, concerned pet owners or veterinarians are encouraged to consult with Pet Poison Helpline.

ABOUT PET POISON HELPLINE

Pet Poison Helpline, an animal poison control center based in Minneapolis, and is available 24 hours, seven days a week for pet owners and veterinary professionals that require assistance treating a potentially poisoned pet. The staff provides treatment advice for poisoning cases of all species, including dogs, cats, birds, small mammals, large animals and exotic species. As the most cost-effective option for animal poison control care, Pet Poison Helpline's fee of **\$59** per incident includes follow-up consultation for the duration of the poison case. Pet Poison Helpline is available in North America by calling **800-213-6680**. Additional information can be found online at www.petpoisonhelpline.com.