## bark & whiskers

Dog Tips Cat Tips

# The Invisible Way You Might Be Harming Your Pet

Are you increasing your pet's risk of heart, lung and breathing problems, or malignancy, simply by wanting a fresh-smelling house? Found in the vast majority of US homes, these toxic products may be damaging not only your pet's health, but yours as well.

#### Analysis by Dr. Karen Shaw Becker

## **STORY AT-A-GLANCE**

- Most homes in the U.S. use air-scenting products such as air freshener sprays and scented candles to mask unpleasant odors or for other reasons
- The bad news is these products are air pollutants, dispersing chemicals into the environment that are dangerous for pets
- Research has revealed harmful chemicals in air fresheners (all types), scented candles, and incense
- Most of the effects of these products aren't immediately obvious and may not even manifest as respiratory issues
- Safe, natural alternatives that freshen the air in your home include pet-safe indoor plants, an air purifier, and diffusing diluted pet-safe essential oils

#### Editor's Note: This article is a reprint. It was originally published November 21, 2021.

In the vast majority of U.S. homes you'll find a variety of air-scenting products, including air freshener sprays, upholstery sprays, plug-ins, gels, candles and incense. If you doubt the popularity of these products, just count the number of TV commercials selling them, along with the impressive amount of shelf space they consume in retail outlets.

People have different reasons for "faux scenting" their indoor space. Some who use these products are trying to mask odors, while others enjoy a home that smells a bit like a beautiful meadow or a pine forest after a rain shower.

Advertisements for air-scenting products are everywhere, sending the not-so-subtle message that most homes harbor

offensive odors, and fixing the problem with a vanilla-scented candle or air freshener is a harmless solution to an embarrassing problem.

## **Air-Scenting Products Are Indoor Pollutants**

The problem with air-scenting products, appealing though they may be, is they produce dangerous indoor pollutants that dramatically affect our pets. Over the past decade, scientific research has shown that many household air fresheners contain chemicals that may be harmful.

I don't recommend using these types of products, especially if you have any type of pet in your home. Birds and cats in particular are highly sensitive to airborne toxins, but if you have any animals in the home at all, I recommend avoiding them.

Studies show that children can have as much as 30 times greater exposure to indoor pollutants than adults due to their smaller size and greater activity level. Now, consider these facts:

- Most pets are even smaller than kids
- Many spend up to 100% of their time indoors, and are living with very high levels of airborne toxins
- They groom themselves and each other, which means they're ingesting the pollutant particles that have accumulated on their fur and in the environment
- They tend to spend a lot of time near the floor where all indoor air pollutants eventually wind up

These factors combine to put pets at the highest risk of anyone in the household for health conditions related to indoor air pollution.

Even if neither you nor your pets are having symptoms, it's still possible the air fresheners in your home are harming your health. Most of the effects of these products aren't immediately obvious and may not even manifest as respiratory issues. Some people say, "If I was having a problem, my pets or I would have watery eyes. We'd be coughing or wheezing." But that's not always the case.

### **Toxins in Air Fresheners**

Air fresheners in both aerosol sprays and plug-ins contain a number of toxic chemicals that are dangerous to your pet's health and yours, including:

1. **Volatile organic compounds** — VOCs are ingredients such as acetone, ethanol, pinene, and acetate, some of which are inherently toxic. When these substances react with the ozone in the air, they generate a range of secondary pollutants such as formaldehyde and ultrafine particles.

Ultrafine particles have been linked to heart and lung disease and respiratory problems. A 2011 news report released by the American College of Allergy, Asthma and Immunology (ACAAI) linked the VOCs in air fresheners with a 34% increase in health problems in people with asthma.<sup>1</sup>

2. **Formaldehyde** — This compound is a known carcinogen that has been definitively linked to cancers of the nose and throat. It's also known to cause ongoing irritation of the throat and airways, potentially leading to

secondary infection, nosebleeds, **asthma** and other respiratory ailments.

- 3. **Naphthalene** This hydrocarbon has been shown to cause inflammation, as well as tissue damage and cancer in the lungs of rodents.
- 4. **Phthalates** These chemicals are linked to a disruption in hormone levels, poor semen quality, birth defects and reproductive harm.
- 5. **1,4-Dichlorobenzene (1,4-DCB)** This compound has been linked to compromised lung function and liver cancer in mice.

### **Toxins in Scented Candles and Incense**

A 2001 EPA study concluded that candles containing fragrance produce more soot. It's possible organic compounds in poor-quality candle wax may increase cancer risk.<sup>2</sup>

A 2009 study warns that the chemicals emitted into the air by burning candles can have a harmful effect on human health.<sup>3</sup> Paraffin candles produce potentially toxic chemicals, including alkanes, alkenes, and toluene.

Like air fresheners, scented candles can also contain dangerous chemicals such as formaldehyde and VOCs. Cheaply made candles can contain toxic levels of heavy metals in the wicks. When one of these candles burns, the lead particles are released into the air. Frequent use of these candles could contribute to the development of health conditions such as asthma, allergies and cancer.

Research shows that burning incense can be dangerous to human health, and a 2015 study even suggested it's much worse that inhaling cigarette smoke.<sup>4</sup> Incense smoke is mutagenic, meaning it can cause mutations in DNA that can lead to cancer.

In the 2015 study, incense was found to be more toxic to cells and DNA than cigarette smoke. Of the 65 compounds identified in incense smoke, 2 were determined to be highly toxic.

### **Natural Alternatives to Keep Your Home Smelling Fresh**

One of the best ways to freshen up the air in your home is to simply open the windows when weather allows. Also consider adding some pet-safe indoor plants. Common houseplants can help clean the air by using their natural ability to absorb toxins through their leaves and roots and turn them into nutrients.

I also strongly recommend investing in an indoor air purifier, which can provide long-term benefits to both you and your pets.

To add a natural scent to your home, you can simmer some mint tea or cinnamon in water in a saucepan on the stove, or grind up a fresh orange. Or you can do what I do – I dilute and water diffuse pet-safe essential oils. They smell wonderful and are nontoxic.

It's a nice all-natural way to keep your home smelling fresh and clean while eliminating toxic products from your life.

#### **Sources and References**

#### PetMD May 28, 2020

- <sup>1</sup> American College of Allergy, Asthma & Immunology, October 26, 2011
- <sup>2</sup> EPA Research and Development, January 2001
- <sup>3</sup> Emission Products of Petroleum-Based Candles
- <sup>4</sup> Environmental Chemistry Letters, December 2015, Volume 13, Issue 4, pp 465-471