

Secondhand smoke is a health threat to pets

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It has been in the news for years about how secondhand smoke is a health threat to nonsmokers. The Center for Disease Control and Prevention indicates that secondhand smoke is attributed with killing thousands of adult nonsmokers annually.

If smoking is that harmful to human beings, it would make sense that secondhand smoke would have an adverse effect on pets that live in the homes of smokers, said Dr. Carolynn MacAllister, Oklahoma State University Cooperative Extension Service veterinarian.

"There have been a number of scientific papers recently that have reported the significant health threat secondhand smoke poses to pets," MacAllister said. "Secondhand smoke has been associated with oral cancer and lymphoma in cats, lung and nasal cancer in dogs, as well as lung cancer in birds."

She said a study conducted recently at Tuft College of Veterinary Medicine found a strong correlation between secondhand smoke and certain forms of cancer in cats. The number of cats with mouth cancer, also known as squamous cell carcinoma, was higher for those animals living in smoking environments versus those felines living in a smoke-free home. In addition, cats that lived with smokers for five or more years had an even higher incidence of this type of oral cancer.

"One reason cats are so susceptible to secondhand smoke is because of their grooming habits. Cats constantly lick themselves while grooming, therefore they lick up the cancer-causing carcinogens that accumulate on



their fur," MacAllister said. "This grooming behavior exposes the mucous membrane of their mouth to the cancer-causing carcinogens."

Malignant lymphoma is another type of cancer that cats that live with smokers have a higher risk of getting. This cancer occurs in the lymph nodes and cats are twice as likely to have this type of cancer compared to cats living in a non-smoking home. This form of cancer is fatal to three out of four cats within 12 months of developing the cancer.

MacAllister also pointed out that secondhand smoke is greatly associated with the increased occurrence of cancer in the nose and sinus area among dogs. Research also indicates a slight association with lung cancer.

"A recent study conducted at Colorado State University shows that there is a higher incidence of nasal tumors in dogs living in a home with secondhand smoke compared to dogs living in a smoke free environment," she said. "The increased incidence was specifically found among the long nosed breed of dogs. Shorter or medium nosed dogs showed higher rates for lung cancer."

MacAllister said the longer nosed breeds of dogs have a great surface area in their noses that is exposed to the carcinogens. This also provides more area in which the carcinogens can accumulate. The carcinogens tend to build up on the mucous membranes of long nosed dogs so not as much reaches the lungs.

Unfortunately, dogs affected with nasal cancer normally do not survive more than one year.

"The reason short and medium nose dogs have a higher occurrence of lung cancer is because their shorter nasal passages aren't as effective at accumulating the inhaled secondhand smoke carcinogens," she said.



"This results in more carcinogens reaching the lungs."

Pet birds also are victims of secondhand smoke. A bird's respiratory system is hypersensitive to any type of pollutant in the air.

MacAllister said the most serious consequences of secondhand smoke exposure in birds are pneumonia or lung cancer. Other health risks include eye, skin, heart and fertility problems.

Secondhand smoke is not the only danger faced by pets that live in smoke filled environments. Poisoning is another risk they face.

"Curious pets can eat cigarettes and other tobacco products if the products aren't stored properly," MacAllister said. "When ingested, this can cause nicotine poisoning, which can be fatal."

It is important, both for the health of pets and others living in the household, that the smoker has a designated area in which to smoke that is physically separated from the home. In addition, always keep cigarettes, cigarette butts and other tobacco products put away.

Source: Oklahoma State University

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