



# PROTECT YOUR PETS

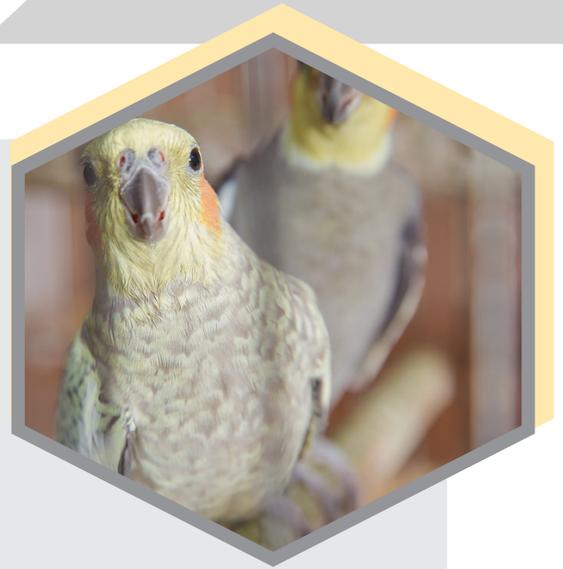
## Carbon Monoxide Poisoning

**S**ixty-seven percent of households in the U.S. have a pet, according to a 2019-2020 National Pet Owners Survey conducted by the American Pet Products Association.<sup>1</sup> Since the start of the COVID-19 pandemic, unprecedented numbers of people have decided to foster or adopt a pet, leading to a massive increase in the number of pets living in American homes.

With so many pets in our homes, it is critical to ensure their health and safety. We all know that we should feed them well, provide them with plenty of attention, and keep them safe from dangers such as traffic. However, many pet owners are unaware that pets may be at risk of serious injury due to an invisible threat: carbon monoxide.

While all humans and animals are at risk of CO poisoning in their homes, pets are particularly susceptible to the negative effects of CO both due to their smaller body size and behavior. Further, home CO detector alarm standards are designed to save human lives, not animal lives, putting pets at significant risk of serious injury or death due to CO poisoning.

**“Unfortunately, home CO detectors in the US are designed to be human life-saving devices, not pet life-saving devices.”**



## One Family's Story

The day after Christmas in 2009, a family of four in Pinckneyville, Illinois found their pet parakeets—Penelope and Feathery—dead in their cages. The children, six and nine years old, were devastated, while their parents were concerned. The birds had been singing along with birds on the television the night before and had shown no signs of illness.

While the father dug a hole in the backyard to bury the birds, the mother spoke to a friend on the phone. The friend wondered if maybe the pet birds had suffered from CO poisoning. The mother grew concerned and decided to call 911.

When city workers responded, they found a small and slow leak in a line near their basement furnace exhaust. Toxic CO fumes had vented into the dining room through air ducts from the basement, right to where the birds' cage was located.

The family was perplexed—they had CO detectors installed in their home. Why had the alarms not gone off?

As the Pinckneyville family learned that night, CO can accumulate in homes at low levels that are not high enough to trigger home CO detector alarms. Because pets' bodies process CO differently than humans, they are particularly susceptible to low levels of CO. As a result, low levels of CO can be fatal to birds and other pets without being fatal to humans.<sup>2</sup>



### Birds

- Birds are especially susceptible to the negative effects of CO.
- They have a small body size, high metabolism, and high breathing rate.

#### ■ Signs of CO poisoning in birds<sup>3</sup>

- Swaying
- Weakness
- Death
- Falling
- Unconscious

### DID YOU KNOW?

Canaries were once used to detect dangerous levels of CO and other toxic gases in coal mines. If the canaries stopped singing, coal miners knew something was wrong.



### Cats

- Small body size makes them more susceptible to CO poisoning than humans.
- Their behavior also raises their risk of CO poisoning, such as curling up next to heaters or fireplaces.

#### ■ Signs of CO poisoning in cats<sup>4</sup>

- Sleepiness
- Erratic Behavior
- Seizures
- Weakness
- Bright red nostrils, lips and ears
- Unconsciousness
- Vomiting
- Death

## A Cat Named Boo

In 2018, a family cat named Boo alerted a family living in Green Township, Ohio of a CO leak in their home. In the middle of the night, Boo began meowing so loudly that he woke the entire family up. When the family awoke, they realized they felt dizzy. Around the same time, Boo fell down and became unconscious. When one of Boo's owners, Ariana, got out of bed, she too fell unconscious. Other family members helped Ariana and Boo get out of the house to fresh air.



After calling 911, the responding fire crew detected potentially lethal levels of CO in the home caused by a boiler that fed the home's baseboard heating system.<sup>5</sup>



## Dogs

Like other pets, dogs are generally affected by CO sooner than humans. Often, dogs are the first to notify their owners of dangerous CO levels in a house due to their erratic behavior.

### Signs of CO poisoning in dogs<sup>6</sup>

- Panting
- Erratic Behavior
- Seizures
- Yawning
- Sleepiness
- Unconsciousness
- Tail Tucking
- Vomiting
- Death
- Sweaty Paws
- Weakness

## A Dog Named Rascal

In February of 2020, a dog named Rascal alerted a family in Zeeland, Michigan of a CO leak in their home. As the dog's owner, Diane Smith, explained in a news release, "he just collapsed, so I have him so goldfish crackers and he wanted nothing to do with that, which was unusual."



Though the family brought Rascal to the vet, the vet did not find any signs of illness, so they brought Rascal back home. Shortly after, Rascal began to act strangely again. After calling a friend who suggested it might be carbon monoxide poisoning, they brought Rascal outside, where he began to act normal again.

After calling a furnace technician, the Smith family discovered that their furnace had a low-level CO leak. The levels were low enough to affect Rascal, but not enough to cause noticeable symptoms in Smith and her husband. The CO levels were also low enough that they did not cause their home CO detectors to alarm.

## Steps you should take if you suspect your pet is suffering from CO poisoning<sup>7</sup>

- ▶ The first step you should take if you suspect CO poisoning in your pet is to remove your entire family (including your pet) from your home.
- ▶ Once you and your pet are away from the source of CO, you should call 911, your fire department, or a utility company to check for CO leaks in your home.
- ▶ You should also contact your veterinarian immediately and/or bring your pet to an emergency veterinary hospital.
- ▶ When you arrive at your veterinarian's office, they will likely take a blood sample and run other diagnostic tests. They may also give your pet oxygen therapy and fluids. Your vet will be able to instruct you on what steps to take next.
- ▶ You and your pet should not return home until your home has been checked for CO leaks by a qualified professional.
- ▶ While your pet recovers, you should keep them as calm and relaxed as possible and monitor them for any ongoing symptoms until they have completely recovered.
- ▶ If you notice any ongoing or new symptoms while your pet is recovering, you should call your vet.

## How to protect your pet from CO poisoning

To protect your pet from CO poisoning, you should follow all of the preventative measures mentioned in previous sections for human exposure prevention. You should also monitor your pet for abnormal behaviors. To protect your pets from significant illness due to low level CO exposure you should consider purchasing CO detectors that are as sensitive as possible. Keep in mind that, according to US home CO detector alarm standards, **most home CO detectors will not alarm at levels less than 70 ppm.** This level of CO has the potential to be fatal in pets since pets are more susceptible to the negative effects of low-level CO than humans.

### References

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## How You Can Help!



### Protect Your Pet from CO Poisoning

Keep in mind that most home CO detectors will not alarm at levels less than 70 ppm. This level of CO has the potential to be fatal in pets since pets are more susceptible to the negative effects of low-level CO than humans. Consider purchasing CO detectors that are as sensitive as possible and always monitor your pet for abnormal behaviors.

### Support CO Awareness

The mission of the National Carbon Monoxide Awareness Association (NCOAA) is to initiate a global conversation on the diagnoses, treatment, and prevention of chronic and acute carbon monoxide poisoning by organizing available COP information and driving change to improve diagnostics, detection, and treatment, legislation, and standards throughout the globe. You can be part of the solution while helping prevent senseless CO injuries and deaths by making a gift to NCOAA.

### Supporting NCOAA is easy!

- Make a secure online donation [here](#).
- Mail your contribution to NCOAA at:  
3596 West Maple Rd. #144  
Bloomfield Hills, MI 48301
- To make a donation by phone or to arrange an in-kind donation in support of our mission, contact **Charon McNabb** at 248.417.5185 or via email at [cmcnabb@ncoaa.us](mailto:cmcnabb@ncoaa.us).