

# **Human Medications and Pets**

## **An Effort to Raise Awareness on the Dangers of Human Medications on Household Pets**

**Tag Words:** pets; medications; drug disposal; poisonous

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**Video Link:** <http://www.youtube.com/watch?v=ZJWXXKxTc160>

**Summary:** Human medications can have harmful effects on our household pets. The current drug take-back program mentions nothing about the dangers medications can have towards pets and we hope to change that.

### **Lack of awareness regarding human medications and the dangers they pose if ingested by pets (RM, SC)**

In the 2011 survey done by the veterinarians at the Pet Poison Hotline, four out of the top 10 most frequent poison dangers for dogs were human medications (1). Most pets cannot resist the candy-like coating and good-smelling flavors of human medications and vitamin gummies. Cats tend to be very attracted to unusual flavors common to lotions and balms (2). The National Animal Poison Control Center (NAPCC) reports that an average of 200 dogs per year are poisoned intentionally (2), but it is not known how many are poisoned unintentionally? In 2010, the ASPCA's poison control center received over 45,000 calls regarding pets that had ingested human medications (3).

The number of cases of accidental pet poisoning has increased a total of 7% in 2012 from the previous year (4). Prescription medication for humans have ranked number one in phone calls to the ASPCA in the past five years with a 2% increase from last year, while over-the-counter medications have ranked third on the list with a 2.8% increase from prior years (4). Fourth on the list was veterinary medication with a 5.2% increase from last year (4).

### **Effects of accidental ingestion of:**

#### **Over-the-Counter Medications (RM, SC)**

NSAIDS (non-steroidal anti-inflammatory) such as Aleve or Motrin can lead to stomach and intestinal ulcers and even kidney failure if a pet ingests only one or two pills. Similar doses of Acetaminophen can result in the red blood cells of cats being unable to carry oxygen. Similar effects can occur in dogs in addition to liver failure (1). Ibuprofen is the most commonly ingested human medication by pets (5). Opioid analgesics like tramadol are commonly prescribed for pets, but only in appropriate doses. Overdoses can result in sedation, agitation, wobbliness, disorientation, vomiting, tremors and seizures (5).

Human vitamin supplements can also have detrimental effects on pets. If a pet ingests large amounts of vitamin D supplements, the first signs of toxicity are elevated phosphorous and calcium levels. However, these symptoms take time to appear. Once the calcium levels reach a certain threshold, they begin to calcify organs like the lungs, gastrointestinal tract, heart, and continues until the pet dies, if not treated. (6)

### **Prescription Medications (RM)**

Below is a table listing several different classes of prescription medications, their uses in humans, effects if ingested by pets, and common names these prescriptions can be found under.

<b>Class of Drug</b>	<b>Uses</b>	<b>Effects on Pet</b>	<b>Common Drugs</b>
Antidepressants *	Treat depression	sedation, loss of coordination, tremors, seizures, elevated heart rate, body temperature and blood pressure,	Cymbalta, Effexor, Prozac
ADHD/ADD Medications	Treat ADHD/ADD	tremors, seizures, and elevated body temperature and heart problems	Ritalin, Adderall
Benzodiazapines and Sleep Aids	Treat anxiety and panic disorders, assist with falling asleep	agitated affect, severe lethargy, loss of coordination, almost a “walking drunk” effect, slowed breathing, and liver failure	Xanax, Lunesta
ACE Inhibitors*	Treat hypertension and high blood pressure	Overdoses can result in high blood pressure, dizziness and weakness	
Birth Control Hormones		ingestion of large doses can result in bone marrow suppression, especially in birds. Female pets that aren’t spayed are at an increased risk for side effects	
Beta-blockers	Treat high blood pressure, migraines,	Even in small doses, ingestion of can cause dangerously low blood	

	glaucoma	pressure and heart rate	
Thyroid Hormones*		large overdoses can result in tremors, nervousness, panting, rapid heart rate, and aggression	Synthroid
Cholesterol Lowering Agents, Anti-clot medications, Anti-ulcer medications		vomiting and diarrhea ,more serious side effects will come from incorrect long-term use	Crestor, Lipitor, Clavix, Nexium
Asthma inhalers		lethal unless given immediate treatment. Heart arrhythmias, elevated heart rate, vomiting, agitated affect, and possible collapsing, electrolyte abnormalities and low potassium levels	Advair
Antipsychotics	Treat Schizophrenia and Bipolar Disorder	Vomiting, diarrhea, elevated heart rate, even seizures, can be lethal	Abilify

\*often prescribed for pets, but overdoses can have adverse effects

### Human Medications That Are Safe for Pets (RM, SC)

Buffered aspirin, aspirin combined with an antacid, can be given to dogs in very small doses. Acetaminophen can work to treat a fever in dogs, however the risk of liver damage is still high so extreme caution must be taken. Kaopectate without aspirin, immodium, and pepto-bismal can all be used to treat nausea and diarrhea. Benadryl can be used if your pet has allergies, and dramamine can be used for motion sickness in the event of long car rides. A common treatment for the condition known as “kennel cough” is Robitussin DM, and only the DM type. Anxious pets or those with PTSD are often treated with low doses of Prozac. However, you should always call your vet before using any medication on your pets.

In 1994, the Animal Medicinal Drug Use Clarification Act (AMDUCA) was passed where it allowed veterinarians the ability to prescribe human drugs to animals, with several exceptions in regards to domestic animals raised for food production purposes (12). This was beneficial to animals because although there are many pharmaceutical companies, many of them were developed for human medications since these companies have less of an incentive to develop drugs for animals. Thus, with AMDUCA passed, it allowed veterinarians to be able to

prescribe allergy medication to dogs or help them relieve some pain. However, with this positive side there is also a negative side. After the act was passed, doctors were more prone to over prescribe drugs to the animals, especially in cases where antibiotic and other steroid drugs were involved (12). Also, because doctors prescribed human medications for pets, many pet owners assumed that all of their medications were safe for their pets, so they would give medications to their pets without consulting the veterinarian first.

Human drugs that have been found to be beneficial to animals include antidepressants and anti-cancer treatments. Antidepressants have been used to treat animals that have been exhibiting any type of aggressive behaviours, displays of excessive grooming or house soiling, and even anxiety from separation (12). However, antidepressants accounted for 47.5% of the phone calls to ASPCA in 2012 about poisoning (4). For cancer, human chemotherapy has been used to treat cancer in animals.

### **Tips to Keep Your Pets Safe (RM)**

The best way to prevent your pets from suffering these horrible side effects is to keep them from ingesting the medications in the first place. By keeping medications in a high cabinet, away from pet foods, treats, and medications, your pets will not be able to reach them. Keeping them separate from your pets' medications will prevent accidental switching. The medications should also be stored tightly in their containers, never in plastic bags because they are too easy to chew through. If you use a colorful weekly pill organizer, pets may confuse it for a chew toy, so weekly pill organizers should also be kept in high cabinets. If daily medications are kept in a purse, hanging the purse up on a high hanger will prevent pets from getting into those medications (1).

### **What to Do if Your Pet Ingests a Harmful Medication (SC)**

In the unfortunate event that your pet does ingest one of your medications, immediately protect your pet by removing it from the source of the medication. Keep your pet away from others as it may become agitated or frightened and try to get it to drink some water to possibly dilute the poisonous substance. Call your vet to get further advice. If it has been less than two hours since your pet ingested the medication, vomiting may prevent any further damage, and products like hydrogen peroxide can be used to induce vomiting (7), (9).

### **Veterinary Treatment (RM)**

If your pet ingests a certain medication that requires veterinary attention, there are certain ways your pet will be treated. If the toxin was ingested within a certain time span from the treatment time, detox can be performed using activated charcoal which will bind to the toxin and cholestyramine which will decrease the recirculation rate. The pet will then experience large amounts of vomiting and diarrhea. The pet's body will then be flushed out with copious amounts of IV fluids (6).

### **The Drug Take-Back Program (RM)**

The U. S. Department of Justice Drug Enforcement Administration Office of Diversion Control hosts drug take-back events every year all across the country. The goal of their program is to provide a safe and convenient way to dispose of and learn about the dangers of household

drugs (8). They focus on initiatives such as preventing teens from overdosing on prescription medications, safe disposal of needles and syringes, and environmental effects that can occur from incorrect disposal of medications. However, they fail to accurately educate the public on the dangers that their leftover medications pose to their pets. Our goal for our service project is to get the drug take-back program to publish more literature on the dangerous effects that human medications can have on household pets. Unlike animals, children and teenagers can be told not to eat a pill they find on the ground or in their mothers' purse. Animals cannot and therefore more precautions must be taken. However, we believe that the general public is not aware of these dangers and needs to be properly educated.

A pamphlet from the Arizona Department of Environmental Quality (ADEQ) on safe drug disposal only mentions pets once, where it mentions that drugs can possibly poison teenagers and animals (10). However, animals are a very broad term and would not imply to most readers that they could possibly endanger their pets if they incorrectly store and dispose of drugs. The Take-Back Network from The Product Stewardship Institute only discusses the risk of teenagers overdosing as a safety issue on their website (11).

### **Increasing Public Awareness**

Our goal was to get the office in charge of the drug take-back program, the Drug Enforcement Administration, under the U.S. Department of Justice, to add resources about the dangers that human medications have on pets. We called the office in hopes of speaking to someone in order to include additional information on this topic in their resources, and were successfully transferred to Thomas W. Prevoznik. He offered to take a look at our pamphlet and then hopefully transfer it to the correct office. We have not heard back from him yet. The pamphlet itself listed several common household drugs (and some prescription drugs) and their side effects on pets as well as some information of what to do if ingestion occurred and who to contact for help.

Another step to increase awareness of our topic was to make a YouTube video. We collaborated with the Rutgers Seeing Eye Puppy Raising Club in order to make the video. In our actual video (the link is provided above), we showed a common way that a pet can get a hold of human medication, listed several common drugs and their effects on pets, what to do upon ingestion, and who to contact if a pet did ingest medication.

## Who to Call?

If your pet has indeed ingested some human medication, you can call these numbers for immediate help 24/7:

### Pet Poison Helpline

1-(800)-213-6680

### ASPCA

1-(888)-426-4435

However, please remember to call your family veterinarian as well!



## INFORMATION



## Human Medications & Pets



▲ Learn about what common things are dangerous to your pets!

### Interesting Facts (continued):

According to Wall Street Journal from 2011 to 2012

phone calls to ASPCA regarding:<sup>1</sup>

- Pet poisoning cases have 27%
- Prescription medication cases have 22%
- Over-the-counter medications cases have 2.8%
- Veterinary medication cases have 5.2%

According to the National Animal Poison Control Center (NAPCC), 200 dogs per year are poisoned intentionally.<sup>2</sup>

## References

<sup>1</sup>Grant, Kelli B. "When Pills and Medicines Get Into the Wrong Paws." *The Wall Street Journal*. The Wall Street Journal, 11 Feb. 2013. Web. <<http://online.wsj.com/news/articles/>

<sup>2</sup>"Pets & Poisons." *Pets & Poisons*. American Humane Association. <<http://www.americanhumane.org/animals/adoption-pet-care/safety/pets-poisons.html>>.



## ▶ Did You Know?

Pets are commonly poisoned by drugs that we have around the house. This can occur unintentionally when your pet finds the pill on the ground, or it can occur intentionally when an angered neighbour takes action.

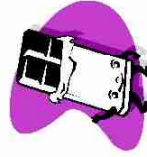
According to Pet Poison Helpline, nearly 50% of the calls they receive involve human medication.

### Top 10 Human Medication Poisoning in Pets<sup>1</sup>

1. NSAIDS (Advil, Aleve, and Motrin)
2. Acetaminophen (Tylenol)
3. Antidepressants (Effexor, Prozac, Lexapro)
4. ADD/ADHD Medication (Adderall, Ritalin)
5. Benzodiazepines/Sleep Aids (Lunesta, Xanax)
6. Birth Control (Estrogen, Estradiol)
7. ACE Inhibitors (Zestril, Altace)
8. Beta-blockers (Tenormin, Toprol, Coreg)
9. Thyroid Hormones (Synthroid)
10. Cholesterol Lowering Agents (Lipitor, Zocor)

### Interesting Facts<sup>2</sup>

- Pets can also be poisoned by human foods.
- Raisins can cause damage to the kidneys
- Chocolate affects the brain
- Onions cause anemia



- Cats like many unusual flavors such as calamine lotion, diaper rash ointments, sunblock and analgesic ointments, which is dangerous because they have contain products similar to aspirin and will be toxic.



## How to Prevent<sup>3</sup>

Certain precautions can be taken in order to prevent pet poisoning:

- Keep medication in higher, hard to reach places away from your pet.
- Keep human and pet medications separate.
- Medications should be stored in tight containers.
- Purses containing medication should be hung up.
- Immediately pick up dropped pills.
- Contact your veterinarian as soon as possible!



## What Should You Do?<sup>3</sup>

If you suspect that your pet has ingested some harmful medication:

- Monitor your pet and record detailed observations of your pet's symptoms.
- Freeze vomit or stool samples so your vet can run tests.
- Do not let other people handle your pet (disoriented animals can be aggressive).
- Provide water to your pet so that it may dilute the ingested poison.

## What Could You Do?

The U.S. Department of Justice Drug Enforcement Administration Office of Diversion Control host drug take-back events every year. The programs mission is to educate the people about the dangers of prescription drug and to provide a convenient place for drug disposal.

Here are a list of local sites where the drugs can be dropped off:

- New Brunswick Police Department
- Highland Park Police Department
- Piscataway Police Department
- Middlesex Police Department
- South Plainfield Police Department

Drop off any unwanted drugs to one of these sites, as well as additional sites.

Head over to this website to check out which sites are closer to you:

[www.deadiversion.usdoj.gov](http://www.deadiversion.usdoj.gov)



- <sup>1</sup> "Top 10 Human Medications Poisonous to Pets," *Pet Poison Helpline*, Pet Poison Helpline. <<http://www.petpoisonhelpline.com/pet-owners/basics/top-10-human-medications-poisonous-to-pets/>>.
- <sup>2</sup> "Pets & Poisons," *Pets & Poisons*, American Humane Association. <<http://www.americanhumane.org/animals/adoption-pet-care/safety/pets-poisons.html>>.
- <sup>3</sup> "Fact Sheet: Poisoning" *Vetstream*. <[http://www.vetstream.com/dalehead/html/pdf/Factsheets/Dog/24\\_365516.pdf](http://www.vetstream.com/dalehead/html/pdf/Factsheets/Dog/24_365516.pdf)>.



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**Editorial 1 (Rebecca)- published in the Ithaca Journal on Friday, November 8th, 2013 on page 6A**

Human Medications: The Threat to Our Pets



Many campaigns depict the dangers children or teenagers getting into prescription medications. Both accidental and intentional overdoses happen every day. However, there is a third group that is in danger: pets. In 2010, the ASPCA received over 45,000 calls regarding pets that had ingested human medication.

Every year, the USDEA hosts a nationwide drug take-back day. Most cities also have 24-hour drug disposal receptacles at local police or fire departments. Non-prescription medications can also be dangerous for your pets. Common products that are ingested by pets are ibuprofen, vitamin D, and lotions.

In addition to disposal, many other precautions can be taken. Put medications in high cabinets, or hang purses high up to keep pets from getting into them. Keep medications in bottles and not clear plastic bags. Pills dropped on the ground should be picked up. Also be wary about placing your pet meds near their food as pets can also overdose.

Even if you don't have children, your beloved household pet could become very ill from ingesting your medications. Please keep your pets in mind next time you visit your local drug take-back location!

**Editorial 2 - Sophia** - (Sent it to American Dog Magazine at [editor@theamericandogmag.com](mailto:editor@theamericandogmag.com))  
Dear (the editor),

I am writing to you in regards to educating the public on the dangers that human medication pose for pets, which is a subject that is not known to many people. People are constantly warned about keeping medication away from their children because of the dangerous consequences that can result if their children were to accidentally ingest some of the medication. However, not many people are warned of the effects that these medications can also have on their pets.

According to the Wall Street Journal, the number of cases of accidental pet poisoning increased a total of 7% in 2012 from the previous year. This correlates with the increase that was seen in the number of calls to the American Society for the Prevention of Cruelty to Animals (ASPCA) regarding pets ingesting medication; the ASPCA reported a 6% increase in the number of calls they received in 2012 (266, 286) from 2011, when they only received 252, 000 calls. This rise in the number of cases of pet poisoning can be attributed to the lack of awareness of this subject to the public; thus, I want to inform the public so that they can try to prevent these cases from occurring.

Pets can not only be poisoned by prescription medication, but they are also in danger of being poisoned by non-prescription medication. Both types of medication are equally dangerous to pets. For example, several over-the-counter drugs, such as Aleve and Motrin, cause stomach/intestinal ulcers or kidney failure, while drugs that contain acetaminophen, such as Tylenol, can cause the red blood cells of cats to be incapable of carrying oxygen. Many other drugs (especially prescription medications) have side effects that are just as serious as these, such as vomiting, seizures, failure of other organs, and increase/decrease in either heart rate or blood pressure.

In order to decrease the likelihood of poisoning your pets, unused medication should be removed from the household. To do this, it is recommended that drugs are disposed of safely either during the national drug take-back day or by the owners themselves. The drug take-back day is an event that the Department of Justice Drug Enforcement Administration Office of

Diversion Control (DEA) holds every year to help aid the disposal of unused drugs. This event is only once a year, so once this date has past, the DEA suggests disposing of the drugs by following the guidelines that they provide on their website ([http://www.6/drug\\_disposal/index.html](http://www.6/drug_disposal/index.html)). The steps include mixing the medication with some undesirable substance so that it is less appealing to children and pets before throwing them out in a sealable bag.

Another way to decrease the chances of pet poisoning is for pet owners to be more aware of where they store their pills. Pills should be kept in high and out of reach places from children and pets and human medication should be kept separate from pet medication. They should also be stored in plastic bottles rather than plastic bags so that pets will not see the pills and think they are treats. However, even though they are in plastic bottles, they should still be kept out of reach because dogs tend to view the bottles as chew toys. Purses or backpacks that contain pills should also be hung up because inquisitive pets can get into them if it is on the ground.

Pet owners should treat their pets like children because much like children, pets are curious animals. Things that are dangerous to children are equally as dangerous to pets, if not more. Therefore, pet owners should always keep in mind the dangers that their medication pose for their pets and never leave their pills out in the open where it is easily accessible. Also, pet owner or not, people should take advantage of the drug take-back day to rid themselves of unused drugs. Preventing pet poisoning from occurring only takes a few simple precautions, so hopefully by educating the public about this subject, the number of incidences will decrease.

Sincerely,  
Sophia Chao