

Newsletter of the COMMUNITY PRACTICE SERVICE

College of Veterinary Medicine, Washington State University
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Treating dog and cat bites in pets

If a dog or cat roams outside, or if there is more than one pet in the house, the odds are at some point that it will get into a fight and possibly be bitten. While a pet may heal on its own, veterinarians regularly treat many dogs and cats with infected bite wounds and abscesses, especially during the spring and summer when pets are more active and roaming.

"Often fights revolve around territory, and are usually between animals that don't know each other, but certainly

there are cases where dogs and cats within a home get into fights around the food bowl, too," said **Dr. Matt Mickas**, head of the WSU Community Practice Service.

"In cats, we tend to see more infections and abscesses from scratch and bite wounds," he said.

"We also see puncture wounds, lacerations, and significant tissue trauma related to the crushing injury from bites."

Cat bites may also spread diseases like feline leukemia (FeLV) and feline immunodeficiency virus (FIV) to other cats, although it may be several weeks or even years after the bite occurred before the disease surfaces. Outdoor cats at risk for exposure that test negative for FeLV and FIV six to eight weeks after a bite can be protected with a vaccination if they were not vaccinated before. Vaccination is based on risk and prevalence of disease in a given area.

"Dogs tend to cause more traumatic injuries, tears, and swelling due to crushing injuries," Dr. Mickas said. "Cats frequently cause wounds to the face and forelimbs while fighting face to face, but also commonly cause tail and hind quarter injuries when one cat flees from the other."

Some bite wounds are obvious, but others can be difficult to locate when pets have lots of fur. Owners may notice there is a problem if their pet seems lame, or has a swollen area on its face, neck, legs, or hind area. "Injured cats may show symptoms such as not eating or drinking well,

and may become inactive and reclusive because they are feeling poorly from pain, fever, and inflammation," Dr. Mickas said. "In general, dog bite injuries are more apparent due to overt tissue trauma."

Infections, which may not be obvious for several days, can also develop and lead to abscess formations. An abscess develops when white blood cells accumulate in an infected area to defend the body against bacteria. As these cells

kill bacteria, pus forms and healthy surrounding cells build a wall to stop the infected material from spreading. This forms a pus-filled pocket called an abscess. If the abscess is close to the surface, it usually bursts and drains on its own.

This often makes an animal feel better and the wound begins to heal. Unfortunately, if the wound heals with some of the infection

still inside, the abscess may form again.

Because of complications that can arise from bites, it is generally best to get veterinary treatment for wounded pets. "Initial treatment usually involves shaving and cleaning or flushing the wounds, and using warm compresses on the wounded area to increase blood flow and help material drain from the inside out," Dr. Mickas said. "Pain medications, antibiotics, and anti-inflammatory medications can also be given to help with bacterial infections. Until recovery, restricted activity and maintaining the pet in a clean environment is also recommended."

Bite wound abscesses may be prevented if antibiotics are given within the first 24 hours after injury. If treatment comes later, some wounds, especially deep ones, may need to be drained and flushed with an antibacterial solution. "In certain situations, a drain tube is surgically placed into the wound to allow for drainage of debris and infectious material, with subsequent drain

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Protecting your cat from feline leukemia

For cat owners, it is important to be aware of a disease called feline leukemia virus (FeLV). In the United States, FeLV infects up to 3 percent of all cats, and causes more deaths among cats than any other infectious disease.

“Even though the nationwide statistic may seem low, the incidence of feline leukemia in a local population of outdoor cats could be as high as 50 percent because of disease transmission due to consistent exposure or contact within a group,” said **Dr. Matt Mickas**, a WSU clinical assistant professor and head of the Community Practice Service.

There are three main types of FeLV, and each generally causes a different type of disease. FeLV-A severely suppresses a cat’s immune system and can lead to cancer, FeLV-B (in conjunction with FeLV-A) causes malignancies and immune suppression, and FeLV-C causes severe anemia. FeLV-C is rare, but FeLV-B occurs in about half of all infected cats. Cats that test positive to FeLV may also be infected with all three types.

FeLV is highly contagious, and may spread through infected saliva, tears, urine, and feces. A mother cat can also pass the disease onto her kittens while pregnant, and through nursing. Stray, free-roaming, and shelter cats are most at risk for contracting and carrying the disease. Up to 13 percent of stray cats may be infected with FeLV. Outdoor cats are also more frequently exposed than indoor-only cats. Outdoor cats are commonly infected from bite wounds when fighting with other cats with FeLV.

The virus is spread from nose-to-nose contact, sneezing, mouth and nose contact with urine or saliva, mutual grooming, and shared food bowls, water bowls, and litter boxes. This makes it more of a risk in multi-cat households, especially when cats are allowed outdoors.

It generally takes large amounts of virus for an adult cat to become infected, so prolonged contact is often necessary for transmission. But cats are more susceptible if already sick with other infections or disorders that cause immune system suppression.

“Cats can get diseases associated with feline leukemia at any age, but most cats that become affected are exposed to the virus at an early age,” Dr. Mickas said. “Most cats exposed to FeLV will develop a natural and effective immune defense. Those that have a poor initial immune response and develop FeLV-related disease are generally less than six years of age.

“Cats may develop signs of the disease at a later age, as well. Some cats with an initial ineffective immune response may develop a subsequent effective immune response to the virus in their system,” he said. “The virus can remain latent



Koala and Arapaho

in cells within their bone marrow for a long period of time. With these latent infections, the cats may recover, may remain latent without disease, or may become viremic and have signs associated with FeLV as older cats.”

When a cat becomes infected, the disease takes up to one to two weeks to develop to the point it is in its bloodstream and can be detected with a test. Cats that develop an immune response to FeLV may shed the virus for only the few weeks that it is in their blood. Cats that do not develop such a defense will carry and potentially spread the virus for the rest of their lives.

Once the virus is in the bloodstream, it can affect many parts of the body, especially the lymph nodes, bone marrow, and intestinal tissue. Secondary infections are common in cats that have the virus, including another common cat disease called Feline Infectious Peritonitis (FIP). These infections are associated with FeLV because a cat’s immune system is often so weakened. At first, there may not be any signs that an infected cat is sick. It can take weeks, months, or even years before symptoms develop. When they do appear, the symptoms can vary because the virus can affect so many body systems.

Often, the first signs are poor appetite, weight loss, weakness, and fever. Over time, the cat’s health may get progressively worse or it may have recurrent episodes of sickness and appear healthy again. Other signs include a poor coat, enlarged lymph nodes, pale gums, diarrhea, reproductive problems, eye problems, neurological problems such as seizures and blindness, and skin, bladder, and upper respiratory infections. About 30 percent of infected cats develop cancer, and many develop gastrointestinal diseases. Toward the end, many cats become severely wasted.

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Owner organizes fund-raising ride to honor memory of a special pet

Bill Johnson still grieves over the loss of his close friend Sonny, an eight-year-old golden retriever. The two developed a special relationship and were constant companions. Johnson described him as, "a special dog, unbelievably full of life, fun, and affection. No matter what kind of day I had, I could always count on Sonny to make me feel good."

In November 2005, Sonny died of canine lymphoma. The disease came on without warning, resulting in his death within several weeks.

"I was devastated," Johnson wrote. "I did everything possible to save him, yet losing Sonny was still an incredible loss, leaving me feeling both guilty and terrible."

Johnson felt compelled to transform this heartbreaking incident into something positive. Being an avid cyclist, Johnson struck upon an idea that would help him find closure for his loss, while battling to help owners of sick animals that have nowhere else to turn.

"Why not bike over to WSU's College of Veterinary Medicine from my home in Cle Elum?" he asked himself. He created it as a fund-raising event, and sought out pledges from friends. As a rider, he decided to cover the same route he often drove with Sonny while seeking out care in his pet's final days, to help him say goodbye.

This was no easy task. The roundtrip distance was 414 miles, in just two days. Johnson hired the same training company that worked with world champion cyclist Lance Armstrong. On a hot day last August, Johnson fought his way through flat tires, big trucks, and heat exhaustion to complete the first half of his journey.

"This was much harder than I ever expected," said an exhausted Johnson when he arrived at the WSU Veterinary Teaching Hospital in Pullman. "Yet the memory of Sonny helped me get through it all."

In October, Johnson made a return trip, completing his journey and fulfilling his dream of raising \$25,000, the amount needed to



Sonny



Bill Johnson

complete "Sonny Angel's Gift of Hope Endowment." This fund will be used to support and care for animal patients that need lifesaving procedures but have no owners, or whose owners do not have the means to pay for the care. In addition, the fund will aid in the training of oncology students and assist in cancer treatment research for pets.

For others who are interested in making a donation to the fund, contact Lynne Haley, director of veterinary development, at 509-335-5021 or lhaley@vetmed.wsu.edu.

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removal in another four or five days," Dr. Mickas said. "Wound location and size can affect recovery time. The average cat with an abscess recovers within five to seven days, but it can take a lot longer depending on the amount of tissue trauma."

"If an owner has a pet with an abscess that bursts at home, it should be brought in for treatment," he said. "Veterinary care is best when treating wounds and abscesses. Pet owners often use inappropriate substances such as rubbing alcohol or hydrogen peroxide, which can lead to delayed or ineffective wound healing and pain. I would say just wash your hands and bring the animal in."

Cats may transmit diseases during a fight, but dogs generally do not. One to

consider in both dogs and cats, however, is rabies. "At times, the recommendation for animals with bite wounds that haven't been vaccinated for rabies can be quarantine for six months," Dr. Mickas said. "That is the amount of time it can take for clinical signs of rabies to appear in an exposed pet. These pets should be vaccinated 30 days prior to release from quarantine. If the animal has been vaccinated before, it should be re-vaccinated once it is healed and quarantined for 45 days.

"As for the animal that did the biting, regardless of vaccination status, it should be quarantined for 10-13 days to monitor the animal for clinical signs consistent with rabies. There is no test for rabies other than taking a brain sample from a euthanized animal," he said. "Fortunately in Washington, the only reservoir

recognized for rabies is bats, and not in coyotes, skunks, or raccoons, which is the case in some states. It must be emphasized, however, that any mammal can contract rabies if bitten by a natural reservoir animal like bats. If questions arise, it is always best to consult with the Washington State Veterinarian and local Department of Health officials."

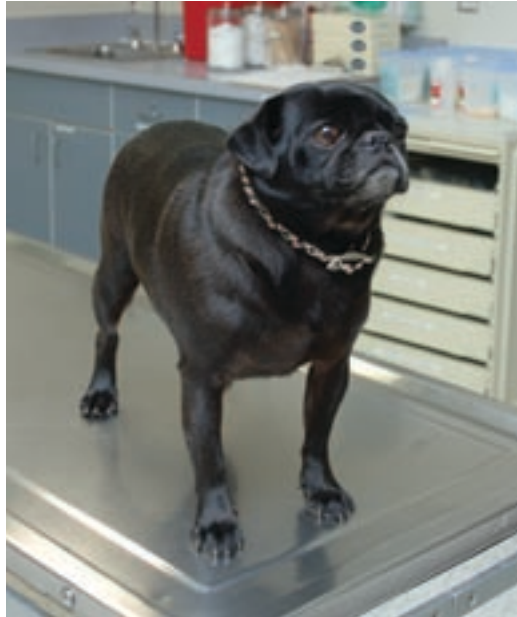
Fights among pets may be hard to prevent, but generally bite wounds treated properly with veterinary care heal without complications. "For outdoor cats, it will probably happen at some time," Dr. Mickas said. "The best recommendation, for numerous reasons, is to keep your kitties indoor. For dogs, make sure they are properly socialized and use a suitable leash and collar, leader, or harness when taking them for a walk."

What are the best ways to find a lost pet?

During warm weather, pets are more likely to roam and explore. Sometimes pets run away and get lost. There are several ways to locate your animal. A recent issue of the *Journal of the American Veterinary Medical Association* contained an article on studies that documented what methods worked best at reuniting animals with their owners. One study conducted in Ohio on 187 dog owners and 138 cat owners found that over time, 71 percent of dogs and 53 percent of cats were reunited with their families.

For dogs, 35 percent were found by owners who placed a call or visited a local animal shelter. Identification tags and licenses helped find 18 percent and posting neighborhood signs helped in finding 15 percent of dogs. For cats, 66 percent found their own way home. Other useful methods including posting neighborhood signs, sightings of the cat in the neighborhood, and finding them at local shelters.

If you have lost a pet, the first thing to do is call the local animal shelter, such as the Whitman County Humane Society in Pullman at 509-332-3422, or the Humane Society of the Palouse in Moscow at 208-883-1166. Check veterinary



Molly

clinics in the area, too. They may have your pet if it was injured. Put up posters with your pet's photo, and put an ad in the lost-and-found classifieds. Consider local community listservs, too. The world is well-wired and it may prove useful in returning your pet.

The sooner you start looking for your pet, the better the chance they will get home safe and sound. The American Veterinary Medical Association urges all pet owners to have their pets permanently identified. Contact us for recommendations on how to best identify your pet.

Collars and tags have their place, but microchips are the only permanent, positive form of pet identification available today. About the size of a grain of rice and inserted under the skin through a needle, microchips provide a unique code

that matches you to your animal should they become lost or stolen. To learn more about inexpensive microchip identification contact us at the Community Practice Service. Finally, consider more than one type of identification, too. Tags get lost, microchips occasionally migrate, and tattoos can fade. But taken together, redundant identification is probably best.

Summertime pet tips

Health checkups

If you have not taken your pet to the veterinarian within the past year, summer can be the perfect time to schedule a visit. Pets are often outside more during the spring and summer months and are more likely to encounter animals that spread disease. Vaccinations help, too. Feel free to contact us for a veterinary checkup today.

Bee stings and allergic reactions

Like humans, animals can suffer allergic reactions to a variety of things including insect bites and stings. If your pet is bitten or stung, carefully remove the stinger and watch the area for an allergic reaction. If a reaction occurs, or if there have been several wasp or bees stings, bring your animal in for veterinary attention. To help prevent bee or wasp stings, inspect your home and yard to eliminate bee hives or wasp nests.

Clinical signs of seasonal or chronic allergies in pets include chewing, licking, head shaking, and scratching. If your pet is experiencing these signs, call us for an appointment.

Gardening hazards

One of the joys of spring and summer is getting out into the yard and garden. Often our pets like to join us. Be aware,

however, that most lawn and garden chemicals are hazardous to your pet's health. Read the label carefully and make sure that these chemicals are used according to the required guidelines. Keep pets off treated areas for at least 24 hours, or better yet, reduce or eliminate lawn chemical use whenever pets may be exposed. Also keep in mind that some summer foliage can be toxic to pets if ingested. Contact us for a list of potentially dangerous plants and flowers. For a complete list of plants that are harmful to pets, go online to the ASPCA Animal Poison Control Center at www.apcc.aspc.org.

Antifreeze poisoning

During spring and summer, some people change the coolant in their car's radiator. Most car radiators contain antifreeze, a sweet, sticky chemical that is highly toxic to pets. Pets are attracted to the color, smell, and taste of antifreeze, but even small quantities will destroy their kidneys quickly. Consider having your coolant changed at a designated service center that will recycle the antifreeze. By all means, protect your pets from this completely preventable hazard.

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Sunburn

Did you know some dogs can get sunburned, just like people can? Shorthaired dogs with light skin and white fur are the most susceptible to overexposure from the sun. Consider limiting your dog's time outside during the most intense times of the day and apply sunscreen to their ears and nose 30 minutes before going outside. Also remember that hot sidewalks or concrete can burn pets' feet. If you can't walk on a surface comfortably with bare feet, then your pet probably can't either.

Food spoilage

Picnics and barbecues are fun for people, but be sure to clean up leftovers, which can attract wild animals or cause gastro-intestinal problems in pets that decide to clean up for you. Also remember that some pets normally eat less in warm weather. Try feeding them in the evening. If you leave food out all day, be sure it is dry because canned pet food spoils rapidly in heat. If your pet refuses food altogether, it may be a sign that your pet is ill.

Swimming

Most dogs can swim and they love it. But not all dogs take to water right away. Here are some tips for helping your pet enjoy the water. First, never throw your dog in the water. To teach a dog to swim, start in shallow water and call your dog's name. Try to coax them out a short distance with a treat or favorite toy. And always keep your dog within reach. Collars can get snagged on debris in water and possibly hold a dog under. Swift currents may also whisk pets away, so try to pick safe swimming places.

Flies, ticks, and fleas

Flies can be pests, especially for outdoor pets. Flies often bite the ear tips, and pets may get fly bite dermatitis as a result. There are approved fly repellants for prevention. Ticks can carry a number of diseases harmful to you and your pet, including Lyme disease and Rocky Mountain spotted fever. A number of preventative

FeLV | *continued from page 2*

"Treatments for cats with FeLV are directed at FeLV-related diseases caused by the infection and not the virus itself," Dr. Mickas explained. "Treatments may be directed against secondary infections and malignancies (lymphosarcoma), or may be directed to support a compromised immune system or degenerative condition like anemia. Unfortunately, once a cat becomes affected, it eventually succumbs to the primary or secondary disease conditions."



Jennifer Mayer, a fourth-year veterinary student, and Edie

treatments are available, including a Preventic™ collar (ticks), Advantix™ (fleas/ticks/mosquitoes) for dogs, or Frontline™ (fleas/ticks) for dogs or cats. Contact the WSU Community Practice Service with any questions about which treatments that are most suitable for your pet.

Exercise and heat

In warm weather, you may have to limit walking/jogging distances and the length of time outside exercising with a dog. Take pets for walks during the cooler morning and evening hours, and carry along an adequate, fresh water supply. Pets, like children, should never be left unattended in a car during warm weather.

If overheating occurs, cool your pet first and then seek veterinary attention soon. Signs of overheating include heavy, rapid panting, a body temperature of 104 degrees F or more, weakness, diarrhea or vomiting, seizures, and potentially coma or death. To get a pet's body temperature down, soak it in a tub of cool water or use wet towels to wet the skin, place the pet in front of a fan, and call a veterinarian.

Vacations and travel

When traveling with your pet, WSU's veterinary college recommends preventative medications for fleas and heartworms. Remember to carry a copy of your pet's current rabies and health certificate. If you plan to board your pet, proof of current vaccinations is required. And never travel without bringing a collar and leash, proof of ownership in case the pet is lost, and food and water for the trip.

4th of July festivities

Fireworks can upset pets and cause them to become lost or injure themselves while trying to get away from the noise. It is best to leave pets at home in a safe, secure, and quiet location. Provide pets with familiar toys, treats, and chews to offer some positive distraction. The WSU Community Practice can help pets with potential anxiety problems before the holiday arrives.

To prevent cats from becoming infected, the best course of action is to test cats for both FeLV and FIV, especially when kittens. If the tests come back negative, a cat or kitten should be vaccinated to protect against the disease. A booster follows two to four weeks later, and then only once a year after that.

"Cats at a high risk for exposure should be tested for FeLV each year as well," Dr. Mickas said. "The vaccine helps to provide an adequate immune response in about 65-85 percent of cats, but not all

cats that receive it will become immune. But even though the vaccine doesn't protect 100 percent of individual cats, you are still reducing the risk in a general population of cats."

The WSU Community Practice Service uses a transdermal vaccine that costs \$17 per vaccination. This method jets the vaccine through the skin, rather than with a hypodermic needle. For more information about FeLV or to have a cat tested and vaccinated, contact the WSU Community Practice Service at 509-335-0711.



Pet food recall worries consumers, raises questions

In late March, a voluntary recall of more than 100 brands of dog and cat foods distributed nationwide was announced. The contractor that produced most of the rations in question was Menu Foods, Ltd., located in Streetsville, Ontario, Canada. Menu is said to be the largest manufacturer of wet style dog and cat rations in North America.

Early reports stated a chemical contaminate, aminopterin, was the culprit. Aminopterin is an old chemotherapy drug that was withdrawn from the U.S. market a long time ago and was replaced with methotrexate. The reports also said it was being used allegedly in China as a rodenticide and made its way into the animal food chain through the production of wheat gluten.

The Chinese dispute this allegation and there is no reference in the literature to this drug ever being used to kill rodents, although it certainly may be toxic to small mammals. Aminopterin also did not have a strong toxic profile for causing kidney failure like that being attributed to the recalled foods. Finally, the original laboratory tests that allegedly discovered the presence of aminopterin were done on a tiny number of samples and was not able to be repeated in subsequent testing. Within a week, suspicion of aminopterin being the responsible toxin was eliminated.

Subsequent testing identified the presence of melamine in the recalled rations. How many samples were tested, what levels were found, and the number of voluntarily recalled rations that actually had the chemical present has not been reported. Melamine is a strong organic base compound (meaning it is not acidic) that is about 66 percent nitrogen. Unsubstantiated reports circulated after the finding, speculating that the chemical may have been added to the wheat gluten to artificially increase its apparent protein content due to the large percentage of nitrogen present. Again, gluten producers dispute that claim.

Adding to the confusion is the common usage of the word melamine. Many will recall the sturdy, unbreakable dinnerware produced most commonly through the 1970s called melamine. It

was a plastic polymer made from a similar process, but otherwise extremely stable and not likely to cause kidney disease. A second chemical, cynauric acid, is also now being implicated in the contaminations. Only additional testing and a clear explanation of the incident will help clear the confusion.

For pet owners, the WSU Veterinary Teaching Hospital's Community Practice Service recommends the following:

- If your companion animal is ill for any reason, take it to your family veterinarian for examination regardless of whether or not a pet food recall is occurring.
- If you have food on the list of recalled formulas, don't feed it.
- If you are currently feeding a recalled formulation, stop and switch your pet to a brand or style not listed in the recall. The most up to date recall lists are available at www.avma.org.
- If you have concerns about your pet's nutrition, again, speak to your family veterinarian about a complete and balanced diet.
- To date, a complete clinical profile of this issue has not been developed despite a number of cases nationwide with a high index of suspicion.
- Veterinarians are welcome to call the WSU Veterinary Teaching Hospital at 509-335-0711 if they have concerns about treatment of animals that may have pet food related problems. Also, they may call the Washington Animal Disease Diagnostic Laboratory at 509-336-9696 for information regarding testing of food samples and other diagnostic tests related to this issue.
- Until we know more, there remains cause for concern within reason.

NOTE: This information was current as of May 18, 2007. It is likely to be superseded with additional and more accurate information by the time this is in readers' hands. For more accurate information and a complete list of recalled foods, see the Web sites of the U.S. Food and Drug Administration at www.fda.gov or the American Veterinary Medical Association at www.avma.org.

Want to know more about the Community Practice and small animal specialty services, or receive our quarterly newsletter online?

Check out the WSU Veterinary College Web site at www.vetmed.wsu.edu/depts-vth/smallAnimalServices.aspx, or subscribe to the online newsletter at www.vetmed.wsu.edu/depts-vth/newsletters/online.asp

Also feel free to call 509-335-0711 for **veterinary appointments** or **emergency care**.