

Newsletter of the COMMUNITY PRACTICE SERVICE

College of Veterinary Medicine, Washington State University
www.vetmed.wsu.edu/ClientED/community_practice.asp

Spring 2006

Torn Knee Ligaments a Common Problem for Dogs

A dog can injure its knee from simply catching a Frisbee or jumping down from a pickup. Or in Maggie's case, a nine-year-old black lab, chasing after a cat.

The impact from these normal activities can cause some dogs, especially if overweight or older, to tear the ligaments within their knee joints, called cranial cruciate ligaments. In fact, it is the most common orthopedic problem veterinarians see today, especially in large-breed dogs like Labrador retrievers and Rottweilers. As many as 20 percent of dogs may experience cranial cruciate tears in their lifetime.

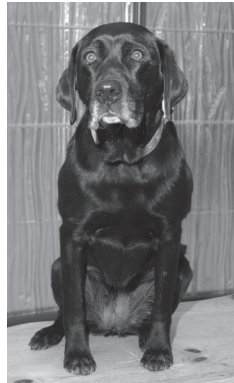
The injury can cause sudden knee lameness for up to two weeks after the ligament first tears, but the pain may subside if the meniscus, or cushion of the knee, was not torn. The pain often returns, however, within four to six weeks and, due to the instability of the knee, arthritis may develop. "After a tear, the cushions or menisci between the knee become damaged and get trapped in an abnormal position," said **Dr. Michelle Powers**, a small animal surgery resident at the WSU Veterinary Teaching Hospital. "It can be compared to walking with a pebble inside your shoe."

In the case of Maggie, owned by the **Nitcy family** of Potlatch, Idaho, her lameness occurred last April after she returned home from chasing a cat. Her owners brought her to the WSU Community Practice, where she has been a regular patient since 1996.

"When we examined Maggie, we could feel instability in her right knee joint," said **Dr. Raelynn Farnsworth**, a veterinarian on the Community Practice team. X-rays were ordered for the most accurate diagnosis, and indicated that Maggie had a torn ligament in her knee, and arthritis in her elbow and hip. "She was given anti-inflammatory medication to help with the pain and inflammation, and the next day we had her come in for surgery," she said.

Treatment

"Surgery is often the best option for dogs of her size with torn cranial cruciate ligaments," Dr.



Maggie

Farnsworth said. There are a number of different ways to surgically correct these injuries. At WSU, a lateral suture procedure can be performed, in which a suture is placed on the outside aspect of the knee to tighten up the knee joint and stabilize it. Scar tissue forms over the permanent suture and eventually functions like the cranial cruciate ligament.

A second surgical procedure, called Tibial Plateau Leveling Osteotomy or TPLO, involves reshaping the top end of the tibia bone in the knee and applying a plate. This procedure changes the angle that the femur or thigh bone makes with the knee joint, helping to stabilize the joint.

During the surgery, dead tissue and joint debris are also removed, decreasing the onset of arthritis. TPLO is a patented procedure and surgeons at WSU who perform the surgery have had advanced training to use this method.

"Both procedures have very high success rates depending on proper patient selection," Dr. Powers said. "More than 86 percent of dogs will be able to return to normal pet function after knee surgery." Dogs weighing less than 20 pounds often heal to an acceptable functional level without surgery. In many cases, they can be treated for pain and inflammation control as needed. For larger dogs, crippling arthritis will most likely occur if surgery is not performed.

For Maggie, the TPLO procedure was chosen as the best option to correct her torn cruciate ligament. Dr. Powers successfully performed the surgery with the help of orthopedic veterinary technician Lori Lutskas and a veterinary student.

Maggie recovered on a standard 8- to 16-week plan of no running or jumping, and slowly returning to a normal activity level. She was brought back in to WSU for check-ups, but as is common with overweight dogs, she still had problems with her leg. To further aid her recovery, she was prescribed physical therapy and supplements of glucosamine and chondroitin to help with inflammation and prevent joint tissue from breaking down. Her owners also received advice on how to safely reduce her weight.

Continued on page 2

Matthew Mickas, DVM
Terri A. Schneider, DVM
Raelynn Farnsworth, DVM
GayLynn Clyde, DVM
elective surgeon
Tamera Montgomery, RVT

To make an appointment call:
509-335-0711

In this issue:

Torn Knee Ligaments a Common Problem for Dogs.....	1
Managing Your Pet's Arthritis	2
WSU Small Animal Orthopedic Service.....	3
Arthroscopy Helps Small Animals with Osteoarthritis.....	4
Preventing and Controlling Gum Disease	4
Avian Influenza	5
WSU Featured on Animal Planet Network.....	5
Canine Influenza	6



Princess

Community Practice Service is published three times a year by Washington State University, PO Box 645910, Pullman, Washington 99164-5910. Issue No. 7. Phone: 509-335-0738. To subscribe, contact Emmy Widman at esunleaf@vetmed.wsu.edu or 509-335-5389. 02/06 112262.

WASHINGTON STATE
UNIVERSITY

World Class. Face to Face.

Managing Your Pet's Arthritis



Baby

Chronic osteoarthritis or OA is an affliction for many people and pets, especially as they age. This condition in pets usually results from an underlying disease process. The most common are joint instability or loss of normal joint contact surfaces due to elbow or hip dysplasia. Injuries can also produce OA.

It is estimated that 20 percent of dogs in the United States may be affected by OA. As with humans, not all animals with OA require treatment. For those that do, there are several measures owners

can take to make their pets more comfortable and decrease the severity of clinical signs.

"Usually your veterinarian can tell you if your pet is predisposed to arthritis, such as with joint conformation problems, breed history, and so on," said **Dr. Raelynn Farnsworth** of the WSU Community Practice. "Weight management, nutritional supplements, and non-steroidal anti-inflammatory drugs or NSAIDs like Rimadyl™ or Deramaxx™ are some of the most effective ways to help pets with this problem."

Although helpful in relieving discomfort for pets with osteoarthritis, adverse reactions such as gastrointestinal upset can be seen with all canine-approved NSAIDs, and are advised to be used "only as needed." Currently, there are no FDA-approved NSAIDs for cats, although a veterinarian may prescribe a canine-approved NSAID for a very short time for feline pets when indicated.

Weight loss relieves continual undue stress on an animal's joints. "Weight loss/control singly has been shown to have a profound effect on the comfort level of a dog with OA," said Dr. Steve Martinez, a WSU veterinary orthopedic surgeon. "Exercise modification, not restriction, is also very important. Avoiding prolonged high impact activities such as free running, Frisbee catching, long distance jogging, etc., and replacing them with low-impact activities such as swimming, walking on grassy flat areas, etc., are also much less stressful on osteoarthritic joints."

Dietary supplements such as glucosamine and chondroitin sulfate may also help with joint health. Glucosamine provides the building blocks to form new cartilage and joint fluid, which makes joints more slippery and healthy. Chondroitin sulfate reduces degenerative enzymes that break down cartilage in a joint, and it also helps lubricate joints.

"Research has shown that glucosamine and certain chondroitin sulfates can have a profound anti-inflammatory effect if used together," Dr. Martinez said. "This effect may decrease the likelihood that an animal with an acute flare-up of chronic OA will require NSAIDs treatment, or may require only a short course of NSAID treatment."

"There are many different forms and sources of glucosamine and chondroitin because they are absorbed differently by animals," Dr. Farnsworth said. "Owners should consult their veterinarian about putting their pet on a diet or giving them supplements or medications to help with osteoarthritis. They can also call WSU's veterinary teaching hospital and receive advice." To date, other nutritional supplements, such as MSM and SAME, believed to have beneficial effects for OA patients, have not been clinically tested and do not impact the clinical signs of OA in pets.

Pet owners also need to realize that human drugs and NSAID formulations can be potentially fatal to a pet. "Studies have shown there is a fine line between the therapeutic and toxic ranges for certain medications for small animals," Dr. Farn-

sworth said. "Even one Tylenol pill can be extremely toxic to a cat, or ibuprofen (e.g. Advil) for a dog. A human-size dose of some medications can cause gastrointestinal upset, liver and kidney disease, and potentially death in pets. For this reason, pets should only receive pet-formulated NSAIDs prescribed by a veterinarian and not use medications formulated for human consumption unless under direct supervision by a veterinarian."

Veterinarians can also prescribe supplements in pill form, or specialized diets formulated with glucosamine and chondroitin, as well as Omega-3 and Omega-6 fatty acids to help with joint health.

For many animals that need to lose weight, the extra pounds should come off slowly. A veterinarian can formulate a weight loss plan suitable for an individual pet, and may include food reductions, a specialized diet, and exercise.

The Small Animal Orthopedic Service at WSU specializes in helping small animals with bone- and joint-related problems, including OA. This service provides expertise and abilities to treat certain forms of OA with surgery, including arthroscopy, and medical management including physical therapy.

For more information about how arthritis prevention or management, contact the WSU Community Practice at 509-335-0711.

Torn Knee Ligaments *continued from front page*

Prevention

It is impossible to prevent a dog from sustaining a cruciate ligament tear, but some factors may make such an occurrence more likely. Weight is a large factor. Weight contributes directly to how much stress is placed on the knee, yet at the same time, the structures in the knee remain the same. These structures do not get significantly stronger as a dog gets heavier. So the heavier a dog is, the more pressure is put on the knee joint and the more likely an injury will occur. Weight loss is a common part of the recovery process for overweight dogs with a torn ligament.

Another factor that can contribute to knee injuries is conformation of the knee joint itself. In other words, a close examination of the joint structure in a given dog may reveal a natural vulnerability to these injuries. Large breed dogs like Labradors, or those with straighter legs, such as Rottweilers, may be more prone to joint conformation problems than other breeds.

Age also plays a role. "The cartilage and ligaments surrounding the knee degenerate and weaken over time, so knee injuries are more common in middle- to older-age dogs," Dr. Powers said. "It is also important to know that 40 to 60 percent of dogs that have injured one knee will injure another within 18 months from the first instance. This may be because a weight shift during recovery from the first surgery overly stresses the opposite side which may have conformation problems as well."

Torn knee ligaments may also appear as a hip joint problem. "In about one-third of cases in which dogs are presented with hip complaints, it actually turns out to be a torn cranial cruciate ligament problem," Dr. Powers said. "A key to knowing the difference is realizing that common hip problems do not produce an acute onset of pain, as will a torn cruciate ligament."

"The best way to avoid knee problems is to keep your dog slightly underweight," she said. "Research has clearly shown that animals kept slightly below their projected weight tend to live up to two years longer than dogs that are overweight. Owners should also be careful about using non-steroidal anti-inflammatory medications such as Rimadyl™ or Deramaxx™ on a daily basis. It is best if they are only given as needed."

For more information about torn cranial cruciate ligaments or orthopedic services at WSU, contact the WSU Veterinary Teaching Hospital at 509-335-0711.

WSU Small Animal Orthopedic Service

The small animal orthopedic service at the WSU Veterinary Teaching Hospital (VTH) helps diagnose and correct injuries or disorders of the skeletal system in small animals, as well as their associated muscles, joints, and ligaments. One of the most common services offered includes fracture repair using the latest techniques.

Other surgical procedures include treating joint problems with arthroscopy (a tiny telescope), total hip joint replacement, and triple pelvic osteotomy where bones are cut and realigned. The service also offers collateral ligament repairs with a tissue-anchoring technique, cranial cruciate ligament rupture stabilization using the latest developments in joint reconstruction known as TPLO, and other stabilization techniques used for cruciate ligament ruptures.

For the most accurate diagnosis of orthopedic problems, the WSU VTH is equipped with the finest medical imaging capabilities available to veterinary medicine in the world. The WSU VTH has advanced diagnostic systems including arthroscopy, magnetic resonance imaging (MRI), computerized tomography (CT scan), nuclear scintigraphy (bone scanning), dual-energy X-ray absorptiometry (DXA) analysis, and ground reaction force analysis (force-plate analysis). These tools make it possible for WSU surgeons to plan precise surgical procedures in complicated injuries, fractures, and tumors, minimizing more invasive procedures and maximizing less invasive techniques, all translating into a safer surgery with better results.

In addition to diagnostics and surgery, the service provides complete patient care and management through small animal physical therapy and rehabilitation plans for patients. Soon the hospital will have a \$60,000 underwater treadmill and swim tank installed for dogs. The combination of orthopedic surgery, physical therapy, and rehabilitation minimizes the pain, discomfort, and length of recovery experienced by a patient.

The service is supported by two orthopedic veterinary surgeons specializing in small animals, who together have more than 30 years of clinical experience. **Drs. Steve Martinez** and **James Lincoln** perform diagnostic testing and surgeries, supervise resident surgeons, and help train veterinary students in small animal orthopedic diagnostics and surgery. They also teach advanced continuing education courses in small animal orthopedics to veterinarians throughout the Pacific Northwest.



The WSU Orthopedic Team: (left to right) Drs. Michelle Powers, Steve Martinez, and David Spranklin, and veterinary technician Lori Lutskas. (Not pictured) Drs. James Lincoln and Pilar Lafuente, and veterinary technicians Jenny Nosakowski, Keri Walker, Ryan Budde, Melody Gerber, and Shelly Lang.

Dr. Martinez and Dr. Lincoln are also co-directors of the Comparative Orthopedic Research Laboratory (CORL), which works in conjunction with the WSU Orthopedic Service to conduct clinical studies to improve the quality of life of small animal orthopedic patients. Past studies have included orthopedic pain management, obesity and the effects of dietary supplements on osteoarthritis, and fracture repair techniques, among others.

The service is also supported by three small animal surgery residents, **Drs. David Spranklin, Michelle Powers, and Pilar La-**

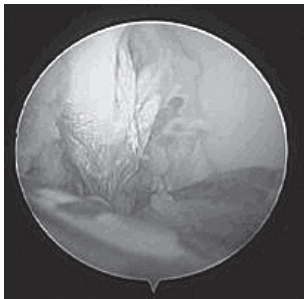
fuate, who perform diagnostic testing and surgeries under the supervision of the attending orthopedic surgeons. Small animal orthopedic veterinary technician **Lori Lutskas, LVT**, supports the orthopedic surgery ward, assists in surgeries, helps to manage small animal orthopedic appointments, and runs the physical therapy and rehabilitation program.

Veterinary surgical technicians **Jenny Nosakowski, LVT, Keri Walker, LVT, Ryan Budde, LVT, Melody Gerber, LVT, and Shelly Lang, LVT**, also provide support during orthopedic surgeries as well as other surgical procedures for the soft tissue surgery service, cardiology service, neurology service, and elective surgery service at WSU.

"We treat a wide variety of orthopedic cases in our service," said Dr. Martinez, who helps manage the service's busy caseload of eight to ten scheduled surgery patients each week, in addition to about as many emergency and referral patients. "We are blessed with a high level of expertise and personnel support, as well as cutting-edge technology to provide the best possible treatment for our patients throughout the Pacific Northwest and the United States. We enjoy a high success rate for getting small animals back to normal, healthy function."

For more information about the orthopedic service or referrals, contact the WSU Veterinary Teaching Hospital at 509-335-0711. More information about the Comparative Orthopedic Research Lab can be found on the College's Web site at www.vetmed.wsu.edu/researchVCS/corl/index.asp. Those who are interested in making a donation to help expand the WSU VTH's ability to provide physical therapy and rehabilitation with cutting-edge equipment (including the underwater treadmill and swim tank system) can contact Lynne Haley, associate director of veterinary development, at 509-335-5021 or lhaley@vetmed.wsu.edu.

Arthroscopy Procedure Helps Small Animals with Osteoarthritis



Arthroscopic image of a torn cranial cruciate ligament in a dog's stifle (knee).

If your dog has osteoarthritis, he or she could be treated with a new technology currently available at the Washington State University Veterinary Teaching Hospital.

In 2001, the hospital acquired \$150,000 worth of state-of-the-art small animal arthroscopy equipment. These small fiber-optic telescopes are used to see inside a joint through small incisions and give veterinarians the ability to examine and treat small animal

joint diseases. Although arthroscopy techniques are common in human medicine and have been used in equine surgery for more than 15 years, it has only come into small animal practice within the past seven or eight years.

Arthroscopes sizes vary from 1.9 to 2.7 millimeters in diameter depending on the size of the joint being examined.

"Unlike a traditional surgery, called an arthrotomy, where the joint is opened and drained of its fluid, arthroscopy is minimally invasive," explained **Dr. Steve Martinez**, one of two WSU

veterinary orthopedic surgeons. "The scope and instruments are inserted through small incisions. This procedure provides unparalleled visualization and access for the surgeon while also maintaining the fluid environment of the joint and promoting faster healing. Now we can see disease processes that we haven't been able to see before and the animals have a better chance at a quicker recovery."

A special digital camera is attached to the arthroscope allowing surgeons to perform the procedure while watching a monitor. Images can also be recorded and saved to computer media for documentation, and can be used as a teaching and demonstration tool for students. "The camera allows us to see and do more," he said.

There is also a vast array of specialized instruments that can be inserted into the joint to deal with various problems. "Arthroscopy and specialized procedures and instruments provide for more evidence-based and objective clinical treatment. They also allow us to study joint diseases and help us more objectively determine the benefits for what we do. Our goal is to always be at the cutting edge of surgery and knowledge in order to advance the care of small animals."

Currently, the WSU Veterinary Teaching Hospital is one of a few animal hospitals in Washington that offers this service for small animals.

Preventing and Controlling Gum Disease

Oral care is an important part of keeping pets healthy. Annual examinations and regular dental cleanings by a veterinarian are important to identify and prevent dental diseases. Pet owners can also play a large role as well.

First, owners can examine their pets' mouths for signs of dental problems. The early stages of dental disease begin with an inflammation of the gums called gingivitis. Some of the first signs of gingivitis include foul-smelling breath, discolored teeth, and swollen gums that bleed easily. This is from plaque and tartar buildup on a pet's teeth.

Left untreated, gingivitis progresses to periodontitis, characterized by loss of the bone and ligament tissues that support the teeth. The end stage of periodontitis is tooth loss. Gingivitis is reversible, but periodontitis is not. Owners concerned about dental disease can bring their pets to the WSU Community Practice for a dental examination.

"Intervention at the early stage of periodontitis is very important," said **Dr. Raelynn Farnsworth**, a veterinarian on the Community Practice team. "With treatment, we can prevent further progression of the disease and avert tooth loss."

Options to treat dental disease depend on the extent that it has progressed, but generally involves a cleaning by a veterinarian, just like people receive from their dentist. For additional



Zima

protection against gum disease, veterinarians at the Community Practice apply a sealant called OraVet Barrier Sealant™ in the last step of a pet's cleaning. The sealant creates an invisible barrier designed to prevent plaque- and tartar-forming bacteria from attaching to the teeth.

To keep a pet's teeth healthy at home, owners can brush their pets' teeth, feed a dental-formulated diet, and give their pets dental chews to help to prevent plaque from building above the gum line. Owners can also apply OraVet Plaque Prevention Gel™ to help prevent plaque and tartar buildup above and below the gum line. Available only through a

veterinarian, the gel should be applied once a week to maintain the barrier established from the pet's last cleaning.

"We are seeing a very good response in pets that are receiving OraVet on retarding plaque and tartar build-up on their teeth," Dr. Farnsworth said.

For more information about oral care for pets or to make a dental appointment, contact the WSU Community Practice at 509-335-0711. For brushing tips and other dental care information for pets, look online at the American Animal Hospital Association's Dental Care Guidelines for Dogs and Cats at www.healthypet.com.

Avian Influenza: Things you should know



Viruses that infect birds, including influenza, have probably been around as long as there have been birds on the planet. Why is the current Avian Influenza (AI) outbreak in Asia gaining so much attention? Here is what you need to know.

AI viruses do not usually infect humans or other mammals, but are normally confined to birds. These viruses can be carried great distances globally by migratory birds.

There are also several different strains of the AI virus, some of which are “highly pathogenic” to birds, meaning that they can cause widespread, severe disease, while others are of “low” pathogenicity. The specific strain must be considered when addressing control or eradication.

The naming of each AI strain in humans and birds depends on surface proteins of the virus. These are designated HA and NA and result in names like H7N3 or H5N1. There are 25 different proteins that can be found in combinations of two on the surface of AI viruses. Humans are susceptible to a number of AI strains; some cause serious disease and others result in only mild symptoms. The strain currently responsible for the Asian outbreak is H5N1. It now seems to be infecting people, but, importantly, has not developed an ability to move from person to person.

Flu viruses can change as the virus mutates. Viruses naturally mutate or change their genetic code. Some do this rapidly, while others are more stable. In the case of seasonal influenza in humans, this explains why there seems to be a new “type” of flu in humans each season. It is also why new flu vaccinations are developed each year.

AI viruses are spread like other flu viruses, in saliva, respiratory secretions, and feces. Most cases of AI in poultry occur from contact with live birds in markets and sales. Most cases of human influenza result from contact with other people.

It is very important to note that the current strain of AI causing concern in Asia, H5N1, has not been seen in the United States. Recent reports of AI in Canada were of the H5N2 strain, which has a low pathogenicity. As of December 10, 2005, both affected farms had gone through three sets of tests with no positive results, and the ban on transportation of poultry throughout Canada was lifted.

The real concern with AI H5N1 is that it will mutate into a form that can easily be passed from person to person, which it does not do now. This could result in a pandemic, or worldwide epidemic like those that occurred in 1957 and 1968 with different AI strains.

Disease authorities worldwide, including the Centers for Disease Control, the World Health Organization, the United States Department of Defense, the United States Department of Agriculture, and a myriad of other organizations and companies, are diligently working to keep the virus out of North America, as well as getting ready to combat it should an outbreak occur. Vaccines to protect humans from H5N1 are under development and the use of antiviral medications against the strain is being studied. Training workshops for state laborato-

The Exotic and Wildlife Service and the WSU Veterinary Teaching Hospital specializes in taking care of and rehabilitating wild birds, raptors such as eagles and owls, reptiles, and mammals such as rabbits, mice, raccoons, and squirrels. This service also treats pet birds, ferrets, rabbits, snakes, fish, and other nontraditional pet species.

ries, local authorities, and other medical personnel are being held to familiarize them with planning strategies, detection of the virus, and treatment of disease.

As for pet bird owners, you will not have to change anything about how you keep your birds. Don't allow the bird access to areas that could have been contaminated by waterfowl or other migratory birds, which most of you don't already. Don't allow the bird to come in contact with poultry or their secretions. Do give your bird only chlorinated or bottled water that has been treated.

There aren't any parrot vaccines available that are specific for H5N1, and there aren't any that are approved for psittacines either. Things are changing quickly with regard to AI and you need to keep up on the new information, but there is no reason to be overly concerned or panic.

For more information:

www.cdc.gov/flu/avian

www.who.int/csr/disease/avian_influenza/en/

www.inspection.gc.ca/english/toce.shtml

www.pandemicflu.gov/

www.fao.org/ag/againfo/subjects/en/health/diseases-cards/special_avian.html

www.osha.gov/dsg/guidance/avian-flu.html

WSU College of Veterinary Medicine featured on Animal Planet Network



Two fellow Aussies saying “Hello mate!”: Dr. Warwick Bayly, Dean of the WSU College of Veterinary Medicine, (left) and Steve Irwin, “The Crocodile Hunter” at WSU.

Steve “The Crocodile Hunter” Irwin put WSU's College of Veterinary Medicine on a world stage as part of his new television series on the Animal Planet Network's *New Breed Vets*.

Declaring WSU's veterinary college one of the “greatest in the world” for its research and dedication to helping animals, Irwin highlighted several of the college's research and clinical care programs on two television programs broadcast on the Animal Planet Network near Christmas.

In an episode that ran Thursday, December 22, 2005, viewers were able to see a thoroughbred racehorse being examined for breathing problems while running full speed on the college's equine treadmill. They also saw a

start-to-finish diagnosis of a quarterhorse's foot lameness using WSU's MRI, and a bald eagle undergoing an MRI to discover the true extent of its injuries. Finally, Irwin spotlighted the WSU grizzly bear facilities to see cutting-edge research during hibernation that may help these endangered animals.

On Friday, December 23, the *Animal Planet Report* on the same network featured WSU's Dr. Nickol Finch releasing a bald eagle back to the wild near Kettle Falls, Washington. The bird, found by rafters and local residents, had been mauled by a dog and was unable to fly before it was brought to the WSU Veterinary Teaching Hospital for care. The same program also covered Drs. Lynne Nelson and Charlie Robbins' research with grizzlies. In all, Animal Planet Network producers have visited Pullman twice in the past year.



Canine Influenza: Things you should know

In late September, the media began reporting cases of canine influenza, a new flu-like disease of dogs. Canine influenza is most likely related to the “influenza A” viruses that affect horses, the H3N8 subtype first discovered in 1956. At some point, the virus mutated and the new strain made the leap from infecting horses to dogs.

In 2003, the first significant natural canine influenza outbreak was diagnosed at greyhound racetracks. The first evidence of canine influenza in companion dogs was documented the spring of 2004.

“So far, there is no evidence that the disease has or will jump to humans,” says **Charlie Powell**, public information director for the Washington State University College of Veterinary Medicine. “This is a very important point that has been widely misreported. Just because a virus jumps from one species to another does not mean humans are next.”

Humans have been exposed to the horse influenza A virus since 1956, and the canine mutation since at least 2003, with no known cases. This virus is unlike the seasonal “flu” viruses humans are vaccinated for each fall.

Currently, there is no vaccine for canine influenza. All dogs are susceptible to infection by the virus, and none have immunity against it. Fortunately, most dogs diagnosed with canine influenza experience a mild form of the disease. Canine influenza also has a very low fatality rate. Only one to five percent of all infected dogs will die from the disease. “Getting your family veterinarian involved early and providing good supportive care is the best medicine for most animals,” Powell said.

Canine influenza begins with exposure to the virus followed by a two- to five-day incubation period. After that, dogs usually suffer from a persistent cough that may last for as long as three weeks, and may experience a yellowish nasal discharge. Dogs that experience more serious canine influenza symptoms frequently have a high fever, increased breathing rates, and other indications of pneumonia. Currently, antibiotic treatment of secondary bacterial infections of the sinuses or lungs is successful in about 95 percent of cases. Antibiotics, however,



do not destroy viruses, and most dogs will not need antibiotics.

“You can reduce your dog’s risk of exposure,” Powell said. “The greater the exposure your dog has to other dogs, the greater the chance of infection.” Currently, canine influenza appears to be an airborne infection, much like kennel cough, so direct physical contact between dogs is not required. Simply breathing in the atomized droplets of a dog’s cough or sneeze may be enough to infect another dog.

“Without a vaccine available, there is no way to ensure your dog won’t contract canine influenza,” Powell said. “If your dog socializes with other dogs or is boarded, exposure risks are greater than if your dog is kept alone or only with housemates.”

The symptoms of canine influenza are very similar to kennel cough. If a dog shows signs of respiratory disease, a veterinarian should see it. The veterinarian will need to know about any travel or exposure to other dogs it may have had recently. Be aware that coughing can also be an indication of a variety of diseases or immediate concerns like an airway obstruction. Veterinarians are best qualified to make the diagnosis.

Laboratory tests are widely available to detect canine influenza, in part because the reagents used in the tests have a 99 percent cross reactivity for all influenza A viruses. Veterinarians can send samples to most commercial or public laboratories. The Washington Animal Disease Diagnostic Laboratory at WSU can perform in-house testing on dog fluids or tissues. Commercial laboratories offering testing in Washington include Antech Diagnostics in Kent and Phoenix Central Laboratory in Everett.

There are no reliable estimates of how many cases Washington will likely see. Like many animal diseases with low fatality rates that are not contracted by humans, canine influenza is not reportable to disease control agencies. Local veterinarians are the best source of information for outbreaks in a certain area. For more information, concerned owners are welcome to contact the WSU Community Practice Service at 509-335-0711.