



## VACCINATION GUIDELINES

### WHY VACCINATE?

Vaccines help prepare the body's immune system to fight the invasion of disease-causing organisms. Vaccines contain antigens, which look like the disease-causing organism to the immune system but don't actually cause disease. When the vaccine is introduced to the body, the immune system is mildly stimulated. If a pet is ever exposed to the real disease, his immune system is now prepared to recognize and fight it off entirely or reduce the severity of the illness.

### CORE VACCINES

Core vaccines are considered vital to all pets based on risk of exposure, severity of disease or transmissibility to humans.

- **Dogs:** DAPP (canine parvovirus, distemper, canine hepatitis) and rabies
- **Cats:** FVRCP (panleukopenia (feline distemper), feline calicivirus, feline herpesvirus type I (rhinotracheitis)) and rabies

### ELECTIVE VACCINES OFFERED:

- **Dogs:** Bordetella (Kennel Cough): - this vaccine should be given if your dog is frequently exposed to other dogs in environments such as grooming facilities, dog parks, boarding kennels, etc. It is given intranasally (via drops in the nose) and is repeated every 6 months to 1 year depending on exposure level.

### VACCINATION FREQUENCY:

- **Puppies & Kittens:**
  - Puppies should receive a series of vaccinations starting at 6-8 weeks of age. A veterinarian should administer a minimum of three vaccinations at three- to four-week intervals. The final dose should be administered at 14-16 weeks of age.
  - SAHS administers rabies at the first eruption of permanent teeth, ensuring the pet is over 12 weeks old.
- **Adults:**
  - DAPP and FVRCP vaccinations should be administered annually.
  - Rabies: The 2nd rabies vaccination is recommended 1 year following administration of the initial dose, regardless of the animal's age at the time the first dose was administered. Booster vaccines should be administered every 3 years. State, provincial, and/or local laws apply. (AAHA Vaccination Guidelines)

### VACCINATION RISKS:

Immunizations should mildly stimulate the animal's immune system to create protection from specific infectious diseases. This stimulation can create mild symptoms, ranging from soreness at the injection site to fever and allergic reactions. As with any medical procedure, there is a small chance of side effects. In most cases, the risks are much smaller than the risks of disease itself. Most pets show no ill effect from vaccination.



**CANINE VACCINATIONS**

**DAPP VACCINE for PUPPIES (<4 months):**

<b>Initial Dose</b>	6-8 weeks of age
<b>2<sup>nd</sup> Dose</b>	12 weeks of age
<b>Final Dose</b>	16 weeks of age (Not to be given sooner!)

**DAPP VACCINE for DOGS (>4 months)**

<b>2 Doses must be given</b>	Given 3-4 weeks apart
<b>Booster</b>	Given at 1 yr. of age

**RABIES VACCINE**

<b>Puppy Dose</b>	Given at 16 wks. or 4 months of age
<b>Adult Dog Dose</b>	Booster administered annually after 1 <sup>st</sup> dose, then every 3 years.

**FELINE VACCINATIONS**

**FVRCP VACCINE for KITTENS (<4 months):**

<b>Initial Dose</b>	6-8 weeks of age
<b>2<sup>nd</sup> Dose</b>	12 weeks of age
<b>Final Dose</b>	16 weeks of age (Not to be given sooner!)

**FVRCP VACCINE for CATS (>4 months)**

<b>2 Doses must be given</b>	Given 3-4 weeks apart
<b>Booster</b>	Given at 1 yr. of age

**RABIES VACCINE**

<b>Kitten Dose</b>	Given at 12-16 weeks of age
<b>Adult Cat Dose</b>	Booster administered annually after 1 <sup>st</sup> dose, then every 3 years.



## CANINE VACCINE DETAILS

### **Rabies:**

Rabies is a virus that may affect the brain and spinal cord of all mammals, including dogs, cats, and humans. Rabies is primarily passed through a bite from an infected animal. Some symptoms of rabies are extreme behavioral changes, hypersensitivity to touch, light, or sound, paralysis of the throat and jaw muscles and, the most commonly recognized, foaming of the mouth.



### **Canine Distemper: (DHPP)**

Canine Distemper is a virus that affects a dog's gastrointestinal, respiratory, and central nervous systems. It is often fatal and is passed from dog to dog through direct contact with body fluids and/or respiratory secretions. The virus starts by attacking the respiratory system (sneezing, coughing, thick mucus coming from the eyes and nose, lethargy) and gastrointestinal system (vomiting and diarrhea). These signs quickly progress to neurologic symptoms (muscle tremors, seizures, vocalization), which are generally irreversible.

### **Canine Hepatitis: (DHPP)**

Canine hepatitis is a highly contagious viral infection that affects the liver, kidneys, spleen, lungs, and eyes. It mostly affects young dogs under one year of age, though it can affect adults. Canine hepatitis is transmitted through direct contact with body fluids (urine, feces). Some symptoms of canine hepatitis are a mild fever, moderate lethargy, and slight loss of appetite.

### **Parainfluenza: (DHPP)**

Canine parainfluenza is a highly contagious respiratory disease that is associated with kennel cough. It is an acute inflammation of the upper airways that can progress to pneumonia in puppies or chronic bronchitis in older dogs. It is transmitted through contact with nasal secretions of infected dogs.

### **Parvovirus: (DHPP)**

Parvovirus attacks the white blood cells and rapidly dividing cells in a dog's body, most severely affecting the intestinal tract. Parvovirus is extremely contagious and can be transmitted easily by anything/anyone that contacts an infected dog's feces. It is highly resistant and can live in the environment for years. Some symptoms of parvovirus are lethargy, severe vomiting, loss of appetite and bloody, foul smelling diarrhea.

### **Bordetella (Kennel Cough):**

Kennel cough is a form of bronchitis that is like a "cold" in humans. A persistent cough with a "honking" sound is the main clue your dog has kennel cough. Kennel cough is generally passed from dog to dog from respiratory secretions. The most common way kennel cough is spread is in high density populations such as dog parks, grooming salons, or boarding kennels.



## FELINE VACCINE DETAILS



### **Rabies:**

Rabies is a virus that may affect the brain and spinal cord of all mammals, including dogs, cats, and humans. Rabies is primarily passed through a bite from an infected animal. Some symptoms of rabies are extreme behavioral changes, hypersensitivity to touch, light, or sound, paralysis of the throat and jaw muscles and, the most commonly recognized, foaming of the mouth.

### **Rhinotracheitis: FVRCP**

Feline Viral Rhinotracheitis (FVR) is caused by the feline herpesvirus and is a major cause of upper respiratory disease in cats. It is the most common cause of conjunctivitis (eyelid swelling, eye discharge, nasal discharge). The virus can infect cats of all ages and once infected, can never be cleared.

### **Calicivirus: FVRCP**

Feline Calicivirus is one of many upper respiratory infections that affect felines. It can cause oral ulceration, ocular and nasal symptoms, etc. While they rarely cause death in adult cats, they often cause serious illness and death in young kittens. Calicivirus is transmitted by direct contact with infected eye, mouth, or nose discharge.

### **Panleukopenia: FVRCP**

Feline panleukopenia virus (FPV), also known as Feline distemper, is a viral infection. It is caused by the feline parvovirus and once contracted, is highly contagious and can be fatal to the affected feline. It is transmitted through contact with an infected animal's bodily fluids, as well as by fleas. Some symptoms are bloody diarrhea, severe dehydration, anemia, and often death.



## DEWORMING / PREVENTIONS

**Pyrantel (Strongid):** Kills hookworms and roundworms.

**Roundworms** are the most common intestinal parasite. Resembling **spaghetti**, adult worms are 3-4 inches long. Roundworms can be transmitted from **mother to baby** or by **ingesting** either infected rodents or infected feces.

**Hookworms** are smaller than roundworms but also found in the small intestine. Hookworms **feed on blood**. These can also be transmitted from **mother to baby** or ingesting infected feces.

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**Praziquantel:** Kills tapeworms

**Tapeworms:** segmented parasites that are only transmitted by **ingesting a flea** infected with tapeworm eggs. Tapeworms are **not contagious** from pet to pet (or to you!). You will usually recognize the shedding segments that look like **small grains of rice**.

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### **Heartworm Prevention<sup>1</sup> :**

- Whether the preventive you choose is a pill, a spot-on topical medication or an injection, all approved heartworm medications work by **eliminating the baby heartworm stages** of the heartworm.
  - Unfortunately, in as little as **51 days, immature heartworm larvae can become adults** and heartworm prevention cannot kill them. This is why it is so important to give prevention on schedule and to test yearly!
  - The products we carry here are **MONTHLY** that ALSO are effective against **HOOKWORMS and ROUNDWORMS**.
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1: American Heartworm Society: <https://www.heartwormsociety.org/>



## HEARTWORM DISEASE<sup>1</sup>

Heartworm disease is a **serious and potentially fatal** disease. It is caused by **foot-long worms** (heartworms) that live in the **heart, lungs and associated blood vessels** of affected pets, causing **severe lung disease, heart failure** and damage to other organs in the body.

**DOGS.** The dog is a **natural host** for heartworms, which means that heartworms that live inside the dog mature into adults, mate and produce offspring. If untreated, their **numbers can increase**, and dogs have been known to harbor **several hundred worms** in their bodies. Heartworm disease **causes lasting damage to the heart, lungs and arteries**, and can affect the dog's health and quality of life long after the parasites are gone. For this reason, prevention is by far the best option, and treatment—when needed—should be administered as early in the course of the disease as possible.

**CATS.** The cat is an **atypical host** for heartworms, and most worms in cats do not survive to the adult stage. Cats with adult heartworms typically have just **1-3 worms**. While this means heartworm disease **often goes undiagnosed in cats**, it's important to understand that even immature worms cause real damage.

The **MOSQUITO** plays an essential role in the heartworm life cycle. Mosquitoes can spread microscopic baby worms (**MICROFILARIA**) from an infected animal to an uninfected one. Once inside a new host, it takes approximately **6 months** for the baby heartworms to mature into adult heartworms. Once mature, heartworms can **live for 5 to 7 years in dogs and up to 2 or 3 years in cats**.

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### Heartworm Testing<sup>1</sup>:

- Puppies **under 7 months** of age can be started on heartworm prevention without a heartworm test (it takes at least 6 months for a dog to test positive after it has been infected)
  - The risk of puppies and kittens getting heartworm disease is equal to that of adult pets. Puppies and kittens should be started on a heartworm preventive as early as the product label allows, and **no later than 8 weeks of age**.
- Adult dogs **over 7 months** of age **and previously not on a preventive need to be tested** prior to starting heartworm prevention.
- **Annual testing is required** to continue purchasing prevention through SAHS, even when dogs are on heartworm prevention year-round, to ensure that the prevention program is working.
  - Heartworm medications are highly effective, but dogs can still become infected. If you **miss just one dose** of a monthly medication—or **give it late**—it can leave your dog unprotected. (In as little as **51 days, immature heartworm larvae can become adults** and heartworm prevention cannot kill them.) Even if you give the medication as recommended, your dog may **spit out or vomit** a heartworm pill—or **rub off a topical** medication.
  - Heartworm preventives are highly effective, but **not 100 percent effective**. If you don't get your dog tested, you won't know your dog needs treatment.



## SNAP Heartworm 4DX Testing<sup>2</sup>:

- Tests for heartworm disease and 3 tick borne diseases: lyme disease, anaplasmosis, ehrlichiosis
- Any positive results should be followed up with treatment at your regular veterinarian

				
	Lyme disease	Anaplasmosis	Ehrlichiosis	Heartworm disease
Parasite	Deer tick or black-legged tick ( <i>Ixodes</i> spp.) carries bacteria and bites dogs, spreading infection		Brown dog tick ( <i>Rhipicephalus sanguineus</i> ) carries bacteria and bites dog, spreading infection	Mosquito transfers worm larvae from infected dog to your dog; larvae develop into worms that live in the heart and its vessels
Most common signs of infection	Silent infection <ul style="list-style-type: none"> <li>• Lameness</li> <li>• Fever</li> <li>• Swollen joints</li> <li>• Kidney failure</li> <li>• "Not himself/herself"</li> <li>• Anorexia</li> </ul>	Silent infection <ul style="list-style-type: none"> <li>• Lack of energy</li> <li>• High fever</li> <li>• Swollen, very painful joints</li> <li>• Loss of appetite</li> <li>• Vomiting</li> <li>• Diarrhea</li> </ul>	From mild to severe: <ul style="list-style-type: none"> <li>• Loss of appetite</li> <li>• Depression</li> <li>• Fever</li> <li>• Painful joints</li> <li>• Bloody nose</li> <li>• Pale gums</li> </ul>	No sign at first, then: <ul style="list-style-type: none"> <li>• Mild, persistent cough</li> <li>• Reluctance to move or exercise</li> <li>• Tiredness after moderate exercise</li> <li>• Reduced appetite</li> <li>• Weight loss</li> </ul>
Disease progression if left untreated	Damaged joints, fatal kidney disease (rare)	Very low numbers of platelets and white blood cells, chronic joint pain, neurological signs (rare)	Permanent blindness, autoimmune diseases, bleeding complications, death	Heart failure, lung disease, sudden death
Coinfection	Coinfection with Lyme disease and anaplasmosis is possible. In addition, it's possible for your dog to become infected with any combination of parasitic diseases—including those not listed here.			
Diagnosis	Simple blood test: SNAP <sup>®</sup> 4Dx <sup>®</sup> Test (can detect four infections in one blood sample in less than 10 minutes) Other tests: Complete blood count, chemistry profile, urinalysis, other special tests, depending on initial findings and clinical signs			
Treatment	Antibiotics: doxycycline, tetracycline	Antibiotics: doxycycline, tetracycline	Antibiotics: doxycycline, tetracycline	Adulticides (kills adult heartworms), melarsomine (Immiticide) <small>Source: American Heartworm Society</small>
Prognosis	If caught and treated early, the outcome is usually very good for a full recovery from symptoms. Some of these infections cannot be cured completely, but early intervention usually provides the best prognosis.			
Vaccine available?	Yes	No	No	No
Other prevention	Daily tick inspection and removal, and the use of topicals and other veterinarian-dispersed products			Heartworm pills and topical preventatives (typically monthly)

**IMPORTANT:** No prevention is 100% effective. Test your dog every year.





## **Feline Combo Test (FIV/FelV)<sup>3</sup>** - Surgery = both locations; Wellness = Brooks only

- Tests for Feline immunodeficiency virus (FIV) and Feline leukemia virus (FeLV)
- Any positive results should be followed up with treatment at your regular veterinarian
- **Feline Immunodeficiency Virus (FIV)**
  - FIV is a disease that causes **suppression of the immune system** and may limit a cat's ability to protect itself from common bacteria and viruses. The disease is transmitted cat to cat, usually by **biting or scratching**.
- **Feline Leukemia Virus (FeLV)**
  - FeLV is a disease that **reduces the immune system's ability to protect itself against secondary infections**. It is transmitted by **casual contact** between cats, such as **sharing a water bowl**, as well as through **bite wounds**.

Symptoms	FIV	FeLV
Weight loss	+	+
Loss of appetite	+	+
Lethargy	+	+
Fatigue	+	+
Bad breath	+	+
Discharge from eyes/nose	+	+

3: Idexx Pet Health Network: <http://www.pethealthnetwork.com>

## Microchipping<sup>4</sup>

A microchip is about the size of a **grain of rice**. It consists of a **tiny computer chip** housed in a special type of glass. The material is made to be compatible with living tissue. The microchip is implanted between the animal's shoulder blades under the skin with a needle and special syringe.

In **April 2015**, the San Antonio City Council made **MICROCHIPPING your pets REQUIRED BY LAW!!**

- All dogs, cats, ferrets residing in San Antonio city limits must have a **registered microchip**.
- Registered microchip must show **current ownership information** including: Owner name, address, phone number (if available) and the description of the pet
- The owner of the pet is responsible for ensuring that the microchip is registered with current information. (If there is a change in pet ownership, the previous and the current owner are both responsible for ensuring the microchip is updated with new owner's information.)
- Dogs **MUST wear a tag** with the registered microchip number at all times while outdoors.
  - Microchips generally come with a tag from the microchip manufacturer with pet's respective microchip number engraved on it. If that tag is lost or misplaced, any tag with the microchip number associated with that pet worn on the pet's collar or harness will be considered in compliance with the law.

4: <http://www.sanantonio.gov/Animal-Care/What-We-Do-Services/Low-Cost-Services/Microchipping>



PRODUCT	SPECIES	TYPE	AGE?	ADULT FLEAS	FLEA EGGS	TICKS	HEART-WORMS	ROUND & HOOK-WORMS	OTHER
		ORAL	6 Weeks				✓	✓	
		ORAL	8 Weeks						
		TOPICAL	7 Weeks 3 pounds				✓	✓	Whipworms Sarcoptic Mange
		TOPICAL	8 Weeks				✓	✓	EAR MITES