

## Pet Health Record

**Primary Care Facility:**

Bellevue Animal Hospital  
 10410 S. 25<sup>th</sup> Street  
 Bellevue, NE 68123  
 (402) 291-1255

**After Hours Emergency Facility:**

Animal Emergency Clinic  
 9664 Mockingbird Dr.  
 Omaha, NE 68127  
 (402)-339-6232

Microchip #:

VACCINATION RECORD:

<u>Vaccine Name</u>	<u>Date</u>											
Enteritis												
Rhinotracheitis												
Calicivirus												
Rabies												
FELV												
FIV												
Weight												

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**(402) 291-1255**  
[www.bellevueanimalhospital.com](http://www.bellevueanimalhospital.com)

## **YOUR NEW CAT OWNERS GUIDE**

At Bellevue Animal Hospital, it is our desire to provide the highest quality care to our patients as well as the best possible service to our clients. We understand that owning a pet is a lot of responsibility and there are many questions you may have about the care of your pet. This information will help you better understand the care needed to raise a healthy, happy pet.

### **Preventative Health Care Recommendations**

Preventive health care can increase the quality and length of your pet's life, and possibly even your own. In general, behavioral and physical health problems are much easier to prevent than to treat. Also, prevention costs substantially less than treatment. The following recommendations will help avoid problems before they occur.

### **Kitten Proofing Your Home**

Like other intelligent and playful babies, kittens investigate objects by touching, chewing and tasting them. They need protection from household items that are dangerous if swallowed.

- **Here are some ways to keep your kitten safe:**
  - Get covered trash cans for your kitchen and bathroom.
  - Keep kitchen countertops clean and clear, so your kitten won't get in the habit of jumping up to inspect them.
  - Close toilet lids so your kitten won't fall in or learn to drink from the bowl.
  - Keep electrical cords and wires out of sight, secured to the wall or tucked behind furniture.
  - Shorten dangling blind and curtain cords, and secure them out of reach.
- **Keep these things away from your kitten:**
  - Plastic bags, string, holiday ornaments, sewing supplies, rubber bands, ribbon and twist ties.
  - Paper clips, erasers and staples.
  - Coins, small board game pieces, fragile keepsakes and ornaments.
  - Any medication (this includes Acetaminophen (Tylenol), Ibuprofen), vitamins, & pill bottles.
  - Dental floss, razor blades.
  - Some houseplants (including: all lilies, philodendron, mistletoe, poinsettia) and garden plants (such as lily, azalea, daffodil, tomato, foxglove, yew, hydrangea) are toxic to cats.
  - Grapes, raisins, onions, chocolate, macadamia nuts, and Xylitol (sugar substitute) are also toxic.

## Welcome Home

Plan to spend extra time with your new kitten shortly after he/she comes home with you (i.e., try to be home for a long weekend). During this time gradually accustom your kitten to their new home and where the food and water bowls and litter box are.

## Leash Training

Leash training is possible for your kitten, but many cats are resistant to it and may never take to it. Additionally, if you do explore this with your kitten, watch closely for others walking their dogs to avoid bite injuries. Also your kitten will likely not be able to tolerate as long of walks as a puppy of equal age.

- **Choose the right collar:**
  - Collars should fit with some slack but not loosely enough to slide easily over the head. Allow two finger-widths of space between the neck and collar for adults and 1 finger-width on kittens.
  - Check the collar's fit every week during your kitten's growth and loosen as needed.
  - ID tags and current contact information should be included on the collar.
  - The use of a safety or pull apart collar is recommended to avoid choking.
  - Harnesses are also available and do provide additional security so your kitten is less likely to pull away from you and slip out of their neck collar.
- **Get the right leash:**
  - A four-foot leash will make it easier to keep your active kitten under control. A longer leash gives him too much room to get into mischief. If a leash is not working well for your cat/kitten, using a carrier when traveling and going to the veterinarian is recommended.

## Housebreaking

Providing an environment as free of stress as possible will help with your litterbox training and future management.

- Select an area on each floor for a litterbox.
- The general rule of thumb is to have 1 more litterbox than cats in the home.
- We recommend a litterbox without a hood unless necessary for aggressive covering behaviors or urinating over the side of the box. Other options include high sided boxes or making your own out of a Rubbermaid container.
- Scooping the box should be done daily and completely empty and clean weekly.
- Feeding and elimination areas should be separate areas of the house.

When a puppy relieves itself in the appropriate area, immediately rewarding it is very useful. However, for cats, this form of reward is unnecessary.

If you see a kitten eliminate in the house...

- Never push a cat's nose in stool or urine.
- Assess the litterbox for cleanliness.
- Make note if you have changed types of food, litter, or type of litterbox. (i.e. plain to hooded ) any of these can confuse your kitten and possibly discourage the use of the box.
- Make note of any blood, mucous, or abnormalities to the urine or stool.
- Observe your cat for signs of straining to urinate or frequent trips to the litterbox.

Use products such as Urine-Off when cleaning up accidents; avoid products with ammonia.

If all things are unchanged with your kitten, and you are still having elimination issues, consult your veterinarian about potential medical or behavior issues.

## Prevent Bad Habits

Provide appropriate objects for chewing and playing – Feather toys, mice, noise balls & greenies are excellent choices.

To handle aggressive play, stand perfectly still, and stop playing with the kitten. Walk away and leave the kitten without attention for several minutes, or a water sprayer or can of compressed air can be used. Avoid the eyes and squirting them while too close to you.

Don't allow jumping up on to the cabinets unless this is a behavior you wish your kitten to continue throughout their life.

## Socialization

While kittens are generally quite social, acclimating them to the home and some of it's noises and "scary" things will pay off in the long run.

1. Introduce your kitten to a variety of positive experiences.
2. Introduce your kitten to people of different ages, especially children. Children create their own kind of noise and activity, which kittens should become accustomed to.
3. Brush your pet daily, and at the same time handle its feet and ears, open its mouth for inspection and massage him all over.
4. Gradually acquaint him to very loud noises, like that of a vacuum cleaner. Turn it off and on from a distance at first, then, move the kitten closer to the noise source.
5. Allow your kitten access to its kennel and try to keep it a positive place & experience to ease getting them into it on their doctor visit days.

## Exercise

Every day, your kitten wakes up with a full tank of energy. How that energy is spent is up to you. Your kitten should have daily opportunities to play, chase a laser light or feather toy and have fun time with their new family.

## Baths

While some cats respond favorably to a bath, the vast majority do not enjoy exposure to water. The use of the dry bath wipes is ok, but most healthy cats will groom and clean themselves. Brushing is the best form of grooming that we can provide to our cats.

## Ears

A kitten's ears do not normally require cleaning. Check the ears for any debris or redness, particularly if you've noticed your kitten scratching or shaking his or her head. Ear infections need treatment by a veterinarian. Do not use swab sticks at any time. (i.e., Q-Tips)

## Nails

Keeping your kittens nails trimmed will minimize playful destructiveness to furniture, other pets, and people. Introduce nail trims gradually. Gently touch the paws as your kitten relaxes. Get him used to your fingers pressing against the footpads or separating the toes. Ask your veterinarian for basic instructions, and how to avoid the nail's blood vessels in the pink base closer to the toe. Don't forget the dewclaws. Use only nail trimmers specifically designed for dogs or cats. It is important that once you commit to a nail trim that you do your best to not let your kitten escape from the trim, as this will encourage them to repeat this bad behavior on your next attempt.

## Proper Nutrition

Throughout life, your pet should be fed a nutritionally balanced food specifically formulated for its age, life style, or medical condition. Feeding kittens poor quality foods of low digestibility may slow their growth rate, cause poor muscle and bone development, and decrease resistance to infectious disease. Table scraps and some pet foods may also contain excesses of nutrients that could harm your pet over time. Proper nutrition, fed in appropriate quantities, is crucial to the healthy development of your kitten.

Therefore, it's important to feed a high-quality food formulated for growing kittens and proven nutritionally adequate by clinical feeding trials. To minimize the risks from overfeeding, make sure your veterinarian agrees that the feeding recommendation on the label is right for your kitten.

Several options exist for feeding your new kitten. You can certainly leave the dry kibble out during the day to allow for small frequent meals, but the daily total amount (per the bag chart or veterinarian recommendation) should be utilized. Cats also can conform to twice daily feeding if multiple food types per cat in your house are being used or if you have a dog that may enjoy eating the cat's food. The cat's food is not balanced for your dog (and visa versa), and it should be avoided.

If your kitten appears to be overweight (you should be able to feel its ribs) or if skeletal problems arise (signaled by lameness), see your veterinarian. Never supplement a good kitten food with table scraps or other food. Certain breeds will look and feel differently, so ask your veterinarian what your specific kitten should look and feel like.

## Vaccinations

AGE:	VACCINATION:
6-8 Weeks	Temporary ENTRC
12 Weeks	ENTRC #1
16 Weeks	ENTRC #2 Rabies ***
Annual to bi-annual after ENTRC #2 Given	ENTRC Booster
If your cat goes outside, ask Dr. to discuss if this vaccine is needed	FELV
Ask Dr. to discuss if this vaccine is needed	FIV

\*\*\* Rabies vaccine is valid for one year.

### What do the vaccinations protect my cat against?

VACCINATION:	PROTECTS:
ENTRC	<p><b>ENT = Enteritis</b> – A viral infection also called panleukopenia (means decrease in all white blood cell lines). Symptoms include vomiting and diarrhea, and dehydration. A high death rate is common, and it is very contagious.</p> <p><b>R = Rhinotracheitis</b> – An upper respiratory virus. Symptoms include sneezing, fever, nasal infection, conjunctivitis (eye infection), and occasional eye ulcers. Prognosis is good with supportive care.</p> <p><b>C = Calici</b> – A viral respiratory disease with upper respiratory signs, mouth ulcers, pneumonia occasionally, and occasionally eye ulcers and pneumonia. Common in multi-cat or cattery environments. Prognosis is excellent with good supportive care and without pneumonia.</p>
Rabies	<p>A severe, fatal viral disease of warm blooded mammals (including dogs, cats and people). Clinical signs include increased salivation, and neurological symptoms such as seizures, paralysis or crazed activity. Transmission is through a bite wound or through mucous membranes (eyes, mouth). <b>This is a zoonotic disease (transmissible to people).</b></p>
FELV	<p>Feline Leukemia virus. A viral disease that causes compromise to the immune system. As a result of this immune problem, symptoms may range from just not acting right to widespread tumors. Diagnosis is based on clinical signs and a blood test. Transmission is by direct contact, shared bowls, or from mom or dad around the time of birth. Prognosis is guarded and generally requires more intense medical management and will ultimately decrease life span.</p>
FIV	<p>Feline Immunodeficiency Virus-- A viral disease that causes compromise to the immune system. As a result of this immune problem, symptoms may range from just not acting right to widespread systemic illness. Transmission is generally through bite wounds or saliva into mucocutaneous junctions (eyes, etc). Prognosis – same as FELV.</p>

## Identifying & Managing Risk Factors in Your Kitten

Your veterinarian can identify any risk factors that are unique to your kitten. The risks listed here have the potential to affect most or all kittens.

### Infectious Diseases Are Very Common in Kittens

Although most kittens are born with antibodies against certain diseases or receive them in their mother's milk, these antibodies disappear after several weeks. Unless your kitten is protected by vaccinations, it will be susceptible to various infectious diseases. Enteritis, rhinotracheitis, calici virus, felv and rabies are some common examples. Several of these can be fatal. To reduce the risk of infectious disease, follow the guidelines set out in the vaccination protocols located in this packet.

### Parasites at a Glance

Parasites can cause a variety of health problems for your pet – and even death. One of the biggest concerns is the potential for transmission to humans. This handout lists common parasites in cats and dogs, the signs, detection, and whether they can spread to humans – these are known as ZOOONOTIC parasites.

Veterinarians divide parasites into two main categories – external (ectoparasites) and internal (endoparasites). Fleas, ticks, and mites are ectoparasites. Endoparasites, such as heartworms, roundworms, hookworms, tapeworms, coccidia, or giardia may be harder to detect, and also typically cause more severe disease. Here's a look at both:

### Internal Parasites Affect Many of our Kittens

Some intestinal parasites that commonly infect young kittens are roundworms, hookworms, giardia, tapeworms and coccidia. These parasites can debilitate your kitten, causing diarrhea, vomiting, anemia and even death. Heartworms are parasites that live in a cat's blood vessels and heart, and are a major risk factor for lung, heart, liver, and kidney disease. They can be fatal, but they are preventable! Thus, it is important to follow the control and prevention measures provided to you by your veterinarian.

Endoparasites	Signs and Complications	Zoonotic	Detection
<b>Heartworms</b> Transmitted through the bite of an infected mosquito	<ul style="list-style-type: none"> <li>• May not exhibit signs until late in the course of the disease</li> <li>• Coughing, difficulty breathing, panting, exercise intolerance, decreased activity level, vomiting, collapse and sudden death.</li> </ul>	No	Blood test
<b>Roundworms &amp; Hookworms</b> Live in the gastrointestinal (GI) tract; transmitted through fecal-oral contact and from mother to offspring	<ul style="list-style-type: none"> <li>• Diarrhea, anemia, and loss of body condition</li> </ul>	Yes	<ul style="list-style-type: none"> <li>• Fecal examination</li> <li>• Observation of worms is sometimes possible, but diagnosis is most times made by observing eggs on the fecal exam.</li> </ul>
<b>Tapeworms</b> Live in the GI tract; transmitted from ingestion of fleas, rodents, and rabbits	<ul style="list-style-type: none"> <li>• None to diarrhea, weight loss, and poor body condition</li> </ul>	Yes. Generally by accidental ingestion of a flea.	<ul style="list-style-type: none"> <li>• Observation of tapeworm segments in freshly passed feces</li> <li>• Fecal examination</li> </ul>

Endoparasites	Signs and Complications	Zoonotic	Detection
<b>Coccidia</b> Lives in the GI tract; transmitted by fecal-oral contact; common in close confinement situations.	<ul style="list-style-type: none"> <li>Diarrhea (blood or mucous may occur). Lethargy, inappetance and possible vomiting</li> </ul>	No	<ul style="list-style-type: none"> <li>Fecal examination</li> </ul>
<b>Giardia</b> Lives in the GI tract; transmitted by fecal-oral contact, or by ingesting contaminated food or water.	<ul style="list-style-type: none"> <li>Bloody diarrhea, lethargy, inappetance, and possible vomiting.</li> </ul>	Undetermined. The experts have yet to determine if cat giardia is transmissible to people.	<ul style="list-style-type: none"> <li>Fecal examination</li> <li>Fecal Smear</li> <li>Giardia Snap Test</li> </ul>

## Internal Parasites Q&A

### 1. How does my kitten get worms?:

- Tapeworms are transmitted to your pet if it should swallow a flea, eat a rabbit or rodent. Stepping on stool or contaminated soil usually transmits Hookworms, and Roundworms. Your pet licks his feet or body and inadvertently swallows the eggs. These eggs develop into the mature worm in the intestine. Kittens are often infected by their mother before they are born or through the mother's milk.

### 2. Human Health Hazards?:

- Humans (especially young children) can be infected with roundworms. The eye and abdomen are the primary areas targeted and **vision loss & abdominal pain** can be a result. Humans can be infected with hookworms through ingestion or direct penetration through the skin. Symptoms can include:
  - Itchy skin lesions**
  - Abdominal pain and illness.**
- Raccoons also carry a type of roundworm (Baylisascaris) that can affect people, cats, rabbits, and birds to name a few. This parasite goes to the brain and is often **fatal**. Although these types of parasite infections are rare in people, they are always a potential risk. They are also easily prevented through routine deworming. Baylisascaris is transmissible to cats, but your cat will not shed infective eggs. Thus, you cannot get it from your cat's stool.

## Elimination and Control of Parasites

Your pet should have a stool sample examined for worms at least once yearly. (While indoor only cats are much less likely to contract parasites it is still possible especially if you track in stool material, or from other pets in the house that go outside.) This checks for the presence of eggs (which are microscopic). Occasionally, your pet may pass mature worms in the stool or in vomited food. **If you see worms, please bring in a sample of both the stool and the worm for us to examine.**

We recommend routine deworming starting when your kitten is young. Your pet will need to be dewormed more than once, generally every 3-4 weeks until 16 weeks of age. It is also recommended to deworm adult animals at least once yearly. Over-the-counter dewormers are generally not strong enough to kill 100% of the worms or the medication is not appropriate for the type of parasite your pet has, and we do not recommend their use. Additionally, some heartworm preventatives now contain deworming medication to allow for year-round parasite control.

## Important Preventative Measures Include

1. Practicing good personal hygiene.
2. Controlling pet parasite infections through internal and external parasite treatment and control.
3. Minimizing your children's contact with contaminated or questionable environments.
4. Cleaning up pet feces regularly to reduce environmental contamination, outside (weekly) and in the litterbox (daily).
5. Cover all sandboxes so cats and other wild animals do not use it as a litterbox.
6. Use an approved heartworm preventative year-round to allow for intestinal parasite and heartworm control.

## What Are Heartworms and How Do Cats Get Them?

Whether your pet spends lots of time outdoors or rarely ventures out of your house, it's still at risk for exposure to deadly heartworm disease. Heartworms are a recognized threat to both adult dogs and puppies and to a cats.

Heartworms are parasites that live in the hearts and lungs of infected dogs and cats. The resulting heartworm disease can cause serious health problems and can eventually lead to severe lung inflammation H.A.R.D. (Heartworm Acquired Respiratory Distress), heart failure or even **sudden death in cats**.

Heartworm disease has been found in dogs in all 50 States. One reason for the prevalence of these worms in puppies and dogs is that we live in a mobile society, where people and their pets travel from place to place, unknowingly taking parasites along for the ride. Additionally there is a natural reservoir for heartworms in coyotes and wolves. So with this in mind, if there are mosquito's then there is a potential for not only canine but feline heartworm exposure.

The transmission cycle of the heartworm begins when a mosquito bites an infected dog or canine species and feeds on blood that contains tiny immature heartworms. As it feeds, the mosquito takes in the immature heartworms. During the next two to three weeks, these tiny worms develop into larvae (the infective stage of heartworms) within the mosquito. If the infected mosquito bites a cat, it can transmit infective larvae to that healthy cat.

Without the use of a heartworm preventive, the infective larvae enter the animal's body through the mosquito bite, and they continue to develop over the next few months. They migrate through the pets tissues, eventually reaching the heart and/or lungs. Once in the heart, the worms may grow to between 7 and 11 inches in length and can cause significant damage to the heart and lungs. Unfortunately, there is **no treatment for infected cats, but there is a preventative**. We can only provide supportive care for their symptoms until they clear the worms on their own. Unfortunately, some will not survive this.

Cats and kittens do not require a test before beginning a heartworm preventative. For protection from heartworm and intestinal parasites, we recommend year round prevention with Heartgard Plus chewable, Interceptor, Revolution topical, or Advantage Multi topical. Additionally, many of these preventatives serve to control and prevent intestinal parasites and some even fleas and ear mites.

## Prevalence of Roundworm Infection in Humans: A Comparison to Other Important Human Diseases

Reported cases of selected notifiable diseases, United States, 2002\*

	Number of Reported Cases
Salmonellosis	44,264
AIDS	42,745
Lyme disease, human	23,763
Tuberculosis	15,075
Roundworm infection, human	10,000
Pertussis	9,771
Hepatitis A, acute	8,795
Hepatitis B, acute	7,996
Rabies, animal	7,609
West Nile	2,840
Hepatitis C/non-A, non-B	1,835
Rocky Mountain spotted fever	1,104
Listeriosis	665
Mumps	270
Measles	44
Tetanus	25
Rabies, human	3

**\*\*Each year, more than 700 people infected with roundworms experience permanent partial vision loss.\*\***

## External Parasites

External parasites in kittens include fleas, ticks, ear mites, lice, and rarely mites.

Ectoparasites	Signs and Complications	Zoonotic	Detection
<b>Fleas</b>	<ul style="list-style-type: none"> <li>• Mild to severe itching, scratching, biting, and chewing</li> <li>• Flea saliva hypersensitivity or allergy and resulting skin problems</li> <li>• The transmission of tapeworms</li> <li>• Anemia and possible death in young or small animals</li> </ul>	Yes – for flea bites  Possible – disease transmission if an infected flea is eaten. (Tapeworms)	Examination of the animal for adult fleas, or flea dirt (small black specks of dried flea feces). A blood test can detect a flea allergy. The best option is prevention with an approved flea control product.
<b>Ticks</b>	<ul style="list-style-type: none"> <li>• Mild local irritation to severe anemia</li> <li>• Transmission of other diseases to animals and humans – Lymes disease, Rocky Mountain spotted fever, and Ehrlichia, among others</li> </ul>	Yes	Examination of the animal
<b>Ear mites</b>	<ul style="list-style-type: none"> <li>• Ear infection, severe itching, debris and crusts in and around the ears</li> </ul>	Yes, Generally a transient infestation	Examination of the ears or an ear swab and evaluation under the microscope.
<b>Lice</b>	<ul style="list-style-type: none"> <li>• Itching, hair loss, dandruff or crusty lesions, and bleeding or oozing skin</li> </ul>	Lice are species specific. Dogs get dog lice, cats get cat lice, & people get people lice.	Examination of the animal may allow direct visualization of the lice.  Tape impressions for lice or their eggs.
<b>Mites</b> <i>The main types: Demodex, and Cheyletiella</i>	<ul style="list-style-type: none"> <li>• Itching, hair loss, dandruff or crusty lesions, and bleeding or oozing skin</li> </ul>	Yes, Cheyletiella can cause skin lesions on people.	Examination of the animal and skin scrapings  Tape impressions, skin biopsy &/or physical exam

**\*\*Please see one of our staff or see the Frontline Plus, Advantage Multi, & Revolution brochures for additional information about these parasites and how to control them.\*\***

## Grooming is an Important Part of your Pet's Health

A poorly groomed coat is a risk factor for external parasites and skin problems. Just a few minutes each day will reduce these risks before they become serious and most kittens will love the extra attention. This is especially important in medium and longhaired breeds.

Find a pet brush or comb that works best for your kitten's coat. Brush in the direction of the hair growth. Kittens with thick or long coats may need to be groomed every day to prevent painful mats and knots.

**\*\*We use and recommend the Furminator\*\***

If your kitten needs professional grooming because of breed requirements or special fashion cuts, introduce your pet early to a friendly, experienced groomer. (always check first as some groomers will not groom cats.) Don't try to groom a kitten who is in high gear. Wait until your kitten is in a more relaxed mood.

## Important Reasons to Spay or Neuter your Pet

Spaying your pet before the first heat cycle nearly eliminates the risk of mammary tumors. We recommend spaying or neutering your pet at 6 months of age.

Early neutering also improves behavior by reducing roaming, urine marking, and aggression between male animals.

Because spayed and neutered pets generally live longer than the non-spayed or neutered pets, failing to do so is an important risk factor which can greatly affect the quality and length of your pet's life. In the U.S., four to six million companion animals end up in shelters each year. You can play an important role in controlling pet overpopulation by spaying or neutering your pet.

<b>Spaying your female pet (Ovariohysterectomy):</b>	<b>Neutering your male pet (Castration):</b>
Removal of the ovaries and uterus. Ideal age is 6 months.	Removal of the testicles and spermatic cord. Ideal age is 6 months.
If spayed before the first heat cycle, your pet has a greatly reduced chance of developing breast cancer.	Eliminates the risk of testicular cancer.
Pets with diabetes or epilepsy should be spayed to prevent hormonal changes that may interfere with medical treatment.	Reduces roaming and fighting.
Eliminates the risk of ovarian and uterine cancer and uterine infections (pyometra).	Eliminates or reduces spraying or marking in males neutered at 6 months of age or before the onset of these behaviors.
Eliminates unwanted pregnancies.	Eliminates the risk and spread of sexually transmitted diseases.
	Eliminates unwanted litters.

### Common Myths

Spaying or neutering your pet does **NOT**:

- Cause laziness or hyperactivity
- Cause immature behaviors
- Postpone or delay normal behavior maturity
- Alter its personality in any manner

Our staff can answer your questions about spaying or neutering your pet or any other procedure your pet may undergo at our hospital. Please don't hesitate to ask.

## Is Anesthesia Safe?

Authored by: Laura McLain Madsen DVM

Veterinarians anesthetize animals on a daily basis. At least once per week in any clinic, a pet owner expresses concern about anesthesia: Is it safe? Will my pet survive the procedure?

Modern anesthesia is very safe. The risk of a pet dying under anesthesia is less than 1%. The rare patients that are lost under anesthesia are generally emergency surgeries, when the patient's condition is extremely critical. The risk of a pet dying under anesthesia while undergoing a routine spay, neuter, dental or mass removal is extremely low, but this risk can be affected by the anesthetic drugs used and the monitoring of the patient.

Can you imagine an anesthesiologist in a human hospital using ether or chloroform in the 21st century? Of course not. But, unfortunately (and surprisingly), there are no standards of care for veterinary anesthesia, and some clinics are still using out-of-date techniques. Here is a list of questions to ask your veterinarian the next time your pet is scheduled for an anesthetic event:

1) Is pre-anesthetic blood work run? All patients, not just the old or sick, should have basic pre-anesthetic blood tests performed checking the blood sugar, kidney values, and red blood cell count. Many animals will require more extensive pre-anesthetic blood work. Even in animals under one year old, blood work will occasionally detect abnormalities that could affect anesthesia.

2) Are intravenous fluids administered during anesthesia? Many drugs used for general anesthesia tend to cause blood pressure to decrease. Intravenous fluids will combat this decrease. In addition, if there are any adverse reactions under anesthesia, an intravenous catheter allows immediate administration of emergency drugs.

3) Is the pet's body temperature maintained during and after anesthesia? All animals, especially cats and small dogs, lose a lot of body heat under anesthesia. The resulting hypothermia can slow the anesthetic recovery. Anesthetized pets should be placed on a recirculating warm water pad and/or under a warm air blanket. Conventional heating pads are risky because they can cause burns.

4) Is the pet intubated, and what anesthetic gas is used?

Intubation means that the patient has an endotracheal tube placed through the mouth and into the trachea, through which gas anesthetic is administered. The endotracheal tube allows controlled respirations if the patient is not breathing well on his or her own, and prevents accidental inhalation of stomach contents if the pet vomits under anesthesia. Virtually every surgical procedure done in dogs and cats requires intubation and gas anesthesia. The modern gas anesthetics are halothane, isoflurane and sevoflurane. Methoxyflurane is out-of-date.

a. What pain control is used? Surgery hurts! It doesn't matter if the patient is a human, a dog, or a guinea pig. Analgesia is the relief of pain, and in modern anesthetic protocols we strive for pre-emptive analgesia (blocking the pain pathways before the painful procedure starts), and balanced anesthesia (trying to block the pain pathways from as many directions as possible).

5) What monitoring techniques are used? It is critical to monitor the patient's vitals while under anesthesia to ensure that the respiratory and cardiovascular systems are functioning well, and to ensure that the patient is not under too lightly or too deeply. Most important is that someone besides the surgeon (who is occupied) is monitoring the heart rate, respiratory rate, and anesthetic depth.

Additional commonly used monitoring techniques include:

- An electrocardiogram (EKG) to monitor the heart rhythm for arrhythmias.
- A pulse oximeter to monitor the percentage oxygenation of the blood, which should be close to 100%.
- A machine to monitor the blood pressure.
- A machine (apnea monitor or capnograph) to monitor the respiratory rate and carbon dioxide level.

Another concern many pet owners have is the cost of anesthesia: Why is it so expensive? Why does Dr. X charge \$300 for a dental while Dr. Y down the street only charges \$100? As you can see, modern anesthesia involves a lot of equipment and expertise, and this unfortunately costs money. Cutting corners by not intubating patients, not keeping patients warm, or skimping on pain medications and monitoring can save money, but the price is decreased comfort and safety for your pet.

## Animal Dentistry

Good oral health is essential to your pet's overall health. Your kitten's baby teeth should be completely replaced with adult teeth by six or seven months of age. Most of the baby teeth will be swallowed, but you might find a few. Report broken teeth to your veterinarian right away. Your veterinarian will examine your cat's teeth during examinations and can schedule a professional cleaning as needed.

Dental disease is the most common problem seen in our pet population today. The great majority of these pets are suffering from periodontal disease (tooth and gum decay).

Periodontal disease is what causes bad breath as well as destruction of the bone supporting the teeth.

Our pet's teeth must be maintained in exactly the same manner as our own. Mechanical removal of plaque is the only true way to prevent dental disease from affecting your pet's mouth. This can be accomplished in various ways, but brushing is by far the most effective means. We recommend introducing brushing as a kitten. Products available include: finger brushes, oral care gel, and pet toothpaste. **Do not use human toothpaste.**

### Recommendations for Home Dental Care

#### When to start?

As soon as possible, 8-12 weeks old is the best. Pets don't need brushing this young, but by brushing once or twice weekly they will be familiar with the routine when the permanent teeth erupt.

#### Steps:

1. The first step is to work with your pet's mouth. With a little patience your pet will soon accept your attention. **MAKE IT FUN** for both of you. Use a lot of love and especially praise to gain their confidence.
2. Start by handling the mouth and soon you will be able to rub the teeth and gums with your finger.
3. Put a few drops of water or flavored pet toothpaste on your finger daily. They will soon look forward to this "treat".
4. Finally, use a soft toothbrush, gauze or pet finger brush and flavored pet toothpaste or oral gel to brush the teeth. Brushing the tongue side of the teeth is unnecessary. Don't use human toothpaste as it foams and frightens them, and can cause GI upset if swallowed since they do not spit out the toothpaste

**NOTE:** It's the brushing which does most of the cleaning; the toothpaste helps by use of enzymes to break down the plaque, and also provides a flavored treat for them to enjoy.

Brushing at least twice weekly is recommended (daily is ideal).

It helps to give abrasive foods and toys such as dry kibble, T/D diet, crunchy treats or greenies. **DO NOT FEED BONES WHICH THEY CAN CRUNCH UP AND SWALLOW.**

**THE ABOVE CARE WILL GREATLY IMPROVE YOUR PETS DENTAL HEALTH AND INCREASE THE TIME INTERVAL BETWEEN PROFESSIONAL DENTAL CLEANINGS.**

## Dental Disease in Dogs & Cats

Teeth are secured into periodontal tissues consisting of gingiva (gums), ligaments, cementum and supporting bone. A majority of pets older than 4 years have some disease of these periodontal tissues. Some breeds of dogs with short noses and toy breeds are especially at risk and need more frequent dental evaluation and cleaning.

Plaque is a transparent fluid composed of bacteria, food material and exfoliated cells, which adheres to teeth. When not removed by brushing, plaque mixes with salts in saliva to harden and forms visible calculus. As calculus sits on the tooth, irritation to the gums and recession follows, which allows the bacteria to irritate the supportive structures. This process leads to pain and eventually destruction of the periodontal tissues. A diseased mouth additionally affects other bodily structures including eyes, heart, liver, kidneys and skin. By intervening in time, we may be able to save the teeth and bone from damage. Additionally we can halt the damage occurring to other organs.

Dental examination is part of a thorough medical history and physical examination. Depending on the age, history and medical examination of your dog or cat, our doctors may recommend pre-anesthetic blood, urine or additional testing prior to a dental cleaning. Using this information as a guideline, we select the appropriate anesthetic protocol for your animal's medical needs.

Once a date is selected, your animal needs to arrive between 7:45 and 8:00 a.m. At this time, the doctor will do a pre-anesthetic examination and discuss the plan for the morning. We additionally **require** a phone contact number to reach you during the procedure if we discover any unexpected dental conditions.

Shortly following admission, your animal will be anesthetized and placed on gas anesthesia. A tube will be placed down the windpipe to deliver anesthesia and oxygen. The anesthesia allows us to work safely, to complete a good oral examination, and protects the airway from bacteria while cleaning the teeth. We also recommend IV fluids to be administered during the procedure. IV fluids help maintain hydration and major organ function. All surfaces above and below the gum line are cleaned and polished. All teeth are probed for pockets into the gum line, which indicate more serious disease that otherwise, could not be seen. We will evaluate the teeth for evidence of fracture, nerve exposure, or disease. If there is evidence of any of these problems, we will advise x-rays to determine the health of the tooth structure below the gums. If disease is noted, additional therapy will be recommended and you will be contacted.

At the completion of the cleaning and polishing a clear barrier sealant will be applied. This product, OraVet®, decreases the accumulation of tartar on the tooth surface and therefore minimizes periodontal disease and odor. The product will last 2 weeks. It is our recommendation, thereafter; the follow up product is to be applied once weekly at home. OraVet is quick and easy to apply, is odorless and tasteless. Application is to the outer surface of the teeth and takes less than 60 seconds. Daily brushing is still recommended, but is not required to use this product. Normal food and chews can be used (however tennis balls are not recommended as they can strip the product from the tooth surface).

When your pet is discharged we will discuss the procedure and aftercare recommendations for your animal. This may include brushing, OraVet, diet changes, recommended treats, or antibiotics if required.

## How to Brush Your Pet's Teeth

A praise after every step of this process. Soon, both you and your pet will look forward to the time you spend together during this important health care procedure.

As with any other routine, it's best to begin a dental care program when pets are young puppies or kittens. Follow up home care with regular complete dental cleaning by your veterinarian.

Prevention of dental disease should be included as part of your pet's overall preventive medicine program, just like vaccinations.

Tooth brushing doesn't happen overnight. It requires training, just like "sit," "stay" and "come." First, select a convenient time when you and your pet are both relaxed. For the first few days, simply hold your pet as you normally do when petting him/her. Gently stroke the outside of your pet's cheeks with your finger for a minute or two. Then, after a few days, place a small amount of C.E.T. Toothpaste on your finger and let your pet sample the flavor. Pets love the flavors of C.E.T. Toothpastes, and soon will consider it a treat.

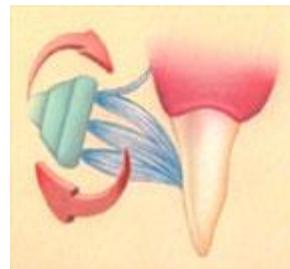
Next, introduce your pet to a C.E.T. Toothbrush, Fingerbrush, or gauze. Place a small amount of C.E.T. Toothpaste on the brush and gently brush one tooth with a slow circular motion. Gradually increase the number of teeth brushed until you've built up to 30 seconds of brushing per side. It is important to reward your pet with a healthy treat and plenty of praise after every step of this process. Soon, both you and your pet will look forward to the time you spend together during this important health care procedure.

As with any other routine, it's best to begin a dental care program when pets are young puppies or kittens. Follow up home care with regular complete dental cleaning by your veterinarian.

For more information about pet dental health and C.E.T. Home Dental Care for your pets, consult your veterinarian. Ask how you can get on the path to better pet dental health. Your pet will love you longer for it!



The brush should be rotated in a circular fashion at a 45 degree angle with emphasis on the stroke away from the gingiva.



## Microchipping

### 1. What is microchipping?

Microchipping is a safe, simple and permanent form of pet identification designed to quickly identify lost pets and reunite them with their owners. Over 10 million pets become lost each year based on statistics from The National Humane Society.

### 2. Is microchipping safe?

Yes, no bigger than a grain of rice, the microchip is a small, sterile transponder that contains a unique ID code capable of being read by a scanner. The microchip's biocompatible material is **extremely safe** for the animal. It requires no battery and remains inactive until it is scanned. Anesthesia is not necessary for implantation. Microchipping takes just seconds, is relatively painless and is recommended for all breeds and ages.

### 3. How do recoveries happen?

When you enroll your microchipped pet in the nationwide database, your contact information is safely stored until it is needed to reunite you with your pet. Currently a successful recovery happens approximately every 6 minutes.

**\*\*For more information please see the Home Again brochure.\*\***

## Pet Insurance

Bellevue Animal Hospital has information available regarding Pet Insurance through **VPI Insurance**. Here is some basic information regarding the insurance. We would be happy to provide you with a brochure for contact information and more details.

### 1. What does a VPI policy cover?

Depending on which plan you select, coverage will include: medical treatments and surgeries for minor problems such as ear infections and bee stings, as well as major problems like broken bones, diabetes and cancer. Each policy covers one pet only.

### 2. How much does the insurance cost?

Rates are based on the plan you select. Multiple pet discounts are available when you insure more than one pet.

### 3. What situations are not covered?

Like most insurance policies, they have some exclusions to help keep your premiums low. These include: elective procedures, pet foods, grooming, behavior problems, congenital or hereditary defects and medical conditions that are present prior to the policy effective date.

Vaccinations, routine teeth cleaning and other annual routine care expenses are not covered under the major medical plans, but are available through optional Vaccination & Routine Care Coverage.

### 4. In some cases, military discounts are available. Please call the company for exact information.

**\*\*For more information please see the VPI brochure.\*\***

## Scheduling Medical or Surgical Appointments

At Bellevue Animal Hospital we see patients by appointment only. You can call our front desk staff during normal business hours to schedule your appointment. Here are some tips regarding your appointment as well as some ways to speed up some other processes...

1. **Well Pet and Ill Pet Exams:** In order to allow the proper amount of time to adequately care for your pet, please inform the front desk of all of your concerns when calling for an appointment. This will ensure the patients scheduled after you do not have to wait for their appointment. Additionally, if you have items of concern that need to be added on beyond what your appointment is scheduled for, you may be asked to reschedule for those items. If the doctor has additional time available, they will do their best to extend your visit and address your concerns.
2. **Pre-anesthetic Exam:** Your pet needs to be seen if they have not had a physical exam by one of our doctors within the last 4 months. During this exam we will discuss the procedure(s), anesthesia, pre-anesthetic recommendations, and the use of IV fluids and pain medication. These recommendations may include bloodwork, blood pressure evaluation, or an ECG (to assess heart health).
3. **Surgeries:** Surgeries are performed Monday-Friday. On the day of your surgery, you will need to arrive between 7:45-8:00 a.m. You will be escorted into an exam room and your pet will be checked in by a veterinarian. The veterinarian will answer any questions you might have and discuss things such as pain management, pre-anesthetic blood work and IV fluids during the anesthetic procedure (if not addressed at a pre-anesthetic exam). Most pets will go home the same day and we will ask you to call in the afternoon to find out your pet's go home time. We will need you to provide a phone number that you can be reached at until 1:00 PM; this is to insure that if we find additional items of concern or problems arise we can immediately consult you.
4. **How to Cancel Appointments:** If you need to cancel an appointment you can call us during normal business hours and let one of our front desk staff members know who you are and if possible your appointment time. Appointments not cancelled are marked as a no-show. (See number 5 regarding no-show's).
5. **No-Show Appointments:** If you do not call and cancel your appointment before your scheduled time, you will be marked as a no-show. If this happens 3 times, you will be charged an office call as this takes away the opportunity for the veterinarian to see other patients.
6. **Showing up late:** Our appointment times are tiered based on what you call and request your pet be seen for. Remember, if you are late this causes the veterinarian to run behind schedule and all their subsequent appointments will have to wait. If you have missed all or most of your appointment time we may ask that you reschedule the appointment unless the veterinarian you are scheduled for has an opening at a later time in the day.
7. **Refilling medications:** Please call ahead for any refills of medicine. This will allow us some time to obtain the doctor's approval and fill your prescription. If you do not call ahead you may experience a wait or have to come back a short time later to collect your prescription.

## Senior Wellness Exams

### Here's what you should know about your pet(s) as they age:

#### Senior pets need more care.

- As your pet ages, he or she will need more frequent physical examinations and additional tests. The best kind of health care for senior pets is preventive.

#### Prevention is key.

- Many diseases that older pets are susceptible to are either 100% preventable with the proper preventive care or are easily managed if detected early enough.

#### Keep them fit.

- Proper nutrition and a regular exercise plan can help your pet live a longer, healthier life.

#### Our approach:

We will start by obtaining a detailed medical history. This is based on the information you provide in the history sheet you will be given prior to your exam. Next, we will perform a physical exam and order diagnostic laboratory testing to establish baseline information.

Using this information, we will give you an assessment of your pet's overall health and make necessary recommendations.

#### How to keep your best friend around as long as possible:

- **Bring in your senior pet twice a year**

Older pets should visit their veterinarian at least twice a year. Dogs and cats age 4 to 5 times faster than we do and, as a result, health problems can progress much more rapidly. Ironically, because pets are living longer today, they are increasingly suffering from many of the same chronic diseases that affect humans:

- Cancer
- Diabetes
- Kidney failure
- Liver and intestinal disorders
- Arthritis
- Vision problems
- Behavioral issues related to senility
- Dental disease

Fortunately, today there are many ways we can treat these conditions and improve your pet's well being. Catching problems early before they become serious often means they will be easier and less expensive to treat or manage.

## Your Pet's Relative Age

Pets Age:	Human Age:
4	24
6	32
8	40
10	48
12	64
14	72
16	80
18	88
20	96

## Diagnostic tests included in the Senior Wellness Exam

	Problem	Test	Facts	
<b>URINALYSIS</b>	<ul style="list-style-type: none"> <li>• Kidney Disease</li> <li>• Urinary/Bladder Disorders</li> </ul>	<ul style="list-style-type: none"> <li>• Complete Urinalysis (Appearance, Color, Specific Gravity, Occult Blood)</li> <li>• WBC (White blood cells)</li> <li>• RBC (Red blood cells)</li> </ul>	Urinalysis is a very important means of evaluating overall kidney function, especially when done in conjunction with blood tests. Urinalysis is also a key test for determining if there is a urinary tract infection or if there is inflammation in the urinary bladder. Urinalysis also helps to confirm, along with blood test, whether or not an animal has diabetes (with diabetes, either sugar or both sugar and ketones are present in the urine).	
		<ul style="list-style-type: none"> <li>• PH</li> <li>• Protein</li> <li>• Glucose</li> <li>• Ketones</li> <li>• Bilirubin</li> </ul>		<ul style="list-style-type: none"> <li>• Casts</li> <li>• Crystals</li> <li>• Epith Cells</li> <li>• Bacteria</li> </ul>
<b>BLOOD CHEMISTRIES</b>	<ul style="list-style-type: none"> <li>• Kidney Disease</li> </ul>	<ul style="list-style-type: none"> <li>• BUN</li> <li>• Creatinine</li> <li>• Calcium</li> </ul>	<ul style="list-style-type: none"> <li>• Phosphorus</li> <li>• Potassium</li> </ul>	Tests of kidney function (should be run in conjunction with urinalysis for the most accurate assessment of kidney function). <i>Kidney disease, if diagnosed early, can often be controlled for extended periods of time.</i>
	<ul style="list-style-type: none"> <li>• Liver Disease</li> <li>• Kidney Disease</li> <li>• Intestinal Disorder</li> </ul>	<ul style="list-style-type: none"> <li>• Total Protein</li> <li>• Albumin</li> </ul>	<ul style="list-style-type: none"> <li>• A/G Ratio</li> <li>• Globulin</li> </ul>	Protein levels. Albumin may be decreased with disorders of the intestine, kidneys, liver, or decreased nutrient intake. The globulin level may also decrease due to intestinal disease and may increase in response to inflammation.
	<ul style="list-style-type: none"> <li>• Liver Disease</li> <li>• Inflammation of the Pancreas</li> </ul>	<ul style="list-style-type: none"> <li>• ALT</li> <li>• AST</li> </ul>	<ul style="list-style-type: none"> <li>• ALP</li> <li>• GGT</li> </ul>	Liver enzymes. These tests help indicate that there may be a problem with the liver. Liver enzyme levels may also be abnormal with inflammation of the pancreas.
	<ul style="list-style-type: none"> <li>• Jaundice</li> </ul>	<ul style="list-style-type: none"> <li>• Total Bilirubin</li> </ul>		A test for jaundice. Increased levels usually indicate a liver disorder (with or without concurrent disease of the pancreas) or damaged red blood cells.
	<ul style="list-style-type: none"> <li>• Parathyroid Disorder, Cancer</li> </ul>	<ul style="list-style-type: none"> <li>• Calcium</li> <li>• Phosphorus</li> </ul>		Elevated or decreased calcium levels can be a sign of a wide variety of diseases. The most common cause of increased calcium is lymphosarcoma (a type of cancer)
	<ul style="list-style-type: none"> <li>• Diabetes</li> <li>• Severe Infection (Sepsis)</li> </ul>	<ul style="list-style-type: none"> <li>• Glucose (blood sugar)</li> </ul>		A glucose test will detect abnormally high blood sugar levels, which may indicate diabetes. Low levels may occur with liver disease, severe infection, certain types of cancer and Addison's disease.
	<ul style="list-style-type: none"> <li>• Adrenal Disease</li> <li>• Decreased Kidney Function</li> </ul>	<ul style="list-style-type: none"> <li>• Sodium</li> <li>• Potassium</li> </ul>	<ul style="list-style-type: none"> <li>• NA/K Ratio</li> <li>• Chloride</li> </ul>	Important body electrolytes. It is especially important that potassium levels be monitored in sick animals with decreased kidney function or adrenal disease.
	<ul style="list-style-type: none"> <li>• Hypothyroidism</li> </ul>	<ul style="list-style-type: none"> <li>• T4</li> </ul>		Thyroid test. In dogs we look for subnormal levels (hypothyroidism). This is a screening test. If the result is abnormal, more detailed thyroid testing may be necessary to determine the best course of treatment.
<b>BLOOD COUNT</b>	<ul style="list-style-type: none"> <li>• Infection</li> </ul>	<ul style="list-style-type: none"> <li>• WBC (White blood cells)</li> </ul>		White blood cells help fight infection. White blood cell numbers can increase in response to inflammation and infection. In leukemia, which is a cancer of the blood system, either the numbers of white blood cells are increased or their appearance is abnormal, or both. White blood cell numbers can decrease with severe infection or with bone marrow disorders.
	<ul style="list-style-type: none"> <li>• Poor Blood Clotting</li> </ul>	<ul style="list-style-type: none"> <li>• Platelets</li> </ul>		Platelets help with blood clotting. It is important to make sure that these numbers remain normal or close to normal.
	<ul style="list-style-type: none"> <li>• Anemia</li> </ul>	<ul style="list-style-type: none"> <li>• Packed Cell Volume (PCV)</li> <li>• Hemoglobin</li> </ul>	<ul style="list-style-type: none"> <li>• MCH</li> </ul>	Tests for the presence of anemia (low red blood cell levels)  These tests help tell which type of anemia is present.