

My pet has bad breath!

What to do about dental disease

Use this handout to learn more about what dental disease is and what you can do to protect your pet's health.

Can you imagine what your teeth would look like if you never brushed them? Not pretty that's for sure! So what about your pets' teeth? Like us, pets need routine dental care. According to the American Veterinary Dental Society (AVDS), *dental disease is the number one health issue affecting 80% of dogs and 70% of cats over the age of three*. Not too surprising considering that most people don't brush their pet's teeth (and we know their pets aren't doing it either). So why should you care? Poor oral hygiene doesn't just cause bad breath, it can lead to *tooth loss, painful abscesses, difficulty eating*, and other serious health problems including *kidney failure, diabetes, and heart disease*.

So how does dental disease occur in pets? The combination of food, saliva, and bacteria leads to plaque formation. If this isn't removed by brushing, it mineralizes and becomes tartar. Tartar accumulation promotes bacterial infections below the gumline, which result in gum recession and destruction of the tooth's support structures. Without treatment, tooth loss and pain occur. Bacteria from a tooth infection can also enter the blood stream and spread to distant organs, like the kidney, liver and heart.

I think my pet has dental disease. Now what?

If you are concerned that there may be a problem with your pet's teeth and gums, bring your pet in for a *free* dental consult with a veterinarian at Cascade Veterinary Clinic. Simply book an appointment, and one of our veterinarians will be happy to assess your pet's mouth to let you know what steps are needed next.



Stage 1: Gingivitis



Stage 2: Early periodontal disease



Stage 3: Moderate periodontal disease



Stage 4: Advanced periodontal disease

If you have any questions, please call Cascade Vet Clinic at (250) 295-0312. Your veterinary team is ready to help!

Taking care of your pet's mouth

Your veterinarian will advise the best course of treatment depending on the state of your pet's mouth. Stage 1 dental disease may be best managed with a thorough home care routine, while a Stage 2 dental disease will likely require a professional dental cleaning. In Stage 3 and Stage 4 dental disease, surgical extractions are often necessary. Sometimes pets with no periodontal disease will require surgical extractions if they fracture a tooth and pulp is exposed.

Professional Dental Cleaning

If your pet requires a professional dental cleaning, the procedure *must* be done under general anesthetic. Scaling teeth while an animal is awake is dangerous and ineffective. Sharp instruments used to clean tartar from teeth can easily cut your pet's mouth, or even cause permanent nerve damage if the pet moves while the instruments are in its mouth. It is impossible to properly clean under the gum line of an animal that is not anesthetized. Failing to clean under the gum line means failing to cure the dental disease.

All dental procedures should start with a thorough oral examination under general anesthesia. Pets never allow a thorough look at their entire mouth when they are awake, particularly when pain secondary to dental disease is present. Your veterinarian will evaluate gum attachment, noting any problem areas such as deep gum pockets, evaluate all surfaces of the teeth for damage, and check for other abnormalities such as gum growths and bone abnormalities. The structures at the back of the mouth are also thoroughly evaluated for any abnormality.

During a professional dental cleaning, your pet's teeth are scaled free of all tartar, thoroughly cleaned under the gumline, and then polished to ensure the tooth surface is smooth which slows future tartar build up.

At Cascade Veterinary Clinic, we use a piezoelectric scaler. This type of scaler is gentler on the teeth with proper use than a magnetostrictive ultrasonic scaler. It also generates less heat, so there is minimal risk of heat damage to the root vs. magnetostrictive ultrasonic scalers.

Dental Radiographs

The same as your dentist regularly takes x-rays of your teeth, it is important to take x-rays of your pet's teeth to properly assess the root and pulp chamber. Pets do not typically get cavities like people do. Instead, tartar and bacteria track under the gumline to the tooth root, where an abscess forms. The root then dies and the tooth requires extraction. Without x-rays, it is *very* easy to miss a tooth that should be surgically extracted. Leaving an infected tooth in the mouth means your pet is at risk of heart failure, kidney failure, and many other life-threatening diseases, secondary to septic infection caused by the rotten tooth.

Cascade Veterinary Clinic performs full-mouth digital dental x-rays on all routine dental procedures. This ensures we don't miss a rotten tooth in your pet's mouth, and that we only do necessary extractions. Without x-rays, it is easy to leave an abscessed tooth in a mouth. Teeth that are rotten at the root can look clean in the mouth. Dentals performed without x-rays often result in teeth with healthy roots being extracted needlessly, because they look dirty and infected in the mouth and just under the gumline, but actually have healthy roots. Digital intra-oral radiographs are safer for your pet than traditional x-rays because they require a far lower dose of radiation to produce a good image. It is easy to refer digital x-rays to a board-certified Radiology Specialist when a second opinion is necessary for particular abnormalities.

Oral Surgery

Teeth may require extraction for several reasons. The three most common reasons are an abscess at the root tip, a fracture with pulp exposure, or resorptive lesions (holes in the enamel) near the gumline. In these cases, extracting the tooth will make your pet more comfortable. Leaving a tooth in your pet's mouth that should be extracted is dangerous to their health – infection will develop or worsen and could lead to heart disease, kidney disease, or diabetes.

Many teeth in your pet's mouth have more than one root, and must be sectioned before they can be extracted. All extractions leave an open socket in the mouth that must be surgically removed. This sometimes requires surgical re-construction of the soft tissues in the mouth.

At Cascade Veterinary Clinic, we take several steps aimed to make your pet's oral surgery safer and less painful. Dental nerve blocks are given by the veterinarian to remove any pain during extraction. This means your pet can be anesthetized with a lower, safer dose of anesthetic. Your pet will also wake up much more comfortable than if dental nerve blocks are not performed. The veterinarian uses a water-cooled fibre-optic high speed dental burr for sectioning teeth to avoid damage to surrounding bone which can occur with burrs which are not water cooled. Post extraction x-rays are to ensure no root tips remain in the mouth, which is important because root-tips can be a source of pain and infection and if left in the mouth. Before closing a tooth socket, it is filled with GelFoam, a sterile compressed gelatin sponge which stops bleeding from the socket and prevents painful dry-socket. Your pet is given an injectable pain medication before waking up and is sent home with a prescription of oral pain medication to keep them comfortable while the extraction site heals.

Careful pre-operative preparation is important for your pet's safety!

Proper pre-op preparation can make general anesthetic much safer for your pet. While the risk of severe anesthetic complications is low using modern pre-operative medications and gas anesthetic, death can still occur if an animal has underlying heart or organ disease. Bloodwork can reveal kidney or liver issues which require a different anesthetic protocol or prolonged IV fluids in order to make anesthetic safer. ECG can reveal heart problems which may just need a different anesthetic protocol, but may need treatment for a few weeks before anesthetic becomes safe. In fact, 1 in 14 animals has abnormalities on pre-anesthetic screening ECG! Pets recover quicker from general anesthetic if they are given IV fluids during the procedure and the recovery period. Fluids are also important to maintain blood pressure, which often drops under general anesthetic.

We strive for safer anesthetics at Cascade Veterinary Clinic. Our pre-op blood panels aren't just a handful of quick tests; they include a chemistry panel, complete blood count, and electrolyte panel. We also check to make sure your pet's blood clots properly prior to any surgery. We offer pre-anesthetic ECG's which are sent to a board-certified Cardiologist who evaluates your pet's heart health and makes recommendations about the safest anesthetic protocol for your pet. Our clinic encourages IV fluids with all anesthetics, and we place an IV catheter in all anesthetized animals to allow access for emergency drugs and quicker administration of pain medications if needed. Under anesthetic, your pet is connected to an ECG to monitor heart rate and rhythm, a blood pressure monitor, a respiratory monitor (which measures not only the breathing rate but also whether the brain is signalling breathing in an appropriate manner), a pulse and blood oxygen saturation monitor, and a central temperature monitor. Pets are provided with supplemental heat to keep their core body temperature in a normal range during anesthetic. All animals are carefully monitored by a Registered Veterinary Technician, who is trained in anesthesia and CPR.

How to keep your pet's sparkly smile!

Once the veterinarian has remedied the issues in your pet's mouth, you'll want to keep it minty fresh as long as possible. Remember: clean teeth help keep a clean bill of health! There are several options to keep your pet's teeth clean and healthy that you can do at home.

Of course, if your pet requires oral surgery, you'll need to be gentle and follow some post-op instructions until your pet's recheck a week later. If your veterinarian gives the green light, you can get started on your pet's home care dental routine.