

Equine Dentistry FAQ's

Why is it important for my horse to have regular dental examinations?

The oral examination is an essential part of your horse's annual physical examination performed by a veterinarian. Every exam provides the opportunity to perform routine preventative dental maintenance. Regular examinations allow for the identification of dental problems while they are still in the early stage, decreasing the possibility of more severe dental conditions which may lead to other serious health issues for the horse.

How often should a horse receive a dental exam?

As a minimum, all horses should receive a yearly dental exam. Horses aged 2 to 5 years may require more frequent dental exams than older horses, as there is an extraordinary amount of dental changes which occur during this time in their life. Senior horses (20 years of age or older) have an increased risk of developing periodontal disease and face the additional challenges of advancing age. Twice-a-year examinations are often required to keep the teeth of senior horses functioning correctly, as they enter their third and fourth decades of life.

How will I know if my horse has a dental problem?

Horses with dental problems may show obvious signs such as pain or irritation, or they may show no noticeable signs at all. Remember that horses are a prey species and generally will not show a weakness until it is unavoidable. Equine veterinarians skilled in dentistry are constantly amazed at how much discomfort horses often endure without showing any outward signals to their owners. By the time many owners notice a problem, such as dropping feed from the mouth while eating, fighting the bit or avoiding contact of the bit when ridden, or a foul odour from the mouth or nostrils, the issues inside the mouth are likely to be severe.

What is involved in a thorough oral examination?

Firstly, the horse needs to be well sedated and the head supported by either a head stand or dental halter which is suspended from above. The use of stocks is highly advisable to provide your horse with added support. The chewing muscles, bones of the skull, salivary glands and lymph nodes are all assessed from the outside along with the range of jaw movement. The bones overlying the hollow cavities in the skull (sinuses) are tapped and the resultant sound assessed. The nostrils are checked for discharge. The mouth is rinsed clean of any food and then a preliminary examination is carried out using one's hand to feel for abnormalities within the oral cavity. A powerful light is then used to illuminate the oral cavity and a detailed assessment made of each tooth, the gums, cheeks and tongue. A dental mirror and dental probe are used to examine better the finer details of the teeth, gums and cheeks.

All findings are recorded on a dental chart and become part of your horse's medical records. In many instances radiographs (x-rays) may also be required to give more information about the teeth which is hidden from view such as the condition of the pulp chambers, the tooth roots and the surrounding bone.

How many teeth does a horse have?

A typical adult male horse has 40 permanent teeth, while a typical mare may have 36 to 40 teeth, because mares are less likely to have canine (bridle) teeth. In all, a horse may have up to 44 teeth if canines and wolf teeth are all present. The horse's permanent teeth are about 10cm (four inches) long when they first erupt. Normally they continue to erupt for the lifetime of the tooth at a rate of 2-3mm per year which is the same rate at which they are being worn down.

Do horses have nerves in their teeth?

Not only do horses have nerves in their teeth, they have nerves in all of the structures supporting the teeth. This means that great care should be taken when floating teeth so that the nerves in the teeth are not exposed or damaged by an over aggressive technique. Teeth should not be cut either with motorised implements or molar cutters because of the much higher risks of causing damage to the pulp which contains the nerves. Extracting teeth should only be performed by a veterinarian because they are able to provide appropriate pain relief and administer local nerve blocks which numb the area.

Do horses have "baby" teeth?

Like humans, horses have two sets of teeth in their lifetime. The baby teeth, known as deciduous teeth, are temporary. The first deciduous incisors may erupt before the foal is born. The last deciduous teeth come in when the horse is about eight months of age. These teeth will begin to be replaced by adult teeth around the age of 2 ½, and by age 5, most horses have all of their permanent teeth.

What are wolf teeth?

Wolf teeth are the remnants of the first premolars that have now become obsolete with the evolution of the horse. The most common first premolars seen in the horse are in the upper jaw and they are shaped similarly to small canine teeth. This is why they are often described as wolf teeth. These sharp teeth, if present, are in the area of the mouth where the bit fits. Wolf teeth may cause the horse some discomfort when pressure is placed on the bit. Therefore, these teeth are usually removed in young riding horses.

What does it mean to "float" a horse's teeth?

Routine maintenance of a horse's mouth has been historically referred to as "floating" and involves removing the sharp enamel points by filing or rasping. The term occlusal equilibration is the modern term used to describe the smoothing of enamel points, correcting malocclusion (faulty meeting of the upper and lower teeth), balancing the dental arcades and correcting other dental problems.

What is the difference between traditional floating and power floating?

Traditionally, horses have had their sharp enamel points and dental crown elongations reduced with hand-held rasps otherwise known as floats. Over the past 10 years revolutionary dental techniques have been developed to care for the equine mouth, including the use of power floats. Using a power float requires a high degree of skill and requires a qualified and experienced operator due to the potential to cause damage with the instrument. The main advantages that power floating provides to the horse is a more efficient procedure and greater precision.

Only your veterinarian who has undertaken the necessary training has the skills and understanding to safely sedate your horse and perform dentistry with power instruments. The risk of either directly

or indirectly causing damage to the teeth is increased with power instruments. The main risks are: over aggressive floating resulting in exposed pulp horns; poor technique resulting in over heating of the tooth and subsequent pulp death which in time leads to an open pulp horn; and an unbalanced float job which results in excessive pressures placed on certain teeth or an adversely altered chewing motion. Pain may be experienced by the horse either from damaging the nerves in the pulp or by sore muscles involved in chewing. Damage to the pulp may be evident immediately or it may be a number of years later. An open pulp horn allows bacteria from the mouth to infect the pulp. This causes inflammation of the pulp and pain is felt by the horse. The infection may result in a tooth root abscess and the pulp may die. Damage to the structures supporting the tooth may result in the tooth no longer erupting. Wear abnormalities develop when a tooth fails to erupt or when a painful tooth is no longer being used to chew.

Oral pain can be exhibited in many ways by a horse from subtleties such as being a bit depressed, spilling a little feed when eating, eating more slowly, avoiding certain types of feed, and not performing as well under saddle to having major riding and behavioural issues, not being able to eat at all and losing weight dramatically.

How safe is the use of sedation in my horse?

The safe use of sedatives in a horse is very complex and requires the full knowledge and training of a veterinarian. There are many factors to take into consideration with each individual case. Sedation is not without its risks to the horse, the handler and the veterinarian, however, a veterinarian is well educated to enable the risks to be minimised. In a healthy horse, the sedation drugs are well metabolised and the drugs themselves cause no long-term effects.

Who is allowed to sedate my horse?

Only a registered veterinarian is legally allowed to prescribe drugs used in sedation.

Why is it important for an equine veterinarian to perform dental work on my horse?

Only a veterinarian has the medical knowledge to understand and treat a dental condition. Many dental conditions have the potential to affect your horse's overall health, performance and behaviour. There are many veterinarians in Australia who have undertaken extra training in equine dentistry since they have graduated from veterinary school and are able to offer the best dental care available today. Not only that, on the occasion when more unusual or difficult dental problems are identified, there is a strong network of veterinarians with special interests in equine dentistry who are available to advise your veterinarian and if necessary treat your horse. Most equine dental procedures, including basic floating, irreversibly change the horse's teeth and therefore are most appropriately performed by a veterinarian. The Australian Veterinary Association, along with Equine Veterinarians Australia and the Australian Veterinary Dental Society, believes equine dentistry is an important branch of veterinary medicine which should only be performed by a registered veterinarian.

What is cribbing and how does it affect dental care?

Cribbing is a stereotypic behaviour that some horses develop. The horse exhibits cribbing by grabbing onto an inanimate object (fence posts, buckets, stall walls, etc.) with its incisor teeth, pulling the object and often making a sucking sound. Because these horses spend the majority of their time during the day preoccupied with this behaviour rather than grazing or eating, they quite often have dental wear problems. The upper incisor teeth (front teeth) are often worn excessively from hours of abnormal abrasion. These horses are sometimes referred to as "stump suckers."

Do donkeys and mules require different dental care than do horses?

All equine species have the same type dentition. We see the same types of pathology and wear patterns in donkeys, mules, zebras and horses. Under current domestication practices, all require regular dental care.

How do diet, pasture management and stabling impact dental wear?

Mother Nature designed horses to be pasture grazing animals. Horses in the wild normally spend 16 hours a day with their heads down, grazing grass. For a horse to properly process 10-15kg of wet-grass forage a day, it uses a wide, crushing chewing pattern. This allows the incisor teeth and cheek teeth to wear at a normal and even rate. Under artificial conditions, horses are fed an abnormal diet (grain and hay) for shorter intervals during the day, with an abnormal head posture (feed tub or hay rack). All of these conditions alter the chewing pattern and adversely affect the way teeth are worn over time.

Should I be concerned about biosecurity?

Biosecurity should always be a concern for a vigilant horse owner. Veterinarians have a comprehensive knowledge of biosecurity and are well trained to minimise the risks to you and your horse. Tools and equipment should be appropriately treated between each horse and each property. Veterinarians are the most informed people to assess the health and health risks of your horse.

This information is kindly supplied by EVA member Dr Rob Menzies

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