

Routine dental care is essential to your horse's health. Periodic examination, corrections and regular maintenance are especially necessary for a number of reasons:

- We have modified the horse's diet and eating patterns through domestication and confinement.
- We demand more from our performance horses (beginning at a younger age) than ever before.
- We often select breeding animals without regard to dental considerations.

Proper dental care has its rewards. Your horse will be more comfortable, will utilize feed more efficiently, may perform better and may even live longer.

The Horse's Mouth



Horses evolved as grazing animals, and their teeth are perfectly adapted for that purpose. The incisors, or front teeth, have a flat surface curved side to side for shearing off forage. The

cheek teeth (including molars and premolars with their wide, flat, roughened surfaces) easily grind the feed to a mash before it is swallowed.

Like humans, horses have two sets of teeth in their lifetimes. The baby teeth, called 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 8 months of age. Only the incisors and the first three cheek teeth have deciduous precursors to the permanent ones. These teeth begin to be replaced by adult teeth around age 2½. By age 5, most horses have their full complement of permanent teeth. 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.

The following chart shows the approximate ages at which different teeth erupt. During the period of tooth eruption and shedding, some problems may occur. Your veterinarian should be consulted routinely during this time or if you suspect your horse is having difficulty with this process. For more information, refer to the *Official Guide for Determining the Age of the Horse*, published

by the American Association of Equine Practitioners. It should be noted that there can be significant variation in eruption times between individuals and breeds.

Deciduous (Baby Teeth)

• 1st incisors (centrals)	Birth to 1st week
• 2nd incisors (intermediates)	4 to 6 weeks
• 3rd incisors (corners)	6 to 9 months
• 1st, 2nd & 3rd premolars (cheek teeth)	Birth to first 2 weeks for all premolars



Permanent (Adult Teeth)

• 1st incisors (centrals)	2½ years
• 2nd incisors (intermediates)	3½ years
• 3rd incisors (corners)	4½ years
• Canines (bridle)	4 to 5 years
• Wolf teeth (1st premolars)	5 to 6 months
• 2nd premolars (1st cheek teeth)	2½ years
• 3rd premolars (2nd cheek teeth)	3 years
• 4th premolars (3rd cheek teeth)	4 years
• 1st molars (4th cheek teeth)	9 to 12 months
• 2nd molars (5th cheek teeth)	2 years
• 3rd molars (6th cheek teeth)	3½ to 4 years

Common Dental Problems

Horses may suffer from any of several dental problems.

The most common include:

- Sharp enamel points forming on cheek teeth, causing lacerations of cheeks and tongue
- Retained caps (deciduous teeth that are not shed)
- Discomfort caused by bit contact with the wolf teeth
- Hooks forming on the upper and lower cheek teeth
- Long and/or sharp canine (bridle) teeth interfering with the insertion or removal of the bit
- Lost and/or broken teeth
- Abnormal or uneven bite planes

- Excessively worn teeth
- Abnormally long teeth
- Infected teeth and/or gums
- Misalignment/poor apposition (bite) — can be due to congenital defects or injury
- Periodontal (gum) disease

Recognizing Dental Problems

Horses with dental problems may show obvious signs such as pain or irritation, or they may show no noticeable signs at all. This is due to the fact that some horses simply adapt to their discomfort. For this reason, periodic dental examinations are essential. Indicators of dental problems include:

- Loss of feed from the mouth while eating, difficulty with chewing or excessive salivation
- Loss of body condition
- Large or undigested feed particles (long stems or whole grain) in manure
- Head-tilting or head-tossing, bit-chewing, tongue-lolling, fighting the bit or resisting bridling
- Poor performance, such as lugging on the bridle, failing to turn or stop, even bucking
- Foul odor from mouth or nostrils, or traces of blood from the mouth
- Nasal discharge or swelling of the face, jaw or mouth tissues

Preventative Maintenance

An oral examination should be an essential part of an annual physical examination by a veterinarian. Every dental exam provides the opportunity to perform routine preventative dental maintenance. The end result is a healthier, more comfortable horse. Routine maintenance of a horse's teeth has been historically referred to as "floating." Floating removes the sharp enamel points. Occlusal equilibration is the term now used to describe smoothing enamel points, correcting malocclusion, balancing the dental arcades and correcting other dental problems listed under "Common Dental Problems." A complete oral examination should precede any dental procedures.

When turned out on pasture, horses graze almost continuously, picking up dirt and grit in the process. This, along with silicate in grass, wears down the teeth. Stabled horses, however, may not give their teeth the same workout. Feedings are more apt to be scheduled,

not continuous, and include processed grains and hays. Softer feeds require less chewing. This may allow the horse's teeth to become excessively long or to wear unevenly. Adult teeth erupt throughout life and are worn down by chewing.

Because the horse's lower rows of cheek teeth are closer together than the upper rows of cheek teeth and the horse chews with a sideways motion, sharp points form along the edges of the cheek teeth. Points form on the outside (cheek side) of the upper teeth and the tongue side of the lower teeth. These points should be smoothed to prevent damage and ulceration of the cheeks and tongue.

Routine examination and correction is especially important in horses that are missing teeth or whose teeth are not wearing properly because of misalignment. For example, if the front or last cheek teeth are out of alignment, hooks can form. Untreated, these hooks can become long or sharp enough to damage soft tissue. Short hooks or other malocclusions may be corrected with hand instruments. Tall malocclusions may be corrected with motorized instrumentation. Motorized instruments have replaced molar cutters and chisels because there is less chance of tooth damage. Tall malocclusions may require several treatments spread over 12 to 18 months.

Wolf Teeth

Wolf teeth are very small teeth located in front of the second premolar. They rarely appear in the lower jaw. A horse may have one to four, or no wolf teeth. While not all wolf teeth are troublesome, veterinarians routinely remove them to prevent pain or interference with a bit.

The Age Factor

The age of a horse affects the degree of attention and frequency of dental care required. Consider these points:

- Foals should be examined shortly after birth and periodically during the first year to diagnose and correct congenital dental abnormalities (existing from birth).
- Yearlings have been found to have enamel points sharp enough to damage cheek and tongue tissue. Floating will make them more comfortable.

The Importance of Maintaining the Health of Your Horse's Mouth

- Horses going into training for the first time, especially 2- and 3-year-olds, need a comprehensive dental check-up. Teeth should be floated to remove any sharp points and checked for retained caps. Caps should be removed if they have not shed. This should be done before training begins to prevent training problems related to sharp teeth.
- Horses aged 2 to 5 years may require more frequent dental exams than older horses. Deciduous teeth tend to be softer than permanent teeth and may develop sharp enamel points more quickly. Also, there is an extraordinary amount of dental maturation during this period. During this period of adolescent development, 24 deciduous teeth will be shed and be replaced by 36 to 40 adult teeth. To prevent maleruption problems, twice-a-year examinations are appropriate for young horses from birth to 5 years of age.
- Mature horses should get a thorough dental examination at least annually to maintain correct dental alignment and to diagnose dental problems as early as possible.
- Senior horses (17 years old or older) are at increased risk for developing periodontal disease. This painful disease must be diagnosed early for successful treatment. Also, it is important to maintain a correct bite plane during a horse's teens in order to ensure a functional grinding surface beyond 20 years of age. Beyond the age of 20, the tooth surfaces may be worn excessively and/or unevenly, and dental alignment correction may be impossible.
- Horses over 20 years of age should receive a dental evaluation and nutritional counseling at least annually to maintain their conditioning and quality of life. With routine dental care, many horses will maintain functional dentition into their third and fourth decades of life.

Developing Greater Awareness

- If a horse starts behaving abnormally, dental problems should be considered as a potential cause.
- Abnormalities should be corrected and teeth should be floated and maintained as indicated.
- Wolf teeth are routinely extracted from performance horses to prevent interference with the bit and prevent associated pain.
- Sedatives, local anesthetics and analgesics relax the

horse and keep it more comfortable during floating and other dental procedures. Such drugs should be administered only by a veterinarian.

- Most equine dental procedures, including basic floating, irreversibly change the horse's teeth and therefore are most appropriately performed by a veterinarian.
- If your equine practitioner finds a loose tooth, he or she may choose to extract it. This may reduce the chance of infection or other problems.
- Canine teeth, usually present in mature geldings and stallions, may be gently rounded and smoothed. This procedure is performed to prevent interference with the bit and to reduce the possibility of injury to the horse, the handler, and other horses pastured or stabled with the gelding.
- Depending upon the condition of your horse's teeth, more than one visit from your equine practitioner may be required to get the horse's mouth in prime working order.
- It is important to catch dental problems early. Waiting too long may increase the difficulty of correcting certain conditions or may even make correction impossible.

More Serious Dental Ailments

Serious dental conditions can develop, such as infections of the teeth and gums, extremely long hooks or overgrowths on the cheek teeth, and lost or fractured teeth. These conditions may require advanced dental care and/or extraction by a qualified veterinarian. Your equine practitioner can recommend the best treatment or refer your horse to a dental specialist if indicated.

Visit aaep.org/horseowner or the Bayer equine web site at bayerequineconnection.com

For more information regarding Dental Care, contact your veterinarian.



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