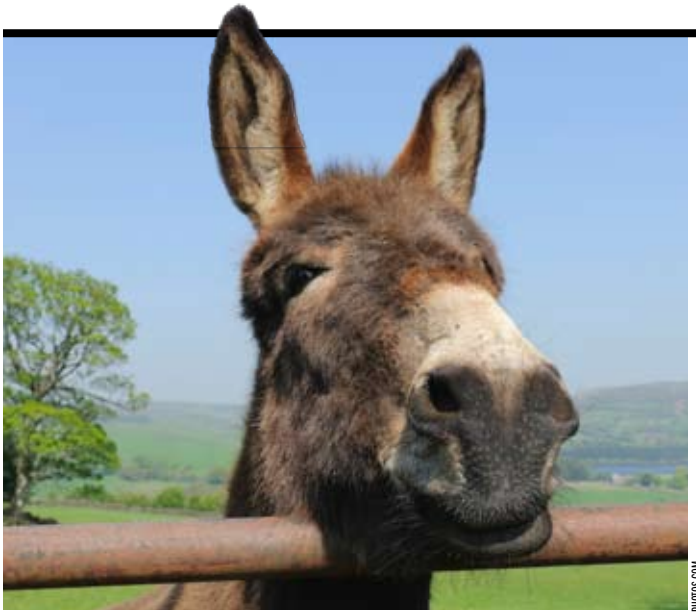
theHORSE.com
YOUR GUIDE TO EQUINE HEALTH CARE

Special Report

15 Facts on Donkey Health

Donkeys are popular in many countries as working animals, pets, and companions. Aside from their characteristic long ears, these equids differ in many ways from horses, including the health conditions they encounter. Below are 15 important donkey health considerations:



PHOTOS.COM

1 **Besnoitiosis** This rare parasitic disease caused by *Besnoitia bennetti* surfaced in North American donkeys in 2011 and is characterized by the development of cystic lesions both on the skin and in the throat and eyes. Currently, the mode of transmission is unknown, and there are no known effective treatments.

2 **Female donkeys (jennies)** are unique in that some cycle all year and when pregnant experience a longer gestation period of 11 to 14 months (on average, 12 months).

3 **Castration** Most veterinarians recommend gelding male donkeys (jacks) that are not part of breeding programs due to their aggressive tendencies. Castration must be done with care, however, as donkeys' testicles are larger than horses and, thus, their blood vessels in this area are larger. While an emasculator is usually sufficient to sever a horse's testicles, crush the vessels, and promote clotting, donkeys require ligation (stitches) to prevent excessive bleeding.

4 **Coronary band lesions** Some donkeys are prone to chronic nonhealing coronary band lesions resembling a gravel (abscess) eruption.

5 **Dental care** Because donkeys' teeth erupt at different intervals than horses, it's important to have them examined at least annually. Most donkeys develop wolf teeth on each side of the upper jaw, but these typically aren't removed because they usually only cause discomfort when the animals wear bits. While donkeys are prone to many of the same dental issues as horses, one developmental dental disorder more common in donkeys is underjet, when the lower incisors protrude further than the upper incisors.

6 **Growth** Donkeys develop slower than horses, with their carpal (knee) growth plates closing (changing from cartilage to bone) at age 4 or older. To avoid lameness issues, owners must allow donkeys to mature fully before asking them to perform strenuous work or carry heavy loads.

7 **Hydration** Donkeys exhibit superior fatigue and dehydration tolerance through reduced water and energy turnover rates, reduced sweating, reduced water excretion, and maintained feed intake (Sneddon et al., 2006). Veterinarians have also observed that donkeys will only drink enough to replace lost body fluid.

8 **Hyperlipemia/hyperlipidemia** Donkeys—particularly obese ones—are prone to elevated fat concentrations in the bloodstream during times of stress and sudden weight loss/food deprivation. Clinical signs include lethargy, weakness, inappetance, decreased water intake, and diarrhea. Thus, any donkey that is off his feed for several days warrants veterinary attention. The best prevention is ensuring donkeys do not become overweight.

9 **Jack sores** Stable flies and house flies serve as the intermediate hosts for *Draschia* and *Habronema* stomach worm larvae that cause irritating jack (or summer) sores. The flies lay eggs on or near skin abrasions and small wounds on donkeys. Larvae that hatch in wound sites don't mature but they do linger, irritating the tissues to create persistent sores that are extremely itchy and resist healing.

10 **Laminitis** This inflammation of the sensitive laminae that connect the horse's hoof to the coffin bone frequently occurs in all four feet, or only the rear feet, necessitating euthanasia. Support limb laminitis due to abscesses or injury is the most common form of laminitis in donkeys and often overlooked by the owner or veterinarian due to the animal's stoic nature.

11 **Lungworms** Donkeys are the primary host for this parasite, *Dictyocaulus arnfieldi*. The worms can complete their life cycles in donkeys, whereas in horses they rarely can reproduce successfully. Affected animals experience coughing and signs of lung irritation similar to heaves. Fecal testing and subsequent targeted deworming with ivermectin reduces the threat of lungworms.

12 **Metabolism** Donkeys require smaller feed rations and less protein than horses; they're at risk of foundering and/or becoming obese. Donkeys also metabolize medications differently—they often require higher or more frequently administered doses than horses. This is particularly important to consider in regards to anesthesia.

Donkeys develop slower than horses.

13 **Respiratory anatomy** Donkeys' nasal passage anatomy, angles, and size differ from horses'. They require foal-sized tubes for gastroscopy and endoscopy and are more prone to dorsal collapse of the pharynx (area extending from the rear of the mouth and nasal passages to the larynx—voice box—and esophagus). The difference in their laryngeal anatomy causes their characteristic braying noise rather than a whinny. Donkeys, particularly those with respiratory issues, can also suffer from narrowing of the trachea (windpipe) leading to difficulty in breathing.

14 **Pain tolerance** Veterinarians recognize that a donkey's pain tolerance is markedly higher than that of a horse. Thus, evaluating and diagnosing injuries and conditions—particularly those involving the musculoskeletal and gastrointestinal systems—can be challenging, as the animals might not show obvious signs of pain until near death.

15 **Sarcoids** Donkeys are more susceptible to this common tumor than are horses. While most are benign, treatment is challenging and can include surgical removal, chemotherapy, topical therapy, and radiation therapy, among others.

This list is in no way comprehensive and goes to show that donkeys are incredibly unique and we have a lot left to learn about them. Because published research on donkeys is limited, observation and practical experience can be the best guides to their care. Work with your veterinarian to craft a preventive care program suitable for your donkey.