

Who and What

- With 3000 to 4000 new registrations each year, the **Belgian** is the most popular draft horse in America. Belgian registrations outnumber those in all other draft breeds combined.
- **Anhidrosis** is the inability of horses to produce sweat. Because **sweating** helps exercising horses dissipate body heat, anhidrotic animals are **exercise intolerant** and may develop high heart rates. Robert McKay, a professor at the University of Florida, has designed a test to measure the amount of sweat produced in response to an **intra-dermal injection of terbutaline**. By increasing the accuracy of an existing procedure, McKay says the test will help veterinarians diagnose and assess the severity of anhidrosis.
- It's not just **dust and mold spores** that stabled horses breathe. Recent studies at Michigan State University have shown greatly increased endotoxin levels in stable air compared to the air horses breathe when turned out to pasture. Endotoxins and other inhaled irritants are contributors to **airway inflammation** and poor performance in susceptible horses.
- **Bone fragility syndrome**, a condition found in some California horses, may be associated in some way with the **silica soils** that underlie the region's pastures. Horses with this syndrome have bone mineral loss that results in lameness, a swayed back, and bowed shoulders. A link has been established between geographic areas with silica soils, respiratory inflammation from horses breathing powdery silica from the soil, and incidences of bone fragility syndrome. In humans, rapid bone turnover is seen in patients that have chronic inflammation. More research is needed to show whether pulmonary silicosis causes pathological skeletal changes in horses as well.
- **Equine cerebellar abiotrophy**, a recessive genetic disease affecting Arabian horses, causes **trembling and loss of balance** severe enough to require euthanasia of most affected horses. A new **DNA test** has been developed at the Veterinary Genetics Laboratory at the University of California, Davis to see whether mares and stallions carry the gene for this defect. If one parent has the gene and the other does not, the offspring will not be affected.
- An article in Hoof Beats indicates cardiac **disease is the third most significant cause of poor performance in horses**, following problems with the respiratory or musculoskeletal systems. While it is estimated that more than 60% of Standardbreds have **leaky heart valves** that allow some blood to flow backward with each contraction, this condition is rarely severe enough to cause a drop in performance. **Heart murmurs** are also fairly common in many breeds but generally do not impact performance. Severe structural defects of the heart are rare, although **irregular heartbeat patterns** are somewhat more common in horses than in other domestic species. **Aortic aneurysms** (weak or bulging spots in the wall of a major artery) usually are undetected until they burst. When a performance horse collapses and dies during a race or other stressful event,

the cause is frequently spoken of as a **heart attack**, but is more likely to have been a burst aneurysm than the type of heart attack that is seen in humans.

- There may be new hope for some horses that can't be worked because of severe **head-shaking behavior**. Various causes such as light sensitivity, nerve irritation, or dental problems have been blamed for head-shaking, but no specific cause can be identified in some horses. Veterinarians in California treated a head-shaking Standardbred gelding by using an infrared diode laser to **reduce cystic tissue on the horse's irises** next to the pupils in both eyes. Head-shaking was greatly reduced and the horse was able to return to his previous performance level.
- **Preventing obesity** is a primary goal in the management of **Miniature Horses**, according to an article in *The Horse*. The author mentions a KER study showing that few owners of Minis know how much their pint-sized equines weigh. **Overfeeding based on erroneous ideas of body size** can quickly lead to weight gain and its associated problems. The average Mini needs no more than about four pounds of hay a day. Supplementing with a small amount of a **vitamin/mineral preparation** will meet nutrient needs without the calories in grain or commercial feeds. Most Minis should not have unlimited access to pasture, and **restriction of grazing** as well as a regular program of exercise can be implemented to keep weight within a healthy range.
- A study conducted at Coolmore Stud in Australia looked at **foal birth weight** as related to placental weight, length of gestation, dam age, and number of foals the mare had produced (parity). The results suggested a positive relationship between greater placental weight and heavier foals, although this trend was not significant when placental weight was over 6.5 kg. Age of mare and length of gestation were not correlated with foal birth weight. Parity is a factor in foal weight, probably related to the fact that mares tend to develop larger and heavier placentas as their broodmare career develops through the years.
- An equine **economic impact study** conducted in **New Jersey** in 2007 showed the total impact is around \$1.1 billion annually. The industry generates 13,000 jobs related to a state population of 42,500 equines. Acreage devoted to equines makes up about one-fifth of New Jersey's agricultural land.

Wins and Wows

- Last fall at Mohawk Racetrack in Toronto, Canada, two-year-old Standardbred colt **Major In Art** won the \$1 million Metro Pace, his fifth victory in six starts. A month earlier, he had won the \$350,000 Woodrow Wilson Pace at The Meadowlands in New Jersey. The two first-place finishes made Major In Art the **richest two-year-old pacer** in the world. At the age of 26, his trainer Justin Lebo was the youngest trainer to have won the Metro Pace. Major In Art was originally sold for \$4000.
- **Miss Rodeo America** 2009 is Maegan Ridley of Alta Loma, California. Ridley was chosen from 29 competitors who were judged on horsemanship and equine knowledge as well as public speaking, modeling skills, and other criteria.
- The American **Saddlebred** Horse Association has named WGC CH Breaking News as **Horse of the Year** for 2008. Breaking News, a gelding, swept the five-gaited championships at the Junior League, Kentucky State Fair, and American Royal, events that make up the Saddlebred Triple Crown.



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3910 Delaney Ferry Road
Versailles, KY 40383
Phone: 859-873-1988
Fax: 859-873-3781
Order Department: 800-772-1988
www.ker.com
info@ker.com