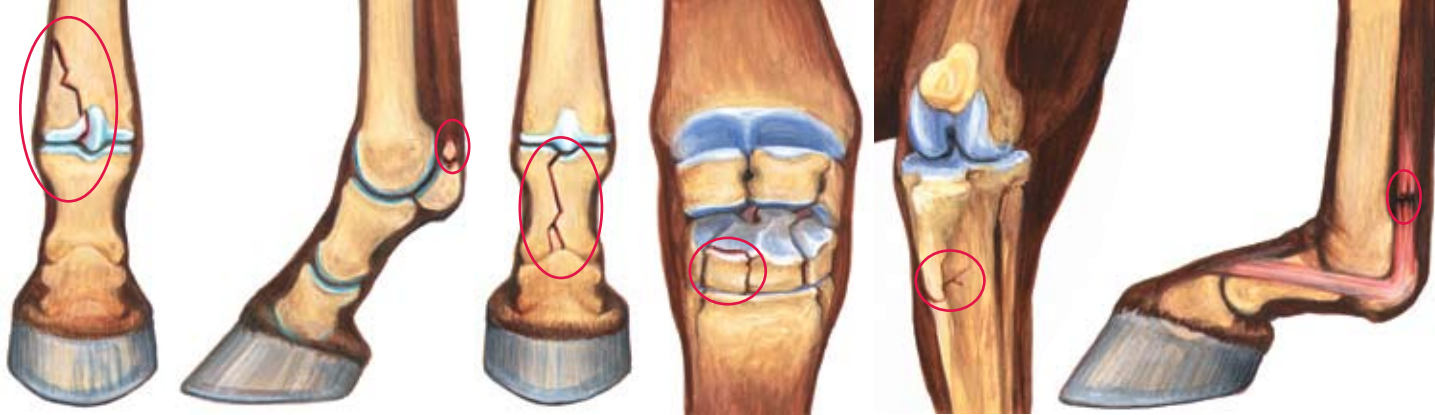


# Understanding and Preventing **CATASTROPHIC INJURIES**

BY STACEY OKE, DVM, MSC





DR. ROBIN PETERSON ILLUSTRATIONS

**F**ollowing the euthanasia of filly Eight Belles, who suffered catastrophic injuries to both front legs a quarter mile after finishing second in the Kentucky Derby, members of every sector of the Thoroughbred industry have banded together to proactively address safety and welfare issues. In this article, representative members of the equine industry together provide an in-depth exploration of catastrophic injuries in the Thoroughbred racehorse, focusing on what veterinarians know about catastrophic injuries based on the available scientific data, and looking at what work is still to be done.

Six different types of catastrophic injuries: (left to right) condylar fracture of the cannon bone, sesamoid fracture, long pastern bone fracture, third carpal slab fracture (in the knee), tibial fracture (in the stifle; this is actually relatively common in racing Thoroughbreds), and the rupture of the suspensory apparatus.

### What are Catastrophic Injuries?

The term “catastrophic injury” in the context of equine veterinary medicine refers to a severe musculoskeletal injury sustained by athletic horses during racing or training that results in an acute lameness. Such injuries include (either alone or in combination):

- Condylar fractures (fractures of the lateral or medial condyle of the third metacarpal bone, also called the cannon bone);
- Fractures of the sesamoid bones;
- Displaced slab fractures in bones such as the third carpal (in the knee) bone or central tarsal (in the hock) bone;
- Rupture of the suspensory apparatus or other tendons or ligaments;
- P1 (long pastern bone) fractures/sagittal fractures (or any fracture of the distal limb); and
- Any other bony fractures, including those of the tibia, humerus, pelvis, femur, or stifle.

Isolated musculoskeletal injuries can be successfully managed surgically and, depending on the exact nature of the injury, many of these horses have a good prognosis for return to racing post-surgically following appropriate rehabilitation. Only rarely are these injuries career-limiting, and it is even more uncommon that catastrophic

**“What happened to Eight Belles is tragic, but it has galvanized the industry like I have never witnessed before. Maybe this will give us some sort of central purpose.”**

— DR. LARRY BRAMLAGE

injuries result in humane euthanasia. Injuries involving multiple structures, such as the injuries sustained by horses like Barbaro (who fractured three separate bones in his hind leg and dislocated the fetlock joint in the same limb), are most often life-threatening.

### Thoroughbred Injury Rates

Larry Bramlage, DVM, Dipl. ACVS, an equine surgeon at Rood & Riddle Equine Hospital in Lexington, Ky., says, “The Triple Crown, historically, is a very clean (series of races). Before Barbaro we have to go back 15 years to cite the previous injury. From a scientific aspect, two injuries in three years does not constitute an ‘epidemic,’ but rather a heartache for both the equine industry and the casual fan.”

According to epidemiological surveys performed in California, Kentucky, Ontario, the United Kingdom, Australia, and Hong Kong, the number of catastrophic injuries incurred by racehorses is small.

“Obviously the entire industry wants the number of catastrophic injuries sustained by Thoroughbreds to be zero,” emphasizes C. Wayne McIlwraith, BVSc, PhD, FRCVS, DSc, Dr. med vet (hc), Dipl. ACVS, Barbara Cox Anthony University Chair and Director of Orthopaedic Research at Colorado State University. “We need to continue to work towards this goal and look at all possible ways of reducing the numbers of injuries.”

Antonio Cruz, DVM, MVM, MSc, Dr. med vet, Dipl. ACVS, ECVS, of the Department of Clinical Studies at Ontario Veterinary College in Canada, recently performed a study on catastrophic injuries in Canadian Thoroughbreds.

“Our research group collected data from two Ontario racetracks in 2004 and 2005 and found that 76 horses were euthanized following the development of catastrophic injuries, which was equivalent to 2.36 and 1.69 fatalities per 1,000 racing starts,” Cruz says.

This data is consistent with other epidemiologic studies. In 1996, Sue Stover,

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DVM, PhD, Dipl. ACVS, a professor from the University of California Davis School of Veterinary Medicine, and colleagues reported 1.7 fatalities per 1,000 starts in California Thoroughbreds. A Kentucky study co-authored by Noah Cohen, VMD, MPH, PhD, Dipl. ACVIM, currently a member of Texas A&M's Department of Large Animal Medicine and Surgery, reported 1.4 fatalities per 1,000 starts. In 2001, Mary Scollay, DVM, associate veterinarian at Calder Race Course and Gulfstream Park in Florida, and colleagues reported the incidence of fatality due to catastrophic injuries as 1.2 per 1,000 starts in Florida Thoroughbreds.

In addition, preliminary data collected by Scollay through the new on-track injury reporting system, which came about in 2007 as a result of the first summit on the safety and welfare of racehorses, concurred with these earlier studies.

Scollay's reporting system was designed to catalog the frequency, type, and outcome of racing injuries in a database capable of identifying horses at risk for injury. Veterinarians in the program are currently looking at data from horses determined to be

unsound/unfit for racing by the regulatory veterinarians at 30 different racetracks (a list of the participating tracks is available at [www.jockeyclub.com/mediacenter.asp?story=288](http://www.jockeyclub.com/mediacenter.asp?story=288)). These veterinarians are voluntarily collecting data and submitting it to the database using standardized criteria and terminology.

"Using the available data from 2007, the fatality rate of racing Thoroughbreds was 1.47 and 2.03 per 1,000 starts on synthetic surfaces and dirt, respectively," summarizes Scollay.

"Ultimately, we will be able to pool the data and generate meaningful statistics," explains Scollay. "Since industry buy-in has been overwhelming, I am optimistic that it will not be long before this is a comprehensive database applicable to Thoroughbred racing throughout North America."

The Jockey Club Information Systems' InCompass Systems developed the software for the database and is providing use of the software free of charge to all participating racetracks.

"It is time for us to be realistic," says McIlwraith. "According to these epidemiological surveys the number of (catastrophic injuries) is small, but we can do better."

## Why do Catastrophic Equine Athletic Injuries Happen?

According to McIlwraith, durability of the horses, use of pharmaceutical drugs too close to racing, differences in track surfaces, and underlying musculoskeletal disease are all factors that can result in catastrophic injury.

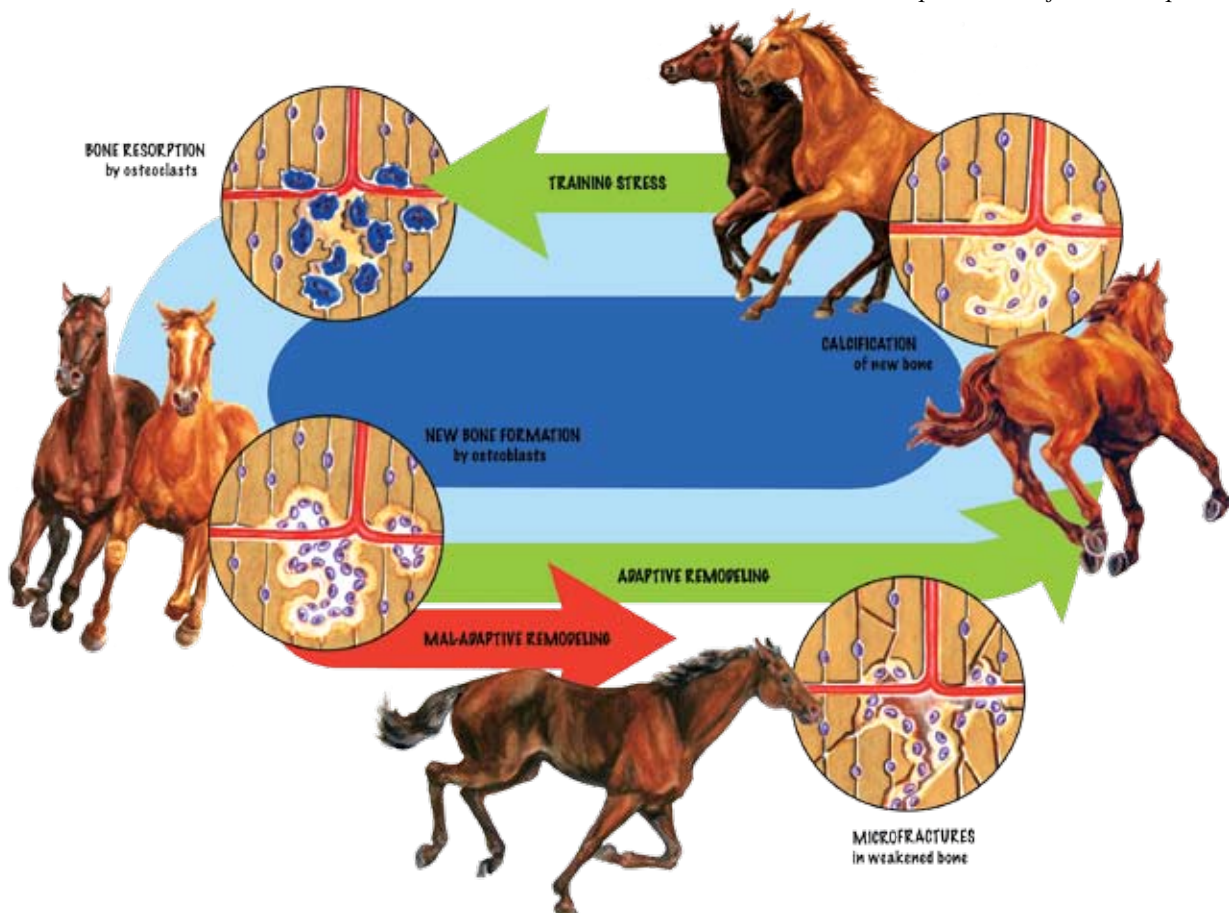
It should be noted that it is generally not the injury itself that forces veterinarians to euthanize injured horses.

"Instead, it is the postoperative complications associated with severe injuries and our inability to manage these complications that ultimately result in the demise of horses with severe musculoskeletal injuries, as we clearly saw in the case of Barbaro," explains Bramlage.

He continues, "The decision of whether to euthanize an injured horse or not is often very complicated and dependent on the horse's prognosis to return to racing or breeding, as well as emotional and economic factors."

He suggests that for most major injuries, the decision to euthanize is due to laminitis.

"The terminal blow usually comes in the opposite foot," says Bramlage, referring to supporting limb laminitis, which can develop when an injured horse places uneven



DR. ROBIN PETERSON ILLUSTRATIONS



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weight on his limbs for an extended period of time.

While the potential complications when managing horses with severe musculoskeletal injuries are too numerous to count, one major issue to consider is that veterinarians are not able to deliver high enough concentrations of antibiotics to the distal limb via the bloodstream.

"In anatomic regions where there is mostly tendon and bone rather than muscle, the blood supply is low," says Bramlage. "This is probably the main reason why infection is such a problem for us in the distal limb. We just can't keep the tissue alive."

## Sex, Drugs, and Rock 'n' Roll?

Akin to the comparison of the demise of the nation's children in the '60s due to sex, drugs, and rock 'n' roll, among Thoroughbred racehorses might gender, age, and drug issues be major contributors to catastrophic injuries?

Not according to the data.

"During the 2004 and 2005 racing meets at Fort Erie and Woodbine in Ontario, there was no significant difference in catastrophic injuries based on either age or gender," reveals Cruz.

In terms of gender, these results contradict earlier data reported in the study co-authored by Scollay on Florida Thoroughbreds, which found that geldings, not fillies, had a higher risk for suffering a catastrophic injury. Specifically, geldings were two times more likely to have a catastrophic musculoskeletal injury than fillies or mares ( $P$  value < 0.02, a measurement indicating probability—the lower the better).

Epidemiologic data from a 2005 New Zealand study showed that Thoroughbreds older than five years of age were at a higher risk for injury—1.38 times more likely—than 2-year-olds ( $P$  < 0.04).

In addition to these studies, Stover, reported that for injuries preventing horses from racing for at least six months, the risk was increased 1.2 to 4.1 times for each year of age. That is, 5-year-old horses were 1.2 to 4.1 times more likely to not race for at least six months following an injury compared to their 4-year-old counterparts. In addition, horses 4 years old and older had a greater risk for moderate to severe injuries than younger horses. Stover also

RACING DEATHS	
LOCATION OF STUDY	FATALITY RATE PER 1,000 STARTS (date of data collection)
California	1.7 (1992)
Kentucky	1.4 (1992-1993)
Florida	1.2 (1995-1998)
Ontario, Canada	2.36, 1.69 (2004, 2005)
United Kingdom	0.8 (1987-1993) and 0.9 (1990-1999)
Victoria, Australia	0.33 (1986-1993) and 0.44 (1989-2004)

noted that existing reports have shown risk for injuries resulting in death decreases with age.

Stover's review, "The epidemiology of Thoroughbred racehorse injuries," was published in the journal *Clinical Techniques in Equine Practice* in 2003.

"Together, our information clearly demonstrates that fillies and young horses are not the athletes most commonly injured," explains McIlwraith.

Relative to drug abuse in Thoroughbreds, officials in the past few years have tightened limits on race day medications to maximize equine safety. The best example of this is the formation of the Racing and Medication Testing Consortium (RMTTC). Its mission is to develop, promote, and coordinate, at the national level, policies, research, and educational programs that seek to ensure the fairness and integrity of racing and the health and welfare of race-

horses and participants, and to protect the interests of the betting public ([www.rmtcnet.com](http://www.rmtcnet.com)).

One of the primary and persisting problems concerning medications is that each state has its own rules regarding drug use, testing, and withdrawal times. To date, anabolic steroids are banned in multiple states, but they are still allowed in others.

Lately, and particularly since Eight Belles' euthanasia, there has been much discussion of adopting "zero tolerance" for not only anabolic steroids, but race day medications in general (although it should be noted that no illegal drugs or steroids were found during Eight Belles' necropsy and drug testing).

The incidence of fatalities due to catastrophic injuries reported in the United Kingdom and Hong Kong—where rules governing the use of medications are more stringent than in North America, and where turf and synthetic surfaces are more common—is lower than those recorded in the North American studies.

"However, this does not mean that use of therapeutic drugs causes catastrophic injuries," contests Ross. "Even if medications were completely banned in Thoroughbred racing, the fatality rate due to catastrophic injuries would, unfortunately, never reach zero. Abnormalities in structure and/or function of bone are the major factors contributing to racehorse injury."

Michael Ross, DVM, Dipl. ACVS, a professor of surgery at the University of Pennsylvania's New Bolton Center, adds

## WELFARE AND SAFETY OF THE RACEHORSE SUMMIT

To date, two summits have been held to discuss safety and soundness in Thoroughbred racehorses. These summits were organized and underwritten by the Grayson-Jockey Club Research Foundation and The Jockey Club, and both were hosted by the Keeneland Association in Lexington, Ky.

The first summit, held Oct. 16-17, 2006, resulted in the creation of a strategic plan, which was followed up in March 2008 with the formation of specific recommendations to identify critical issues that affect horse health and/or shorten the careers of racehorses. Six key areas were identified: Education & Licensing, Racing Conditions/Racing Office, Research, Health & Medical Records, Racing Surfaces/Shoeing/ Hoof Care, and Breeding Practices.

Detailed information is available at [www.grayson-jockeyclub.org/summitdisplay.asp](http://www.grayson-jockeyclub.org/summitdisplay.asp)



CHAD MENDEL

that lower fatality rates in the U.K. and Hong Kong likely reflect the contribution of race surface. In those countries races are run on turf and, importantly, horses are trained on turf and all-weather track surfaces.

### Pathology Brewing?

Based on the data presented in the preceding sections, there is no epidemiological evidence to support the hypotheses that age, gender, and drug use are the primary factors involved in the genesis of catastrophic injuries.

So, what does cause severe musculoskeletal injuries in Thoroughbreds?

According to Hunt, if one throws out the catastrophic injuries that occur when a horse is knocked off balance and steps unnaturally, thereby overloading a limb, all other catastrophic injuries are due to developing pathology (disease) in the bone or soft tissue.

"It is simple—pathology causes injuries," emphasizes James C. Hunt Jr., DVM, a private practitioner based at Belmont Park in New York.

Chris Kawcak, DVM, PhD, Dipl. ACVS, an associate professor and Iron Rose Ranch Endowed Chair in Musculoskeletal Research at the Orthopaedic Research Center at Colorado State's College of Veterinary Medicine, has been performing research in this field aggressively and confirms Hunt's suggestion: microfractures and bone remodeling (i.e., repetitive stress injuries) are major contributing factors to the development of catastrophic injuries.

"In response to repetitive mechanical stress, bone develops microscopic cracks referred to as microfractures that are not visible on X rays," explains Kawcak.

Once microfractures have formed the bone initiates a phase of resorption, which is followed by a slower remodeling phase in which new bone that's custom-designed to withstand the stresses of racing is synthesized.

"Between the initiation of the resorption phase and the completion of the bone remodeling phase, the horse is in a

delicate state and we need to respect that," advises Kawcak.

That is, if the horses are overtrained during remodeling or if the remodeling phase is too slow, then an overt clinical fracture can result.

The formation of microfractures and the process of bone remodeling is also the reason why many veterinarians advocate starting racehorses in training while they are young.

McIlwraith further explains that the remodeling process happens no matter what age you start training.

"Their bones have to adapt and remodel," he summarizes. "Properly and slowly training young racehorses is another example of how the entire racing industry, from the trainers to the veterinarians, is attempting to minimize injuries in our athletes."

In addition, there is evidence that giving even foals controlled exercise can help strengthen their musculoskeletal system. This observation was relayed by the Global Equine Research Alliance/Institute of Vet-

erinary, Animal and Biomedical Sciences at Massey University in New Zealand, in which McIlwraith and Kawcak are participants. The resulting study, "Evaluation of a new strategy to modulate skeletal development in racehorses by imposing track-based exercise during growth: the effects on 2- and 3-year-old racing careers," was published in the March 2008 edition of the *Equine Veterinary Journal*.

### Breeding Dilemmas: Speed vs. Soundness

One of the major questions the racing industry is facing relates to basic breeding practices: Are we breeding fast, fragile horses at the expense of soundness and durability?

There is evidence that the number of starts per horse and starts per season are declining, which, according to Bramlage, is due to number of reasons.

"Most people dealing with horses do feel the horses are more fragile than they used to be. But there are other factors, such as more horses per race in essentially the

same total number of races and the fact that horses are trained harder for each race than they used to be. This increased training increases the wear and tear on the horse. Just counting races is possibly not the best indicator of durability," explains Bramlage.

Hunt also acknowledges that breeding issues might exist. He says, "A 2-year-old may have a brilliant race record, then become injured and retire to the breeding shed. If conformational faults predispose this young horse to a pathology that shortened its racing career; then these faults are likely to be passed on to progeny."

In addition, procedures performed in young horses to "straighten their legs" for sales, such as periosteal stripping or transphyseal bridging, might enable these horses to race well enough to become sought-after breeding stock, but then these undesirable "crooked leg" genes are propagated through breeding.

"Are we really producing faster horses?" questions Ross. "No. To my knowledge there has not been any trend for faster times



ELIOT J. SCHECHTER

Fleet Indian is loaded in the equine ambulance after she was pulled up during the 2006 Breeders' Cup Distaff at Churchill Downs.



CHERYL MANISTA

Fleet Indian, pictured here with her Storm Cat colt in February 2008 at Summer Wind Farm in Lexington, Ky., continues a successful career as a broodmare after her injury.

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in Thoroughbred racing.”

Bramlage adds, “As we presented during NBC’s round table discussion on the major issues of horse racing in Pimlico, Md., prior to the running of the 133rd Preakness Stakes, there is no scientific evidence that we are breeding friable horses. At present, this remains an unproven hypothesis.”

According to Bramlage, breeders are not intentionally creating less-durable horses. In the past it never really crossed breeders’ minds to select for durability. But now, following all of these recent discussions, durability and longevity are beginning to be considered positive traits.

“We have to be more conscious of our breeding habits and continue the education process so that we can swing the pendulum in the opposite direction,” emphasizes Bramlage.

## Surface Wars

For a variety of reasons, including durability, maintenance, and safety issues, synthetic surfaces have been installed at nine racetracks throughout North America, including all of the major tracks in California. Have they lived up to their expectations? Not entirely.

“The adoption of synthetic surfaces is a heatedly debated topic that is affecting all facets of the industry,” says McIlwraith.

A special edition of *The Blood-Horse* (published in December 2007, available in article #10985 on TheHorse.com) provides an in-depth exploration of the impact of synthetic surfaces, from the perspectives of horses (according to results), owners, veterinarians, breeders, trainers/jockeys, and track maintenance personnel.

According to Ross, synthetic surfaces are a double-edged sword.

“While it is possible that the rate of catastrophic injuries could decrease by installing synthetic surfaces, there is already the growing opinion that new, different, and potentially equally life-threatening injuries are occurring in horses that race and train on synthetic tracks,” says Ross.

In addition, Ross explains that breeding might also play an important factor in the manifestation of new types of injuries.

“The horses that are racing now have been bred by stallions with a propensity to run well on dirt,” explains Ross. “We have no idea if these horses will perform equally well on synthetic surfaces, or if the entire breeding industry will ultimately change in racing jurisdictions that have embraced synthetic tracks.”

McIlwraith acknowledges that at price tags up to \$10 million a track, it is obvious that the track associations that have installed the synthetic tracks are interested in improving race track safety, but it isn’t enough.

“Race track synthetic surfaces are in their infancy,” he says. “It will take a considerable time before we have any real evidence

“The entire equine industry is saddened over the loss of not only Eight Belles and Barbaro, but any racehorse that suffers a catastrophic injury.”

— DR. C. WAYNE MCILWRAITH

based on research regarding the pros and cons of synthetic surfaces and what role these tracks should play in Thoroughbred racing. One major hurdle is finding the research dollars to fund this work.”

Hunt adds, “We haven’t seen the best surface for horse racing yet; more research is definitely needed.”

Leading Thoroughbred trainer Todd Pletcher, who is based at Belmont Park, offers a practical point of view.

“We have only had a limited time on the

## INJURIES IN OTHER EQUINE EVENTS

Not only is safety an important issue in racing, but it’s also a hot topic as it relates to other equine-related athletic events. According to a spokesman with the Fédération Equestre Internationale (FEI, the international governing body for equestrian sport), based in Lausanne, Switzerland, safety is an ongoing concern for nonracing equine athletes. The FEI monitors the number of competitors and the types of injuries (among other data) for each event through its safety system, which was inaugurated in 2001 (available at <https://admin.fei.org/Disciplines/Eventing/Documents/Report%20Safety%20Forum.pdf>).

The FEI database includes data on falls during cross-country in eventing at international events. This database shows that the total number of falls in equine competition reported in 2007 was 780, which was equivalent to 59 falls per 1,000 starts. This number has decreased steadily since 2002, when 82 falls per 1,000 starts were recorded. Most falls (97% of those in 2007) occurred at jumps; however, the FEI acknowledges that falls also occur on the flat.

In January 2008 the FEI held an eventing safety forum involving participants from 22 countries to discuss means of reducing or eliminating accidents that compromise rider safety. Based on the presentations and



In 2007 there were 780 falls during three-day events; the governing body is working to reduce this number to protect horses and riders.

discussions, three main areas were identified that need to be specifically addressed by the FEI and each of the national federations to influence safety: communication and data gathering, training and education, and research.—Stacey Oke, DVM, MSc



BILL AOUTH

Efforts to limit the use of drugs in racing, the formation of safety committees, and heightened research efforts are some of the ways the industry is working together to enhance safety in Thoroughbred racing, with professional and administrative organization support.

synthetic tracks and it has been a learning process requiring meet-to-meet adaptation in training style,” says Pletcher.

### What's Being Done?

In addition to the proposals and recommendations created by the Welfare and Safety of the Racehorse Summit, efforts by the RMTTC to limit use of drugs in racing, and intense research efforts in the field of joint injuries and joint disease are some of the other ways the industry is working together to enhance safety in Thoroughbred racing.

#### 1. Progressive Actions of Charitable Foundations and Research Organizations

For 30 years, charitable organizations such as the Southern California Equine Foundation, Inc. (SCEF, [www.scef-inc.com](http://www.scef-inc.com)), dedicated to protect the interest and promote the welfare of the equine athlete, have been aggressively protecting racehorses. The SCEF is also affiliated with the Dolly Green Research Foundation, which was instituted to advance the health and welfare of Thoroughbred racehorses through research. Dolly Green is the second largest independent research funding agency for equine research in medicine and surgery.

The SCEF has built two on-track hospitals in California since its inception: one at Santa Anita and the other at Hollywood Park.

The admirable efforts of the SCEF have not gone unnoticed. New York veterinarians are following their example.

“The Ruffian Equine Medical Center is scheduled to open at Belmont Park, N.Y., by September 15, 2008,” says Hunt, who is co-owner and director of the hospital.

The Ruffian Equine Medical Center, managed through International Equine

Acquisitions Holding, Inc. (the same group that owns Kentucky Derby and Preakness winner Big Brown), is a state-of-the-art hospital equipped with all the bells and whistles that are available at Santa Anita and Hollywood Park, which were used as models during the planning and designing phases. It is a three-surgeon facility, headed by Patricia Hogan, DVM, Dipl. ACVS, and it will provide coveted on-site referral diagnostic and medical services.

**2. Formation of Safety Committees** In May 2008 the Jockey Club announced the formation of the Thoroughbred Safety Committee. The goal of this seven-member committee is to review all facets of the industry, including breeding practices, medication, racing rules, and surfaces. The committee is planning on using the recommendations from the Welfare and Safety of the Racehorse Summits as a starting point.

In the group's first teleconference, held May 14, goals, objectives, and timelines for the committee were discussed. It is anti-

ciated that the committee's inaugural recommendations will be unveiled on Aug. 17, 2008, at The Jockey Club's annual Round Table Conference on Matters Pertaining to Racing.

**3. Heightened Research Efforts** Cutting-edge research from the scientific team at Colorado State University, which is led by McIlwraith and David Frisbie, DVM, PhD, Dipl. ACVS, in concert with the SCEF (funded by the Grayson-Jockey Club Research Foundation) has resulted in the discovery of “biomarkers,” and sequential measurement of these biomarkers has a quite high predictability for diagnosing a pre-fracture injury.

“Biomarkers are released from bone in association with microdamage to the skeletal system into the bloodstream,” explains McIlwraith. “We potentially can collect a blood sample, measure these biomarkers, and identify which horses are at risk for developing a skeletal injury.”

Once developed, a serum biomarker test will provide a means of screening the health of a horse's skeletal system. Horses with positive biomarker tests can be referred for further evaluation via diagnostic imaging techniques, such as X rays, scintigraphy (bone scans), computed tomography, or MRI.

“Biomarkers are already being used for screening at early stages of osteoarthritis in people, as well as post-menopausal osteoporosis in women; however, the use of biomarkers to predict fracture is novel in horses,” McIlwraith explains.

Further, the establishment of such funds as the Barbaro Fund at the University of Pennsylvania and the formation of additional research centers like the Penn Vet Laminitis Institute ([www.vet.upenn.edu/laminitis](http://www.vet.upenn.edu/laminitis)) are also important steps that

## WHAT ARE THE THOROUGHBRED INDUSTRY'S CURRENT SAFETY INITIATIVES?

The dedication of the Thoroughbred industry and its fans to racehorse safety is evidenced by various safety initiatives, including:

- Establishment of the Barbaro Fund and the Penn Vet Laminitis Institute;
- Formation and development of the Racing, Medication, and Testing Consortium (RMTTC);
- Professional and education services provided by the American Association of Equine Practitioners (AAEP);
- Aggressive research efforts in the field of joint disease and joint injuries to diagnose bone or joint damage in the early stages of disease and to estimate risk and severity of joint damage;
- Active efforts by charitable organizations such as the Southern California Equine Foundation, Inc. dedicated to protect the interest and promote the welfare of the equine athlete;
- Construction of synthetic surfaces at nine racetracks throughout North America; and
- Institution of The Jockey Club's Thoroughbred Safety Committee. —Stacey Oke, DVM, MSc



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will ultimately contribute to the decline of euthanasia due to catastrophic injuries.

#### 4. Professional and Administrative Organization Support

Finally, organizations such as the American Association of Equine Practitioners (AAEP) and National Thoroughbred Racing Association (NTRA) each are emphasizing and publicizing their commitment to the industry and racehorse safety.

According to David L. Foley, CAE, executive director of the AAEP, one of the main tenants of the AAEP's mission statement is

to improve the health and welfare of the horse. The association's policies regarding horses in competition recommend that all events—whether racing, eventing, dressage, reining, or another venue—be conducted in a way that minimizes injury. Events should have guidelines to ensure humane treatment of the horse, standardized rules to provide maximum safety, and quality drug testing.

“Specifically to racing, we provide guidelines to help our members who practice at the racetrack, as well as continuing education throughout the year so members can stay up-to-date on the latest advancements in treatment options,” explains Foley.

In addition, the AAEP has a number of

representatives that participate with The Jockey Club's Welfare and Safety Summit, as well as the RMTC.

Similarly, the NTRA has announced its commitment to racehorse safety and is banding together with the AAEP and other organizations to coordinate and implement safety initiatives.

#### Who is Responsible?

We all agree that the welfare and safety of horses is important and changes are obviously necessary, but who is most responsible for putting in the time, money, and energy to ensure the words become action?

Pletcher suggests that it should be a combined effort of management, track superintendents, trainers, and veterinarians.

“We all need to come together with our own areas of expertise and personal experiences to improve racehorse safety,” says Pletcher. “We have been successful in the past in terms of taking the recommendations proposed at various meetings and creating firm rules—such as limiting the size of toe grabs. We need to continue this trend.”

Dave Donk, another veteran trainer at Belmont Park, concurs with Pletcher and adds, “The owners also need to step forward and take a little more control over decision making to ensure the safety of their horses.”

#### Take-Home Message

“This is a modern world where horses are no longer used as beasts of burden,” says Hunt. “Instead, horses have become an important component of the world's entertainment industry. We value our horses and all efforts are taken to diagnose lameness in its infancy to ward off all types of injury.”

McIlwraith concludes, “We want to decrease the occurrence of all types of injuries—not just those, catastrophic or otherwise, that occur during racing.”

It is virtually unanimously agreed that economics drives horse safety. Horses are not expendable commodities, and thousands of people's livelihoods are reliant on the health, safety, and prosperity of our horses. 🐾

#### ABOUT THE AUTHOR

Stacey Oke, DVM, MSc, is a freelance medical writer based in Canada. Her areas of interest are nutrition, supplements, and osteoarthritis, and she contributes to scientific journals, magazines, and tabloid publications.

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