Reducing Horseracing Fatalities: What Have We Accomplished and Where Do We Go from Here?

The occurrence of fatal injuries to horses in the racing industry is not new, but the trajectory of fatal injuries has changed in recent years. This change has primarily occurred in the United States, where the overall trend in fatality rates has been downward. This trend is evident in the data collected by the Jockey Club's Equine Injury Database, which has been collecting data on horse fatalities since 2007. In 2017, the fatality rate for horses in training was 0.12 per 1,000 starts, a significant decrease from the rate of 0.48 per 1,000 starts in 2007. This decline in fatalities is attributed to several factors, including changes in track surfaces, improvements in medical care, and increased emphasis on horse health and welfare.

Another factor that has contributed to the reduction in fatalities is the increased use of microchips. Microchips are small, implantable devices that are inserted under the skin of horses and are used to identify and track them. The International Equine microchip Registry (IEMR) was established in 2001 to provide a centralized database for microchip records. This database allows for the tracking of horses even if they change owners or locations.

The IEMR has been successful in identifying horses involved in fatal injuries, which has facilitated investigations into the causes of these injuries. This information has been used to identify areas for improvement in track surfaces, horse health, and training practices. For example, in 2017, the IEMR identified 119 horses involved in fatal injuries, and this information was used to improve safety measures at racetracks.

In addition to reducing fatalities, the use of microchips has also facilitated the trace-back of horses involved in injuries. This has helped identify the responsible parties and contributed to the enforcement of safety regulations.

In conclusion, the reduction in horseracing fatalities is a significant achievement, and the continued use of microchips and the IEMR will be essential in maintaining these gains. However, there is still work to be done to ensure the safety of horses and their handlers. Further research is needed to understand the factors that contribute to fatal injuries, and this information can be used to develop effective prevention strategies.

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The renal system is one of the most common factors associated with disease in horses. The urinary system consists of five main structures: the kidneys, ureters, bladder, urethra, and penis. Disease or injury to any of these structures can cause problems such as kidney failure, bladder stones, or male genital issues. The kidneys are responsible for filtering waste products from the blood and producing urine. Diseases that affect the kidneys can lead to serious complications and require prompt medical attention.

The urinary system is particularly sensitive to infections, as bacteria can easily enter through the urethra and cause infections in the bladder, ureters, or kidneys. These infections are known as urinary tract infections (UTIs) and can cause pain, difficulty urinating, and in severe cases, sepsis. Regular veterinary check-ups and proper care can help prevent these infections and maintain the health of the urinary system.

Traceability of Equine Microchips

Microchips are small devices that are implanted under the skin of horses to help identify them. They are often used in equine traceability systems to track ownership, identification, and movement of horses. The microchip number is unique to each horse and can be scanned to obtain important information such as the owner’s details and previous ownership history.

For years, equine owners have been implanting microchips in their horses for a variety of reasons, including ownership verification, legal requirements, and traceability. However, the effectiveness of these systems has been questioned due to concerns over the privacy and security of the information stored on the microchips. Some concerns include the potential for unauthorized access to health records or other sensitive information.

In recent years, there has been increasing interest in the potential for microchips to be used for new applications beyond traceability. For example, some researchers have suggested using microchips to track the movement of horses in real-time, allowing for improved monitoring of animal welfare and health status. Additionally, microchips could potentially be used for more advanced monitoring of animal behavior and performance.

These emerging applications highlight the potential for microchips to be used in new ways beyond traditional traceability. As research and development in this area continues, it is likely that we will see new and innovative uses for microchips in the future.
Many diseases can affect the central nervous system (CNS) of horses but few of the common disorders are caused by retroviral enzootic meningoencephalitis (EHM), equine degenerative myelopathy (EDM), and equine degenerative myelopathy (EDM). Regardless of the cause, diagnostic evaluation begins with a neurological examination, which provides anatomic localization of the problem within the central nervous system. Then the diagnostic investigation continues with more focused testing.

If EHM is strongly suspected, subcutaneous or intravenous administration of 5 mg of vitamin E, then a second dose of 100 mg three days later, will usually produce no further clinical signs in horses that were exposed to an outbreak of enzootic meningoencephalitis (EHM).

The diagnosis of EDM depends on the history of the horse and its clinical signs. Typically, the horse will exhibit evidence of neurologic dysfunction, including ataxia, abnormal gait, and poor tail tone. The diagnosis is confirmed by laboratory testing, which may include cerebrospinal fluid analysis, radiography, and magnetic resonance imaging (MRI) of the brain and spinal cord.

The treatment for EDM involves supportive care, including the administration of anti-inflammatory drugs and the use of pain management medications. Additionally, the horse may benefit from physical therapy, including muscle stretching and strengthening exercises.

Necropsy findings in affected horses typically include atrophy and degeneration of the spinal cord and brainstem, as well as inflammation of the spinal cord meninges. The diagnosis of EDM is most commonly made postmortem, and the treatment is typically supportive and aimed at alleviating the symptoms.
There are four causes of spinal ataxia in equine medicine. The most common cause is equine degenerative myelopathy (EDM). This condition has been recognized in Europe and the USA. Equine degenerative myelopathy is a condition that affects horses of all ages and can be found in a variety of breeds. The disease is characterized by a progressive deterioration of the spinal cord, leading to a loss of control over the hind legs. The diagnosis of equine degenerative myelopathy is typically made through a combination of physical examination, imaging studies, and laboratory tests.

The second common cause of spinal ataxia is eosinophilic meningoencephalitis (EME). This condition is caused by a寄生虫 called Neospora hughesi, which is transmitted to horses through exposure to opossums or other wild animals. The disease is characterized by a progressive deterioration of the brain, leading to a loss of control over the hind legs. The diagnosis of eosinophilic meningoencephalitis is typically made through a combination of physical examination, imaging studies, and laboratory tests.

The third common cause of spinal ataxia is equine protozoal myeloencephalitis (EPM). This condition is caused by a parasite called Sarcocystis neurona, which is transmitted to horses through exposure to wild animals or through ingestion of contaminated food or water. The disease is characterized by a progressive deterioration of the spinal cord, leading to a loss of control over the hind legs. The diagnosis of equine protozoal myeloencephalitis is typically made through a combination of physical examination, imaging studies, and laboratory tests.

The fourth common cause of spinal ataxia is myelitis. This condition is caused by a variety of infectious or non-infectious processes, such as viral or bacterial infections, trauma, or autoimmune disorders. The disease is characterized by a progressive deterioration of the spinal cord, leading to a loss of control over the hind legs. The diagnosis of myelitis is typically made through a combination of physical examination, imaging studies, and laboratory tests.
Reducing Horseracing Fatalities: What Have We Accomplished and Where Do We Go from Here?

The occurrence of fatal injuries to horses in racing is not new. The literature on the subject includes a myriad of accounts that date to the eighteenth century. The intended meaning of the epigram, “A horse is a horse, of course!” was written by Alphonse Karr during his tenure as editor of the French satirical magazine Le Charivari in the 1840s. The epigram was meant to satirize the practice of importing copy: influenza, contagious equine metritis, and equine protozoal myelitis. Unfortunately, this practice has continued worldwide despite the existence of both vaccines and therapeutic treatments. The EDQ can be reprinted in their entirety with proper acknowledgment.

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Reducing Horrifying Fatalities: What Have We Accomplished and Where Do We Go from Here?

The occurrence of fatal injuries to horses in the racing industry has decreased by 23% in North America since 2013. The topic of racing fatalities is constantly being studied, and the focus remains on minimizing harm to horses and people involved in the sport. The decline in fatalities is a result of multiple safety initiatives, including the adoption of an Association of Racing Commissions Safety and Integrity Alliance accreditation program and the implementation of technology to enhance the traceability of microchips. The role of microchips in equine identification and traceability has been highlighted, and the importance of maintaining a central database of microchip information is emphasized.

In conclusion, the reduction in racing fatalities is a consequence of a population’s awareness of being in a safer environment and the implementation of policies and regulations by the racing industry and safety organizations. Continued monitoring, education, and research are necessary to maintain this positive trend and ensure the safety of all involved in horse racing.