

## **Announcement Concerning Enforcement of HISA Rule 2276 (HORSESHOES) as It Pertains to Full Outer Rim Shoes and Toe Grabs**

July 29, 2022

Rule 2276 shall not be enforced for horses **racing on dirt surfaces** that are shod on the **hindlimbs** with traction devices in the form of **either a full outer rim shoe (up to 4 mm in height) or a toe grab (up to 4 mm in height)**. All other provisions of Rule 2276 shall remain in full force and effect. Enforcement of Rule 2276 will begin as previously announced on Monday, August 1, 2022.

### **RATIONALE**

In the last week, the Racetrack Safety Committee (“the Committee”) was made aware through communications from elected officials on Capitol Hill and from horsepersons of widespread concerns that the traction provided by full outer rim shoes and toe grabs for the hindlimbs is essential for the safety of horses in certain circumstances. These circumstances include breaking from the gate and track conditions that are impacted by ambient temperature or precipitation (including maintenance procedures such as watering the track). The concerns are that reduced traction will result in horses either slipping, falling, or otherwise being unable to firmly grip the track surface, with resulting injury to horses and their riders. In response to these concerns, the Committee invited a representative group of horsepersons including trainers, owners, a veterinarian, and a blacksmith to present their concerns to the Committee. Following this meeting, the Committee met for several hours to discuss the concerns expressed in light of the upcoming implementation of the horseshoe rule.

After full consideration of the matter, the Committee ***strongly recommended the use of full outer rim shoes for hindlimb traction*** because these shoes provide traction while enabling the hoof to land flatly on the track surface, whereas toe grabs accentuate stressors on bone and soft tissues, such as tendons and ligaments, which contributes to injury. Moreover, the only study investigating the association of hindlimb toe grabs with injury revealed that injuries to the suspensory apparatus were more likely to occur to horses shod with hindlimb toe grabs.<sup>1</sup> In contrast, there is no evidence indicating that toe grabs protect horses or riders. However, given the concerns expressed, the Committee recommended to HISA that Rule 2276 shall not be enforced for horses **racing on dirt surfaces** that are shod on the **hindlimbs** with traction devices in the form of either **a full outer rim shoe (up to 4 mm in height) or a toe grab (up to 4 mm in height)**. All other provisions of Rule 2276 shall remain in full force and effect. Enforcement of Rule 2276 will begin as previously announced on Monday, August 1, 2022.

## **EVIDENCE AND FINDINGS SUPPORTING THIS RECOMMENDATION**

Findings that support the rationale for strongly recommending use of full outer rim shoes rather than toe grabs are the epidemiological data<sup>1</sup>, consistency of the association of musculoskeletal injury with toe grabs on the hindlimbs with that of injury on the forelimbs<sup>1-4</sup>, findings of the association of a long-toe conformation with racing injury (toe grabs would extend the effective length of the toe)<sup>5</sup>, expert opinion<sup>6</sup>, and evidence from other racing jurisdictions where toe grabs are banned and where injury rates are lower (including Japan, where racing on a dirt surface is prominent).

###

## **REFERENCES**

1. Kane AJ, Stover SM, Gardner IA, Case JT, Johnson BJ, Read DH, Ardans AA. Horseshoe characteristics as possible risk factors for fatal musculoskeletal injury of Thoroughbred racehorses. *Am J Vet Res* 1996;57:1147-1152.
2. Hill AE, Stover SM, Gardner IA, Kane AJ, Whitcomb MB, Emerson AG. Risk factors for and outcomes of noncatastrophic suspensory injury in Thoroughbred racehorses. *J Am Vet Med Assoc* 200; 218:1136-1144.
3. Hernandez JA, Scollay MC, Hawkins DL, Corda JA, Krueger TM. Evaluation of horseshoe characteristics and high-speed exercise history as possible risk factors for catastrophic musculoskeletal injury in thoroughbred racehorses. *Am J Vet Res* 2005;66:1314-1320.
4. Anthenill LA, Stover SM, Garner IA, Hill AE. Risk Factors for proximal sesamoid bone fractures associated with exercise history and horseshoe characteristics in Thoroughbred racehorses. *Am J Vet Res* 2007;68:760-771.
5. Balch OK, Helman RG, Collier MA. Underrun heels and toe-grab length as possible risk factors for catastrophic musculoskeletal injuries in Oklahoma racehorses. *Proc AAEP* 2001;47:334-337.
6. Casner B. 2010 Jockey Club Welfare & Safety Committee Presentation
7. Hitchens PL, Morrice-West AV, Stevenson MA, Whitton RC. Meta-analysis of risk factors for racehorse catastrophic musculoskeletal injury in flat racing. *Vet J* 2019;25:39-40.