



State of Indiana Indiana Horse Racing Commission

Eric Holcomb, Governor

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IHRC Advisory Notice to Horsemen and IHRC Licensed Veterinarians

March 11, 2022

Thyroxine Restricted

Please be aware of the thyroxine restriction rule that passed at the IHRC meeting on March 1, 2022. This rule applies to both harness and flat racing.

This rule is **effective immediately**. Please note that it is now prohibited to have possession of thyroxine, any thyroid analog, or thyroid supplement without meeting the conditions set forth in this rule (see rule in its entirety below). If you have a horse (or horses) on thyroxine currently, please discuss options with your veterinarian regarding a weaning-off period and proper testing protocols as outlined within the rule.

Why add this restriction?

The administration of thyroxine has been found to be given in racehorses unrelated to the horses' thyroid health. The practice of prescribing thyroxine to large numbers of racehorses has drawn public scrutiny and has resulted in inquiries about the legitimacy of its use, as the occurrence of primary hypothyroidism in horses is rare, especially in young, fit racehorses.

In 2020, a joint advisory was provided by the AAEP (American Association of Equine Practitioners) and the RMTC on the overuse of thyroxine in racehorses—with the position that *“prescribing and dispensing of levothyroxine on a herd health basis with normal thyroid function is not medically justifiable.”* A recent 2021 research paper by Dr. Janice Kritechevsky (Purdue University College of Veterinary Medicine) has established an association between excess administration of thyroxine with cardiac arrhythmias, which can negatively affect performance and may result in sudden death.

Equine Medical Directors from (NY, MD, MN) have reported a precipitous decline in sudden deaths since their thyroxine restrictions were put in place. The use of thyroxine needs to be restricted to only horses that are officially diagnosed with primary hypothyroidism. A TRH (Thyrotropin-releasing hormone) response test is needed for official diagnosis of hypothyroidism—more specific than T3 and T4 testing alone.

**It is important to note that several factors in a racehorse can lower circulating thyroid hormone, despite a normal functioning thyroid gland. These include a high protein diet, exercise, and certain medications (Phenylbutazone, Corticosteroids, Sulfa antibiotics).*

71 IAC 8-1-2.1 and 71 IAC 8.5-1-2.5 Thyroxine restricted

Authority: IC 4-31-3-9

Affected: IC 4-31-12

Sec. 2.1 and 2.5. (a) Thyroid supplementation is prohibited. Trainers shall not have thyroxine, any other thyroid hormone, thyroid hormone analog, or thyroid supplements on the premise of a facility under the jurisdiction of the commission, nor shall they administer such supplements unless **both** of the following conditions have been met:



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(1) A thyrotropin-releasing hormone (TRH) response test has been performed by a commission-licensed veterinarian and supports a diagnosis of hypothyroidism in the horse.

(2) A commission-licensed veterinarian has submitted the TRH response test result to the equine medical director, and the equine medical director approves the thyroxine prescription based on their independent determination that the test result confirms the hypothyroidism diagnosis.

A T3 or T4 test without stimulation of the thyroid is insufficient to diagnose hypothyroidism.

(b) If approved by the equine medical director, the horse shall be treated with only Federal Drug Administration approved medications for hypothyroidism prescribed by a veterinarian. Possession of any thyroid supplements that are not pursuant to a veterinary prescription is prohibited.

(c) The prescription for thyroxine or any other thyroid hormone or thyroid hormone analog administration shall not exceed ninety (90) calendar days, after which the prescription must be reauthorized by the equine medical director under either of the following circumstances:

(1) The equine medical director has determined that the horse has benefited from the previous thyroxine, thyroid hormone, or thyroid hormone analog treatment after reviewing the horse's medical records and consulting with the attending veterinarian.

(2) The hypothyroid diagnosis has been reconfirmed under the requirements described in subsection (a)(1) and (a)(2).

(d) A horse administered thyroxine or any other thyroid hormone or thyroid hormone analog, pursuant to this section, is ineligible to start in a race for thirty (30) calendar days after the last administration.

(e) If a horse is currently being administered a thyroid supplement, administration of the supplement shall be discontinued, and a TRH test conducted after a thirty (30) day washout period before the horse is eligible to race.

(f) Possession of thyroxine or any other thyroid hormone or thyroid hormone analog on the premise of a facility under the jurisdiction of the commission is prohibited without a prescription obtained in compliance with this section.

(g) In the absence of the equine medical director, or, if there is no appointed equine medical director, the commission or executive director may designate an alternate regulatory veterinary official for this section.

For questions, please contact Dr. Kerry Peterson, IHRC Equine Medical Director. Kepeterson@hrc.in.gov
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