

Medication Rules and the Well-being of the Horse

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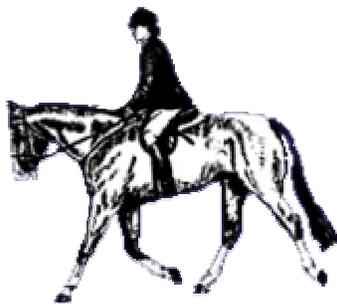
Keypoints

- Fédération Equestre Internationale (FEI) has a zero tolerance rule for drugs in competition.
- Equine Canada (EC) has a similar intolerance rule for drugs in competition.
- USA Equestrian has much more liberal rules regarding use of non-steroidal anti-inflammatory drugs (NSAIDs) leading up to competition.
- Local humane, or food and drug, regulations may also determine the legality of drug use during competition.

Fédération Equestre Internationale

The different governing bodies of equestrian sport retain the right to set their own drug rules and penalties for violations. Since 1992, FEI has maintained a zero tolerance policy toward nearly all drugs, including NSAIDs, in horses in competition. The inherent philosophy is that there should be a level playing field for all horse and rider pairs, and that to allow any performance-altering drugs to be present on the day of competition might allow one competitor to have an unfair advantage over his/her counterparts by having better medication, not necessarily a better horse.

There are a few substances for which FEI has set maximum allowable limits, since they can be present in horses to a slight extent due to natural exposure through feedstuffs or other environmental contamination.¹⁹ Those substances for which maximum thresholds have been established under FEI rules include: total carbon dioxide (37 mEq/L plasma), dimethyl sulfoxide (DMSO: 15 µg/ml in urine or 1 µg/ml in plasma), hydrocortisone (1 µg/ml in urine), salicylic acid (750 µg/ml in urine or 6.5 µg/ml in plasma), theobromine (2 µg/ml in urine), total arsenic (0.3 µg/ml in urine), and the hormones nandrolone and testosterone.¹⁹ FEI rules allow the use during competition of most antibiotics, anthelmintics, vitamins, fluids and electrolytes, ranitidine (but not cimetidine), and omeprazole.¹⁹



During or just prior to a competition, a horse may require treatment for any of dozens of different medical or surgical problems. In these various situations, the FEI General Regulations state:

“The Veterinary Commission/Delegate must give written approval on the appropriate form before any veterinary treatment or medication with a Prohibited Substance is administered to a horse during the entire course of an event. If during this period it is urgently necessary to treat a horse with a Prohibited Substance, the Veterinary Commission/Delegate must be informed at once and the circumstances reported to the President of the Ground Jury. Any treatment so administered must be indicated to the Veterinary Commission/Delegate by written certification. The Ground Jury must, on recommendation of the Veterinary Commission/Delegate, decide whether the horse may take part or continue in the event, having regard to the welfare of the horse and to the possibility that the competitor may obtain an unfair advantage.”²

Three examples of entirely different clinical circumstances follow to illustrate common but complex interpretations of FEI medication rules. (1) A horse sustains an eye injury or corneal ulcer which requires local medication but which may not require any medication which might unlevel the playing field. Systemic flunixin meglumine should be avoided in this horse but might be used in a similar injury out of competition. (2) A horse sustains a small laceration which will not prohibit further competition but which requires suturing. Judicious use of a local anesthetic might be approved by the Veterinary Commission but sedation might not be approved prior to suturing. The anesthetic will be in a small amount and should have no lasting consequence on the future of the competition. However, tranquilization might affect the competition since it might make a dressage horse, for instance, quieter for a test the following day, obviously depending upon the dose and drug used. Its legitimate use to suture the laceration might also make it more difficult to detect a second dose given illicitly the following day. Finally, (3) a horse develops colic signs severe enough to require systemic use of an NSAID. This horse should be treated and removed from competition since it (a) has a medical problem severe enough to preclude it from further competition for medical reasons alone, and (b) has received one or more doses of an NSAID which might affect the outcome of the competition since the NSAID will also have musculoskeletal effects which might benefit the horse and create an unlevel playing field.

The most commonly detected foreign substances in the FEI Medication Control Programme are analgesics (primarily NSAIDs including salicylic acid), comprising 58% of the positive samples in 1999 (AK Allen, personal communication, 2001). Corticosteroids, caffeine, theobromine, isoxsuprine, and tranquilizers are less commonly encountered. From 1990-1998, 79% of the positive drug tests in FEI competitions were from show jumpers, and only 9% and 8% were from 3DE and dressage horses, respectively.



Equine Canada

Equine Canada is the national governing body for all non-racing equestrian competitions in Canada. EC federation rules are similar to those of the FEI in that significant levels of drugs are not permitted on competition days. Phenybutazone and flunixin meglumine are termed “restricted substances” in that maximum allowable limits have been described for them during competition.

USA Equestrian

USA Equestrian rules are just as restrictive as those of the FEI and EC for most substances such as stimulants, tranquilizers, and other mood-altering drugs.³ However, USAEq rules are much more liberal than FEI and EC with respect to NSAIDs.³ The philosophy simply put is that therapeutic medications allow some horses to continue to compete at an effective level over the course of a season or over the course of a long horse show. The rule specifically states, “The full use of modern therapeutic measures for the improvement and protection of the health of the horse and/or pony is permitted...”³ USA Equestrian rules prohibit the use of any drugs within 24 hours of competition, but they allow for fairly liberal use of five different NSAIDs up to 24 hours prior to competition. Furthermore, two different NSAIDs may be detected legally in horses in competition as long as: (1) phenylbutazone and flunixin meglumine are not detected in the same horse on the same test, and (2) each NSAID detected is below a maximum threshold established by USA Equestrian. Those maximum thresholds are set for plasma concentrations of phenylbutazone (15 µg/ml), flunixin (1 µg/ml), ketoprofen (0.25 µg/ml), meclofenamic acid (2.5 µg/ml), and naproxen (40 µg/ml).³ Tranquilizers, cocaine, and NSAIDs above the allowable limits are the most commonly detected foreign substances under USAEq medication testing (AK Allen, personal communication, 2001).

Finally, there are innumerable unsanctioned or unrecognized horse shows which may not be subject to any drug testing by a governing body unless local law allows for testing. California law, for instance, allows state veterinarians from the California Drug and Food Administration to drug test any horse show in California, sanctioned or otherwise. Most European Union countries now have commonly restricted use of NSAIDs in horses in general, although veterinarians in the United Kingdom have fought what they see as a restriction on their ability to practice freely to promote optimal health and pain relief in their equine patients.

Depending upon the governing body, the rider may also be subject to drug testing during a competition. Any competitor identified by the national federation as an international level competitor is also subject to random, unannounced, out-of-competition drug testing by the national federation at any time.

References

Available upon request.