

Ask the Vet

By Rick Arthur, DVM

How do anabolic steroids work in horses, and what are the latest rules regarding their use in California?

At the simplest level, anabolic steroids are a class of drugs which mimic the male hormone testosterone. Anabolic steroids have a long history of abuse in human athletic and sporting events. Internationally, anabolic steroids have been regulated in horse racing for decades; from the international perspective anabolic steroids are simply performance enhancing drugs and are banned. But anabolic steroids have been pervasive in American racing.

National surveys showed over 60% of the horses had some anabolic steroids in post-race tests. In fact, the use of multiple anabolic steroids was common; one horse was found with five different anabolic steroids in his post-race urine. A survey in California earlier this year also showed a similar 60% anabolic steroid use rate.

A national movement to regulate anabolic steroids in American horse racing began at the Racing Medication and Testing Consortium (RMTTC) several years ago. Recent scandals in human professional sports relating to anabolic steroids highlighted the issue and brought horse racing under the spotlight of Congress. To the public, anabolic steroids are performance enhancing drugs, and even racing fans were surprised to discover anabolic steroids weren't already banned.

The RMTTC modified the international anabolic steroid rules for US racing, which were subsequently adopted by the ARCI into their model rule program. The RMTTC recommended regulation of anabolic steroids rather than an outright prohibition. While controversial, this approach recognized anabolic steroids have legitimate veterinary medical uses while preventing their use in racing. Anabolic steroids are controlled substances and as such are subject to state and federal laws and regulations which supersede CHRB authority.

Three anabolic steroids present regulatory difficulties because they are endogenous; that is, they are naturally occurring in the horse. Testosterone is present in all horses including geldings, fillies and mares. Boldenone and nandrolone are present in non-gelded males. CHRB rules for these three anabolic steroids mimic international rules. All three are also available as pharmaceuticals. Boldenone is Equipose; nandrolone is Durabolin; and testosterone is available as generic testosterone. A major exception to international anabolic steroid rules in the US and California is a threshold for stanozolol. Stanozolol is Winstrol. Stanozolol is a synthetic, pharmaceutical anabolic steroid. Stanozolol was the cause of Ben Johnson's disqualification at the 1988 Seoul Olympics 20 years ago.

There are no official withdrawal time recommendations for testosterone, nandrolone, boldenone and stanozolol. This is no different than any other drug, therapeutic or oth-

erwise. However, horsemen should look at a minimum of 30 days for stanozolol and aqueous testosterone and 45 days for nandrolone, boldenone and non-aqueous testosterone. The CHRB is currently able to offer pre-entry anabolic steroid screening under specific conditions. The program will end soon after the Breeder's Cup.

The CHRB began discussing anabolic steroid regulation early in 2007. An outline of the rather complicated regulatory sequence was laid out at a public hearing last fall and has been closely followed. For such a monumental undertaking with so many steps and pitfalls, the process has gone quite well. The CHRB had anticipated a number of potential problems and responded quickly when appropriate. In the near future, anabolic steroids will be primarily regulated by testing blood rather than urine. There are a number of technical advantages to using blood. Using blood will also give us the ability to test a large number of sale horses for anabolic steroids, which would not have been possible with urine testing.

Australia had a similar history of unregulated anabolic steroid use in horse racing and subsequently banned the drugs.

During a discussion of anabolic steroids at the Racing Forum at the AAEP, Dr. Treve Williams stood up and explained he had fought the Australian anabolic steroid ban tooth and nail. He was sure racing couldn't survive without anabolic steroids; but when anabolic steroids were banned in Australia, racing and the horses never missed a step.

At the same AAEP meeting, trainer/veterinarian John Kimmel – a practicing racetrack veterinarian for several years before he became a trainer – stood up in front of 100 race track veterinarians and asked, "When are we going to ban anabolic steroids?" He went on to say anabolic steroids allow a trainer to train a horse harder than would otherwise be possible naturally and, for that reason, should be eliminated. Keep in mind intensity of exercise has been related to catastrophic musculo-skeletal race horse injuries.

In spite of all our problems, horse racing has a good story to tell in drug testing. We've tested our athletes longer and for more drugs than any other sport with one glaring exception. The exception is anabolic steroids and that has changed.

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