

California Takes its Drug Testing Seriously

By Tracy Gantz

Just how small is 25 picograms? If you wrote out the number, you'd have to put 10 zeros between the decimal point and the number 25. That's how infinitesimal an amount the California Horse Racing Board can test for in racehorses, which is why California's drug-testing program is the envy of the nation.

"California takes drug testing more seriously than anyplace in the country," said Jerry Brown, creator of the Thoro-Graph sheets used by both bettors and horsemen. "California now has the cleanest racing in the country."

Dr. Rick Arthur, California's equine medical director, notes that California's drug-testing requirements in many ways are stricter than those for any human athletic endeavor. Most Little Leaguers and Olympic competitors couldn't pass the state's post-race testing. Yet day in and day out, Thoroughbred racehorses successfully pass this rigorous testing procedure.

"We're almost at the point where if you had a cup of coffee at Starbucks three days before the race, you could test positive for caffeine at a level that would be a violation in horse racing," said Arthur. "I can't get a cup of coffee even from Starbucks to keep me awake for three days. In the Olympics, the threshold level for caffeine is 12,000 nanograms (parts per billion). In the '90s California horse racing called a positive at two nanograms.

"Most people in the car next to you driving down the road could not pass a post-race drug test. Most people sitting next to you in church could not pass a post-race drug test."

The technology has improved to the extent that California's Kenneth L. Maddy Equine Analytical Laboratory, which tests all of California's samples, can find up to 800 drugs. Arthur says that the lab is adding new substances it can test for all the time.

Why do the tests call positives at levels that are so far below what could possibly influence a horse's performance?

"We err on the side of caution," explained Arthur. "If anything, we over-regulate horse racing for two reasons—1) to protect the integrity of the competition and 2) to protect the welfare of the horse and jockey."

Brown said that California made great strides a couple of years ago when the state began testing for alkalizing agents (in racing commonly called milkshakes) and changed its testing for clenbuterol from a urine test to a more accurate blood test.

"That has now made racing there the most drug-free and formful," said Brown. "I don't mean formful in the sense of favorites winning, but you don't have to handicap the

trainers as much. You can handicap the horses. What you don't see are the extreme form reversals when horses enter or leave certain trainers' barns that you do in the rest of the country. You have no idea how significant that is to bettors in deciding where to bet."

California's landmark decision to test for milkshakes—the process of administering sodium bicarbonate (TCO₂) in the hopes that the horse will run faster because his muscles don't build up as much lactic acid—virtually eliminated the problem.

"Our last violation was in August of 2008," said Arthur. "In the last two years in California, we've had only two violations out of over 50,000 samples. That's a pretty amazing success rate."

Clenbuterol is a medication that horsemen use to help horses breathe better. While veterinarians can legally administer clenbuterol to horses in training, it must be withdrawn 72 hours prior to racing. Only that trace amount of 25 picograms per milliliter (parts per trillion) of blood is allowed in a post-race test, an amount deemed far too small to have any effect on a horse's racing performance.

Positives are called both for illegal substances with no legitimate use in the horse and for overages of otherwise legal therapeutic medications. By far the most positives occur in the latter instance, usually when a horse received a medication too close to race time for the drug to clear the system.

"Most drug violations are mistakes," Arthur said, "inadvertent administrations of legitimate medications that were prescribed to the horse with no intent to influence the outcome of a race. The groom, assistant trainer, or trainer may have forgotten that the horse was entered, or the medication was accidentally given to the wrong horse.

"Drugs that one would even suspect are being administered to try to beat the system are few and far between. They are very rare."

Contamination can also cause positive tests. Several years ago, horses in the care of several prominent trainers tested positive for scopolamine. The culprit turned out to be jimsonweed, a poisonous plant containing scopolamine, which had contaminated the baled straw bought for the horses' stall bedding.

Human drugs of abuse are another source of violations. If a backstretch worker has a drug problem, traces of the drug can get into a horse's system just through the employee handling the horse.

California officials don't only rely on post-race drug tests to keep horse racing clean. The CHRB now conducts out-of-competition testing, where a horse is tested after training, but well before it is scheduled to race. The reason for that is that some substances, primarily blood-doping agents, can cause an effect over long periods of time but wouldn't be detectable in the standard post-race sample. Human sports testing has the same problem. The California program is similar to out-of-competition testing in the Olympics.

Arthur said that the CHRB has never had a positive through this testing program. The out-of-competition testing is acting as a deterrent.

“Trainers don’t want positives,” Arthur said. “You get the purse taken away, you get a fine, you get a suspension, your reputation is tarnished. Nothing good comes out of a positive for anybody. Most people try to play by the rules.”

California’s stringent drug-testing policies reassure trainers that they have a level playing field.

Though sometimes the rules can seem complicated, Arthur tries to be as available as possible to answer questions. A typical conversation might be, “My horse was mistakenly treated five days before the race. Will I be okay?” Or the racing office may write a last-minute race that suits a horse who has been receiving a medication, and the trainer asks Arthur if the medication will have time to clear. Perhaps the horse needed to be tranquilized for special shoes such as glue-ons, and the trainer wants to be sure the tranquilizer was given far enough in advance of a race to be out of the horse’s system

California has also led the way in testing for anabolic steroids. In the summer of 2008, a ban on most major anabolic steroids was phased in, with the CHRB giving trainers notice of when positives would begin to be called.

“Once anabolic steroids were re-classified as Class 3 drugs in September of 2008, we have had no positives,” Arthur said. “The program has gone much better than expected.”

Another tribute to California’s strict testing has come as the national Racing and Medication Testing Consortium adopts standards first implemented in California.

Despite such rigorous testing, rumors persist of illegal cocktails of nefarious drugs for purchase that will make a horse run faster.

“The RMTTC has looked at some of these,” Arthur said. “We once purchased a special cocktail that cost \$2,000 an ounce that ended up to be water and food coloring. A lot of this stuff is pure nonsense, but we take everything we hear seriously.

“Dr. Scott Stanley is the chief chemist at the Maddy Lab. We are continually looking at our program. We want to know if there are any gaps in our drug coverage before anyone else does. Both Dr. Stanley and I are well connected with drug testing labs in the U.S. and around the world. We have a very good idea what we need to be watching for.

“And we freeze samples in California. We have nearly two years of samples in the freezer. If someone takes a shot at our program, they have a long time to worry about their test clearing.”

It’s easier and cheaper just to play by the rules.