



Medication and Drug Testing Timeline

August 1998

Formation of the NTRA Racing Integrity and Drug Testing Task Force announced at The Jockey Club Roundtable Conference. Task Force funding of more than \$800,000 is contributed by industry stakeholders.

May 1999

The Scientific Advisory Committee comprised of individuals outside the racing industry with extensive analytical chemistry backgrounds complete their report, "Equine Drug Testing: An Assessment of Current Practices and Recommendations for Improvement." This report will guide future Task Force activities.

October 1999

Drug Testing Task Force joins with Racing Commissioners International (RCI) to fund research project by Dr. Ken McKeever at Rutgers University aimed at developing a detection method for human recombinant erythropoietin (EPO). Grant is \$25,154.

July 2000

Task Force begins "Supertest" Project. Cleared split samples are put through a rigorous battery of tests by laboratories at Cornell University and UC-Davis to determine drugs in use and improve testing standards. 28 of the 32 United States racing jurisdictions participate in the project.

October 2000

Extensive surveys are sent to all racing jurisdictions to create a database of information relating to post-race sample analysis.

August 2001

Initial Supertest and survey findings, along with five key recommendations to improve post-race testing are detailed at The Jockey Club Roundtable. There were 22 confirmations of RCI Class 1, 2 or 3 drugs in the 1,272 samples tested (1.7%).

December 2001

The American Association of Equine Practitioners hosts the Equine Medication Summit in Tucson at the RTIP Annual Symposium on Racing. This closed-door, professionally facilitated meeting brings together individuals representing 21 industry stakeholder groups to discuss the most basic elements of a national uniform medication policy.

December 2001

RCI approves the concept of "Prohibited Practices."

January 2002

The consensus document resulting from the Equine Medication Summit is released.

April 2002

RCI formally adopts specific language prohibiting the possession and/or use of erythropoietin and darbepoietin. This prohibited practices language has since been adopted by KY, CA, AR, DE, IN, LA, NJ, OH, PA, MD, NY, TX and Ontario, and is now part of the RCI/NAPRA joint model rules.

- May 2002** Second meeting of the AAEP Medication Summit stakeholder groups to continue work on model medication policy. Meetings are now being facilitated by the NTRA Drug Testing Task Force.
- May 2002** Final report of the Supertest project is released. A total of 22 confirmations of RCI Class 1, 2 or 3 drugs in 1,596 samples are found (1.4%).
- May 2002** New York Racing Association prohibits the possession and use of experimental drugs awaiting FDA approval and blood doping agents. All veterinarians practicing medicine at NYRA facilities are required to attest to their acceptance of this rule, with punishment for infractions potentially to include loss of NYRA credentials and the privilege to practice veterinary medicine on association grounds.
- July 2002** Third meeting of the AAEP Medication Group, now with the official title of the Racing Medication and Testing Consortium (RMTC). The RMTC continued the development of the model policy document and established research priorities. The development of detection methods for blood doping agents is deemed the number one research priority.
- July 2002** An ELISA test to detect horse antibodies to recombinant human erythropoietin is developed by Cornell University and Testing Components Corp.
- October 2002** The RMTC holds a two-day meeting in Lexington, Kentucky. Significant progress is made on the model policy document. Bylaws and Articles of Incorporation are adopted.
- February 2003** RMTC board meeting in Atlanta, Georgia. Officers are elected and bridge financing commitments of \$800,000, contributed voluntarily by those stakeholder groups represented on the board, are announced. A 2003 budget is approved dedicating \$500,000 towards research leading to the development of new testing methodologies and scientifically defensible withdrawal guidelines and threshold levels.
- April 2003** The RMTC receives 19 scientific research grant proposals requesting close to \$2 million aggregate in its inaugural call for proposals.
- July 2003** RMTC board meeting in Dallas, Texas. Substantial portions of the model medication policy document are completed pending final drafting changes. Various strategies are discussed to involve individual state regulators in the process.
- September 2003** The Research Advisory Committee of the RMTC meets in Dallas, Texas to review, score and rank the 19 submitted research proposals.
- September 2003** The RMTC Board meets in Los Angeles, California. The Board unanimously approves the drafting changes of the policy document and approves funding for scientific research projects involving procaine, erythropoietin, clenbuterol and

morphine. The board also approved hosting a regulatory workshop to be held in December 2003 in order to brief state regulators on the policy document.

November 2003

Ontario and New York begin testing samples for antibodies to EPO. Horses found with antibodies will be placed on the Vet's List and will be ineligible to run until no antibodies are present.

December 2003

The RMTC hosts a regulatory workshop in Tucson, Arizona. 25 jurisdictions are represented. The model medication policy document is discussed in detail and the input of regulators is collected to be communicated to the RMTC board.

January 2004

The RMTC Board of Directors meets in Ft. Lauderdale, Florida. The board approved changes to the model medication policy document based on the feedback received from regulators at the regulatory workshop. The board also approved funding an additional study on EPO and approved the formation of a sub-committee to study issues related to security.

February 2004

The Joint Model Rules Committee of RCI and NAPRA meets in Tucson, Arizona to convert the RMTC model medication policy document into model rules language.

March 2004

Model Rules redrafting is completed and the new language is sent to all regulatory agencies prior to the RCI/NAPRA Joint Convention.

April 2004

Redrafted Model Rules are approved by boards of RCI and NAPRA unanimously.

July 2004

California begins testing for milkshakes at Del Mar in order to establish usage patterns in Thoroughbreds.

August 2004

Kansas becomes the first state to adopt the Model Rules in entirety.

September 2004

RMTC board appoints a scientific panel to review all research related to milkshaking and testing in order to make recommendations for model language and best practices for control.

December 2004

California becomes the first major racing jurisdiction to adopt the Model Rules.

December 2005

RMTC's recommended guidelines for penalties were approved by the RCI and NAPRA boards.

February 2006

RMTC board votes to fund the TRPB-coordinated Big Event Team, which includes teams of TRPB, Standardbred Investigative Services (SIS) and racing commission investigators that coordinate backstretch security for Grade I races at various tracks across the country. The team provides consultation on best security practices, assists with coordination, training new security guards and providing other investigative services. The board also approves a plan to expedite the necessary research to establish guidelines for withdrawal times for therapeutic medications commonly used by race track veterinarians. 30 pari-mutuel horse

racing states have adopted or are in the process of adopting the RMTC Model Medication Policy.

May 2006

The Big Event Team sends seven racing investigators to the Preakness Stakes. Investigators represented the TRPB, Maryland Racing Commission and the Kentucky Horse Racing Authority.

June 2006

The RMTC board finalizes a two-part plan to establish model policies for withdrawal times for therapeutic medications. In part one, RMTC will compile existing withdrawal guidelines for 50 therapeutic medications identified by AAEP. In part two, RMTC will prepare a request for proposals on therapeutic medications that need additional research to better define their withdrawal times. The RMTC Model Rules are now adopted or in the process of being adopted in 30 of 38 pari-mutuel horse racing states. A motion is approved that the RMTC will work with the RCI Model Rules Committee to develop a model rule on out-of-competition drug testing.

November 2006

The RMTC board approves a proposed draft of an out-of-competition testing rule that will be forwarded to the RCI Model Rules Committee. Work is underway on a pilot project on the medications acepromazine, lidocaine, mepivacaine, pyrilamine, glycopyrrolate, butorphanol, methocarbamol and detomidine in order to develop necessary protocols for research into developing scientific withdrawal times.

February 2007

The RMTC board passes a model rule on anabolic steroids, which is forwarded on to RCI for their approval. RMTC approves funding for special investigations and pledges to continue to evaluate the issue of environmental contaminants.

June 2007

The RMTC launches a database on www.rmtcnet.com that enables licensed racing participants to look up guidelines on withdrawal times for approximately 75 therapeutic medications identified by the RMTC Veterinary Advisory Committee. Guidelines are searchable by jurisdiction or medication.

January 2008

The RMTC board endorses a December 31, 2008 deadline for nationwide adoption of a model rule regulating the use of four androgenic anabolic steroids (stanozolol, boldenone, nandrolone and testosterone) and banning the use of any other anabolic steroid. RMTC funds an administration study at the University of Florida Pharmacokinetics Laboratory on these anabolic steroids in order to provide plasma threshold levels and withdrawal times for their use. RMTC and RCI also issue recommendations for penalties.

March 2008

The RMTC board makes specific policy recommendations for racing commissions on the implementation of androgenic anabolic steroids.

April 2008

RMTC sponsors a three-day equine racing chemist workshop to foster uniformity in drug testing of the androgenic anabolic steroids at the University of California-Davis. The workshop featuring renowned equine drug testing experts is attended by analysts representing seven international laboratories and 16 of the 18 official U.S. laboratories. Participants gain practical knowledge in the analysis of AAS

and are given copies of standard operating procedures as well as the latest scientific information for detecting and identifying AAS in horses.

September 2008

The RMTC board announces a five-part drug testing initiative aimed at developing laboratory and drug testing standards comparable to the World Anti-Doping Agency (WADA) model, which is named the RMTC Drug Testing Initiatives (DTI) Task Force. The initiative includes the following action points: development of laboratory standards and accreditation criteria to ISO standards; expansion of current quality assurance and laboratory proficiency programs; development of a business plan for the U.S. drug testing infrastructure including industry-sponsored research and reference equine drug testing laboratories; establishment of a post-doctoral and grad student recruitment program for drug testing research and laboratory staff development; and review of current sample collection strategies including long-term storage of frozen samples. On the anabolic steroids front, 16 pari-mutuel racing states have now adopted the RMTC-recommended model rule on anabolic states with 16 more states in the adoption process, representing more than 90% of the pari-mutuel handle. The RMTC commits more than \$300,000 to support comprehensive research over the next two years on corticosteroids, which will allow the development of model rules, best practices and proper procedures related to the administration of these medications.

February 2009

RMTC announces that its anabolic steroid administration studies are complete and data will be analyzed. The model rule on AAS has now been adopted or is in the process of being adopted in 33 of 36 pari-mutuel racing states currently conducting horse racing. RMTC continues research on threshold levels and withdrawal times for several therapeutic medications. The board commits up to \$62,000 in 2009 to fund the quality assurance programs provided by the Testing Integrity Program (TIP).

April 2009

In an effort to increase harmonization of the international regulations of prohibited substances in racing, RMTC officials meet with representatives from the IFHA Advisory Council on Prohibited Substances. Topics of discussion are the development of common definitions of prohibited substances and therapeutic medications, implementation of international screening limits, and strategies to achieve international harmonization of drug testing rules and regulations. RMTC officials receive constructive recommendations regarding the development and certification of accredited laboratories. Participants agree to stay in close contact and cooperate on a number of drug detection studies underway for therapeutic medications in the U.S., Europe, Africa and Australia to maximize scarce resources.

July 2009

The RMTC board approves new national laboratory standards for testing, the implementation of a laboratory accreditation program and a new Equine Quality Assurance Program (EQAP). The EQAP will provide an independent, third-party examination of equine drug testing laboratories - new concept for the horse racing industry. In addition, the board approves the three-year funding of a graduate/post-doctoral research fellowship and a frozen samples retrospective testing program funded by The Jockey Club.

September 2009

The RMTC forms a committee to oversee the implementation of its DTI Task Force recommendations on quality assurance and laboratory accreditation programs. Dr. Larry Soma presents an extensive report on NSAID administration, concluding that residual effects of phenylbutazone remain at 24 hours. The RMTC Scientific Advisory Committee will assess the data and then make a final recommendation regarding NSAID concentrations in the blood at the time of pre-race examinations. The RMTC also forms a Communications Subcommittee to make recommendations on a media campaign to better explain the significant efforts of the drug testing laboratories in detecting prohibited drugs, and differentiate those findings from the more prevalent positive laboratory reports for overages of approved therapeutic medication that are primarily mistakes in administration times and dosages.

April 2010

In response to concerns expressed by the regulatory veterinary community regarding the effects of NSAID administration on pre-race examinations, RMTC revises its recommended threshold for phenylbutazone from 5 micrograms per milliliter to 2 micrograms per milliliter of plasma or serum. The RMTC also debuts a Recent Rulings Database on *rmtcnet.com*, which is the only database in existence that allows viewers to see not only the infractions but also a description of the possible uses and effects of the drug in the horse. This will begin the process of better clarifying the difference between medication management mistakes and more serious drug violations. As the organization awaits the initiation of the EQAP, the Testing Integrity Program and the Interstate Drug Testing Alliance continue their single- and double-masked sample programs with RMTC subsidization. The Jockey Club-funded frozen sample and retrospective testing program for growth hormone has tested 2,000 samples that have been frozen over the past two years under the CHRB's testing program.

May 2010

RMTC approves the funding of Dr. Heather DiMaio Knych and Dr. Mary Robinson for its post-doctoral research fellowship program, fulfilling one of the main goals of its DTI Task Force. The board commits \$450,000 over three years toward the fellowship program with the University of California-Davis and the University of Pennsylvania matching the grant. Dr. DiMaio Knych will research the pharmacokinetics, clinical effects and biomarkers of corticosteroids in horses, while Dr. Robinson will research the detection of extracorporeal shock wave therapy usage in the racehorse using biomarkers. This commitment begins the process of developing the next generation of scientific experts in the equine industry who will be working with the industry on emerging medication issues.

October 2010

Based on RMTC funded and developed administration studies, the board of directors recommends scientifically identified withdrawal guidelines and plasma thresholds for the short-acting bronchodilator glycopyrrolate, the muscle relaxant methocarbamol and four anabolic steroids. A recommendation for the NSAID firocoxib is also approved (pending resolution of one outstanding issue) along with a plasma threshold for DMSO that would only enable its use only as a topical leg paint. RMTC continues to fund research for several potential doping agents including AICAR.

March 2011

RMTC reports that before the start of its DTI Task Force, 5 of 18 laboratories were ISO 17025 accredited. As a result of the addition of the Ohio Department of Agriculture, 7 of 19 laboratories are now ISO 17025 accredited, and by the end of 2011, RMTC expects 12 of 19 laboratories to be accredited. In addition, signed letters of intent to go through the RMTC accreditation program have been returned from seven laboratories.

Summary of 2010 RMTC DTI Task Force Accomplishments

- Subsidization of the Testing Integrity Program and Interstate Drug Testing Alliance, which provide quality assurance samples to racing laboratories
- Finalization of a comprehensive Laboratory Code of Standards
- Receipt of letters of intent from six key racing laboratories to become fully accredited to the RMTC Standards by the end of 2011
- 12 of 19 laboratories expected to be ISO 17025 accredited by the end of 2011
- Funding of two post-doctoral candidates for three-year research periods in an effort to develop the next generation of racing laboratory directors

Summary of Major Organizational Accomplishments

- Adoption of model rules for uniform policy on therapeutic medications started or complete in 31 of 34 states currently conducting pari-mutuel horse racing
- Adoption of model rules for uniform policy on the regulation of anabolic steroids in 32 of 34 states currently conducting pari-mutuel horse racing, which represent 99.98% of total Thoroughbred handle
- Approval of model rules for more severe uniform penalties for the use of prohibited drugs and practices by the RCI board of directors
- Development of a model rule on out-of-competition drug testing approved by the RCI board of directors
- Funding of more than \$1.5 million in drug testing research
- Launch of a five-part drug testing initiative to develop a comprehensive drug testing plan for U.S. horse racing testing laboratories
- Establishment of a post-doctoral research fellowship program, with initial funding of two candidates in the amount of \$450,000 over three years
- Creation of a withdrawal times online database for therapeutic medications for horsemen and veterinarians
- Creation of a public recent rulings online database for drug-related rulings