



2016 Massachusetts Gaming Commission Manual For Practicing Veterinarians

Guide to Medication and Horse Health Procedures

Massachusetts Gaming Commission Veterinary Department Suffolk Downs

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Horses first. That's how our Racing Division staff is trained.

It sounds simple, but what starts as a simple premise goes to the core of our industry. Happy, healthy horses perform to the best of their ability. They run truer to form for our pari-mutuel customers, they maximize return on investment for their breeders and owners, they help create a safer training and racing environment for those who work around them, and they retire from the racetrack to productive second careers.

Ensuring the happiness and healthiness of our equine athletes is a big job, and it's where our knowledge about welfare and science intersects. The Racing Division's veterinary program is among the most comprehensive in the country. We use science and regulation to help us document and maintain the healthiness of our racehorses, and we're not afraid to step in if intervention becomes necessary. But that's not enough.

Equine welfare, by definition, addresses psychological as well as physiological well-being. Psychological well-being is dependent largely on housing, nutrition, health care, environment, and handling. While the Racing Division is dedicated to ensuring the happiness of our racehorses, we must rely heavily on their caregivers for this task.

The Racing Division of the Massachusetts Gaming Commission is proud to partner with our hard-working, dedicated horsemen and women and our racetrack operators for another successful year of live racing in the commonwealth. We take very seriously our shared role as stewards of our industry, and we know you do, too. Together, we must hold each other accountable for putting the horse first in everything we do.

Because when we do right by the horse, all the rest follows.

****The Massachusetts Gaming Commission has a new drug testing laboratory starting in 2016-Industrial Laboratories. ****

Please review the Controlled Therapeutic Medication Schedule at the end of this manual to avoid overages. Remember, with the multiple violations penalties in CMR 4.25 (2)(f) available here: <http://massgaming.com/wp-content/uploads/205CMR4.pdf> overages can add up to loss of purse, etc.

New in 2016: The anabolic steroid regulations have been updated to conform with the ARCI Rules. There is no longer a threshold for stanozolo (any level of stanozolo will be a violation), there is a level for nandrolone in male horses other than geldings. A typo in the regulations regarding ketoprofen was also corrected in the regulations-the information regarding ketoprofen in the Trainer's Manual has always been correct, so refer to ketoprofen in this manual. Cimetidine, Ranitidine, Cetirizine, and Guaifenesin have been added as new substances to the Controlled Therapeutic Medication schedule. Xylazine and Omeprazole have amended threshold and dosing specifications. These can all be found at the end of this manual.

The laboratory has been instructed to test for endogenous, dietary, or environmental substances arsenic, caffeine, cobalt, estranediol, gamma aminobutyric acid, hydrocortisone, methoxytyramine, salicylate, salicylic acid and theobromine using thresholds adopted by the Association of Racing Commissioners International. These can be found at <http://arcicom>.

Please note these important changes regarding the administration of therapeutic medications that went into effect in 2014

In an effort to establish a uniform medication and drug testing program, which has been a long-time goal of horsemen, veterinarians and regulators, the Massachusetts Gaming Commission has adopted new regulations that will distinguish between those medications which have been recognized as appropriate for therapeutic use in the horse and those which have no business being in a horse on race day. There is a new medication category called the ARCI Controlled Therapeutic Medication Schedule, which lists over 24 therapeutic medications that have been recognized as necessary in the routine treatment of illness or injury in the horse. Withdrawal time information, dosages, administration routes and uniform laboratory detection thresholds for these medications are being provided to guide horsemen and veterinarians. **Please note some of these withdrawal times may vary from what you have been accustomed**

to in the past, and make adjustments where needed. You are strongly encouraged to restrict your use of medications to those on the list. The list will be amended from time to time. The current Controlled Therapeutic Medication Schedule can be found at the end of this manual. This program will assist horsemen who race in multiple jurisdictions, provide guidance for necessary treatments of horses, ensure a level playing field, and promote the health and safety of the human and equine athletes.

Please be particularly aware of clenbuterol and IA corticosteroid withdrawal times, **Furosemide administration protocol begun in 2015**, cobalt testing, etc.

VETERINARIANS' RESPONSIBILITIES

Veterinarians are responsible for knowing and complying with racehorse medication rules in effect in Massachusetts. They are responsible for their own actions and also for properly advising their clients. **If in doubt about a particular medication contact the Chief Commission Veterinarian for clarification.**

ACCREDITATION

Any practicing veterinarian wishing to generate health certificates or EIA test certificates must be accredited in Massachusetts.

Be aware that if you have not already done so, you will need to update your email address with APHIS regarding August 2010 accreditation requirements. Renewals for many veterinarians went into effect in early 2014.

Remember that a non-accredited veterinarian who draws blood samples and gives them to an accredited veterinarian for testing is in violation of federal statute. The veterinarian who accepts the samples is also in violation and in danger of losing their accreditation.

ANABOLIC STEROIDS

No Androgenic-anabolic steroids (AAS) are permitted in test samples collected from racing horses except for residues of the major metabolite of nandrolone, and naturally occurring substances boldenone and testosterone at concentrations less than the indicated thresholds. Refer to the medication section for complete information.

BLEEDERS

A horse that bleeds externally from the nose for the first time will be placed on the Veterinarian's List and is ineligible to race for 14 days following the observed bleeding.

Longer periods of ineligibility result from subsequent bleeding incidents: 30 days for a second bleed, 6 months for a third bleed, and a lifetime racing ban for a fourth bleed. A permanent Bleeder List is kept in the Commission Veterinarian's Office.

BREAKDOWN INJURIES

A horse, which may require euthanasia from a fracture or injury sustained during a race or while training must be attended to by the Racing and/or Official Veterinarian as well as the practicing veterinarian. Blood samples may be required and insurance companies often request additional paperwork from the Chief Commission Veterinarian. Please make sure that either the Racing or Official Veterinarian is present or aware of the situation.

DAILY MEDICATION REPORTS

Each practitioner licensed by the MGC must file a written record of all medications and other substances administered, prescribed, or dispensed for any horse on the grounds. Other examples of procedures to be included in the written log include castrations, nerving, joint injections, radiographs, ultrasounds, chiropractic, acupuncture, dental work and the drawing of blood for EIA, EPM testing, etc. The time of day for all treatments must be noted on your daily logs. The form may be made out by someone else but must be signed by you. Pads of these forms will be available in the Official Veterinarian's Detention Barn Office.

The precise medication(s) used must be specified, not just the general category. You should include any drug used for restraint, anesthesia, or therapy at any time, on a call-by-call basis throughout the day.

The written records must be filed with the Official Veterinarian by noon the day following treatment. They should be placed in the locked Veterinarians' Drop Box located at the Stable Gate or in the locked Drop Box located in the Detention Barn office.

DEATH OF A HORSE

The death of a horse must be immediately reported to the Chief Commission Veterinarian. Horses dying on the grounds must go intact (i.e. with all body parts) and with shoes on to the Cummings School of Veterinary Medicine at Tufts for necropsy.

The following information must be provided to the Chief Commission Veterinarian:

1. Horse's Name and tattoo
2. Trainer responsible for horse
3. Insurance status of horse
4. Brief history of problem
5. Time of death/euthanasia
6. Name of veterinarian handling case

EPO, DARBIPROETIN, COBALT, BLOOD DOPING AGENTS, VENOMS

The possession and use of blood doping agents and venoms is prohibited by 205 CMR 4.51(3). This means that they should not be in your personal possession or veterinary vehicle at any time you are on the grounds of Suffolk Downs. For purposes of 205 CMR 4.51(3): Prohibited Substances, the possession of an injectable cobalt salt shall be considered a violation. For purposes of 205 CMR 4.53(4): Out of Competition Testing for Blood and/or Gene doping Agents, the presence of excessive levels of cobalt shall be considered a violation. The Racing Division will take into account existing research, established thresholds and laboratory recommendations when determining whether levels are excessive.

The Massachusetts Gaming Commission tests for erythropoietin (EPO), darbepoetin, other red blood cell growth factors, and venoms. Horses reported as having raced with any of these substances in their system(s) will be placed on the Veterinarian's List and remain there until the horse is retested negative. All retesting is done at the owner or trainer's expense.

EUTHANASIA

If a horse under treatment for a severe illness or injury appears to be regressing to the point where euthanasia may be required, contact the Chief Commission Veterinarian to make arrangements. PLEASE DO NOT PLAN TO EUTHANIZE A SICK HORSE DURING LIVE RACING.

FUROSEMIDE

A horse is eligible to race on furosemide if the trainer and their MGC commission licensed DVM determine it would be in the horse's best interest. In order to run on furosemide, the horse must be registered in the Furosemide Program prior to the next entry. This means that the trainer or assistant trainer must fax, mail, or physically come into the Commission Veterinarians' Office and sign the horse into the Furosemide Program. Once the horse has raced with furosemide it must continue to do so until a written request from the trainer and licensed veterinarian to discontinue furosemide is made. Once a horse is removed from the Furosemide List the horse may not be placed back on the list for 60 calendar days UNLESS it is determined to be harmful to the welfare of the horse in consultation with the Official Veterinarian. Should the horse be removed from the list a second time in a 365-day period, the horse may not be placed back on the list for 90 calendar days.

Furosemide is the ONLY approved and authorized bleeder medication. No other race day bleeder medications can be administered.

PRE-RACE FUROSEMIDE TREATMENTS

According to MGC Rule 4.52 (6) furosemide shall be administered IV (intravenously) by the veterinarian employed by the owner or trainer of the horse. It should be given in the LEFT jugular vein and **cannot** be given IM or orally. The administered furosemide must be at least 150 mg and cannot exceed 500 mg per dose administered.

Practicing veterinarians will be required to furnish the Chief Commission Veterinarian with several factory-sealed bottles of furosemide, syringes and needles. These will be labeled with the practicing veterinarian's name and will be locked and retained in the Furosemide office.

Official race day furosemide schedules are available in the Furosemide office. On race day, each veterinarian will go to the Furosemide Office to pick up a MGC observer. The veterinarian will fill their syringes with Lasix in the presence of the MGC observer.

The MGC observer will confirm the identity of the horse by tattoo, the presence of the trainer or trainer's designee, and will observe the furosemide administration. They will not restrain the horse or otherwise assist in furosemide administration. The horse handler, not the MGC observer, is responsible for showing the tattoo.

Veterinarians are responsible for providing transportation for themselves and the MGC observer, and making room for the observer in their vehicle. The MGC observer has paperwork that needs to be signed and completed before they can rejoin the veterinarian in their vehicle.

Horses not in their assigned barn/stall or who do not have a person to restrain them will not receive furosemide. If time permits, the veterinarian and MGC observer will return to the untreated horse after the other horses have been treated. Adequate time must be allotted to complete all furosemide administrations.

New for 2015: Horses not receiving furosemide by four hours before post-time will be immediately reported to the Chief Commission Steward by the MGC observer. The horse may receive furosemide up to three hours 45 minutes before post-time (15 minute window) and will be allowed to race. They will be considered late for furosemide administration and the Stewards will fine the trainer \$100. If a trainer is late again, fines will progressively increase. If a trainer is repeatedly late, the Stewards may ultimately scratch the horse. If a horse does not receive their furosemide by three hours 45 minutes before post-time, the MGC observer will also immediately report this to the Chief Commission Steward, and the horse will be scratched. On days when post times vary due to special events/ simulcasts etc., trainers should inform their employees that the furosemide treatment deadlines will be different.

In case of a true emergency and the veterinarian cannot make it in time for their scheduled Furosemide treatments, the veterinarian shall contact the furosemide office immediately (extension 3287) and they will then try to find a replacement veterinarian for you.

HEALTH CERTIFICATES (Certificate of Veterinary Inspection)

All horses entering the grounds at Suffolk Downs are required to have an accurate and complete health certificate dated within 30 days of arrival. The stable gate will leave a copy of the CVI for Dr. Lightbown to collect and examine. Please remind your clients that horses shipping in and out of Canada require a special health certificate that often is more difficult to acquire.

INFECTIOUS DISEASES

Vaccinations for Rhinopneumonitis within the last six months are recommended for all horses entering the grounds of Suffolk Downs. West Nile Virus, Eastern and Western Encephalitis Virus, Influenza, Rabies, and Strangles vaccinations are also recommended. We are working with the Division of Animal Health and the American Association of Equine Practitioners to develop a fair and equitable policy regarding the neurological form of Rhinopneumonitis should a horse develop clinical signs.

Any horse in your care that has developed a potentially contagious illness (especially Strangles or the neurological form of Rhinopneumonitis) should be reported to the Chief Commission Veterinarian immediately so other horses are not unnecessarily endangered. Some diseases are reportable to the Division of Animal Health, while others may require quarantine or disinfection of premises. Suffolk Downs and Dr. Lightbown have identified an isolation area for veterinary use.

Any horse exhibiting signs consistent with Strangles, especially a fever and enlarged, hot, painful node(s), must be monitored closely and isolated from other horses. Horses with active draining lymph nodes should be cultured for Strangles and must be immediately removed from the premises if the culture is positive for Strangles. Horses removed from the premises due to Strangles may not be allowed to return until 14 days after their draining tracts have healed. If the horse's abscess did not drain externally, the 14-day count will begin when the horse's rectal temperature returns to normal and the horse is fully back on feed and swallowing normally.

MEDICATIONS

ALLOWED MEDICATIONS

1. Furosemide:

- Horses are allowed to race on furosemide without prior evidence of bleeding but must be entered into the furosemide program prior to entry time.
- According to MGC Rule 4.52 (6b) furosemide shall be administered IV (intravenously) by the Commission-licensed veterinarian employed by the owner

or trainer of the horse. Furosemide should be administered in the LEFT jugular vein.

- The administered furosemide must be at least 150 mg but cannot exceed 500 mg per dose administered and is administered 4 hours before post time.

2. Nonsteroidal anti-inflammatory agents (NSAIDS)

- **One (and only one)** therapeutic dose of the following three approved NSAIDS may be used by single intravenous (IV) injection at least 24 hours before post time.
 - Bute (phenylbutazone): The maximum permissible limit of phenylbutazone (bute) is 2 mcg/mL blood.
 - Flunixin: The maximum permissible limit of flunixin or metabolites is 20 ng/mL blood.
 - Ketoprofen: The maximum permissible limit of ketoprofen or metabolites is 2 ng/mL blood.
- The use of all but one of the three approved NSAIDs must be discontinued at least 48 hours before the post time for the race in which the horse was entered.

3. Controlled Therapeutic Medications

- Several medications including some corticosteroids, methocarbamol, and others have been added to the list of medications with a permitted level in post-race testing.
- Refer to the list at the end of this document for specific levels, withdrawal times, suggested doses, and routes of administration.
- **Be WELL advised that these are ONLY suggested doses, routes of administration, and detection times.** Each horse is different in height, weight, and ability to excrete medications.
- The use of several medications at the same time often results in delayed clearance and increased blood levels so plan accordingly.
- Horses that are dehydrated from lack of water prior to racing, furosemide, hot and humid weather, or other factors may not clear these medications as rapidly and reductions in dose or extending the time period is often needed.
- **Clenbuterol:** Special care is recommended when prescribing this medication. Studies have been performed and serum levels determined on the trade name product only (Ventipulmin[®]), and compounded products are often the source of medication overages. The window for withdrawal is 14 days.
- **Methocarbamol:** Care is advised with the oral administration of this medication, especially if multiple day dosing is utilized. The use of compounded products such as paste and powders may result in medication overages. In addition, horses receiving multiple medications may metabolize this drug much more slowly. While the recommended withdrawal time is 72 hours, 96 hours may be a better choice. Also, take caution when using it in combination with drugs such as

phenylbutazone as the time may be extended further due to the drugs' interactions.

OTHER MEDICATIONS

Alkalinizing Agents

- MGC 4.52(9) prohibits the use of agents that elevate a horse's TCO₂ or base excess above those that exist naturally in the horse.
- It is illegal in Massachusetts for anyone to treat entered horses with sodium bicarbonate by nasogastric tube within 24 hours of racing.
- Collection of blood samples for testing is performed in the horse's own stall before the horse is taken to the paddock. The time to begin testing is determined based on the projected post time for the race and the size of the field to be tested. Generally this occurs 45 to 60 minutes prior to post time. The trainer or his/her designee must be available to restrain the horse and sign the evidence card.

Anabolic Steroids

- No Androgenic-anabolic steroids (AAS) shall be permitted in test samples collected from racing horses except for residues of the major metabolite of nandrolone, and naturally occurring substances boldenone and testosterone at concentrations less than the indicated thresholds. Concentrations of these AAS shall not exceed the following urine threshold concentrations for total (i.e., free drug or metabolite and drug or metabolite liberated from its conjugates):
- Boldenone: 15 ng/ml of total boldenone in urine of male horses other than geldings, or 25 pg/ml of boldenone in plasma or serum of all horses regardless of sex;
- Nandrolone: 1ng/ml of total nandrolone in urine for fillies, mares and geldings, or 25 pg/ml of nandrolone in plasma or serum for geldings, fillies, and mares, or 45 ng/ml (as 5 α -estrane-3 β , 17 α -diol) in urine in male horses other than geldings
- Testosterone:
 - (1) in geldings - 20 ng/ml total testosterone in urine, or 25 pg/ml of testosterone in plasma or serum;
 - (2) in fillies and mares - 55 ng/ml total testosterone in urine, or 25 pg/ml of testosterone in plasma or serum

**Please be advised that withdrawal times are very lengthy for anabolic steroids, at the very least 30 days and perhaps as long as 90 days.

MEDICATIONS GENERAL

All medications, drugs, and substances administered on the backside must be FDA approved and contain, at the very least, the product name, manufacturer's name, lot number and expiration date. The possession or use of a drug, substance, or medication for which there is no analytical detection method; has no accepted use in equine care; may adversely affect the integrity of racing; or endanger the health, welfare, and safety of the horse or rider is prohibited.

No medications, needles, syringes or veterinary supplies may be stored anywhere on the racetrack grounds. All veterinary drugs and supplies must be in your personal veterinary vehicle, your immediate possession, or off grounds.

Any drug or medication that is dispensed or requires a prescription must contain the following information on the label: product name including strength; name, address, and phone number of DVM dispensing it; horse's name; trainer's name; and the dose, dosage, treatment time, and expiration date of the product.

The FDA is closely re-examining the use of compounded medications. According to AAEP guidelines, compounded medications should be limited to individual patients with specific needs. Maintaining an inventory of bulk-compounded medications is illegal in most states. If you are using compounded medications, please be aware of current AAEP and AVMA PLIT guidelines involving the use of these medications.

All dispensed medications must be labeled with your name, horse's name, medication name, date, instructions, and cautions for use in horses. No injectable medications are to be dispensed at any time to anyone other than another licensed veterinarian. Medications should be dispensed according to practice act for the Massachusetts Boards of Veterinary Medicine and Pharmacy and under the guidelines of the American Veterinary Medical Association.

MEDICATION TESTING

Industrial Laboratory is the MGC contract laboratory for 2016. Three tubes of blood and urine will be collected from horses in the detention barn. Serum will be tested using LC/MS/MS. Anabolic steroids, some corticosteroids, methocarbamol, and most medications that you use on the backside will be regularly and routinely tested for using this method. This may be different from other jurisdictions where you practice and you may need to adjust your medication policies accordingly. Urine will also be tested. Those horses not passing urine in the test barn will have an expanded LC/MS/MS testing procedure performed.

A list of medications with regulatory detection limits and suggested dosages and routes of administration is attached to the end of this document. Be aware these are suggestions only and will need to be modified based on each individual horse. In addition to other medications, you should consider the horse's sex, weight, and overall health.

If you have any further questions about medication detection times see Dr. Alex Lightbown.

NECROPSY

All deceased horses will have a necropsy performed at the Cummings School of Veterinary Medicine at Tufts University. Horses must be sent intact with shoes on and all body parts present. The Commission Veterinarians' office will generate and submit the appropriate paperwork to accompany the horse.

NEEDLES AND SYRINGES/ OTHER WASTE PRODUCTS

No needles and/or syringes may be dispensed to trainers and they may not be in possession of them on the association grounds. Veterinarians should use one time (i.e. single use, disposable) needles and syringes. These need to be disposed of off grounds and should not be placed in the trash or otherwise left on the association grounds.

Empty bottles of injectable substances, scalpel blades, contaminated materials, and any other debris that may create a hazard must be disposed of safely in a location that is not on the grounds of the racetrack. None of these materials may be disposed of in manure bins or garbage containers. Please contact the Massachusetts Pollution Control Agency regarding proper disposal of hazardous and infectious waste.

RESTRICTIONS

A veterinarian unlicensed by the Massachusetts Gaming Commission cannot practice on the racetrack grounds. MGC licensed veterinarians cannot sign in other veterinarians as their guests for the purpose of working on the backside. Please contact the Chief Commission Veterinarian if you have a conflict or problem.

Practicing veterinarians CANNOT have contact with an entered horse within 24 hours of the post time of the race it is entered into with the exception of administration of furosemide or approved by the Official Veterinarian.

Veterinarians have been added to the classes of licensees who may not participate in pari-mutuel wagering while licensed by the Commission.

Veterinarians may not be licensed in any other capacity. This means that you cannot own a racehorse in Massachusetts or be a jockey, exercise rider, etc.

SHOCK WAVE

Extracorporeal shock wave and radial pulse wave therapy are permitted with the following restrictions:

- No treated horse can race or breeze within 10 days of treatment.
- Only MGC licensed practicing veterinarians can perform treatments.
- ALL machines on association grounds MUST be registered with and approved by the Official Veterinarian prior to use.
- All treatments performed must be reported within one day to the Official Veterinarian on the MGC prescribed form.

SIGNING IN / OUT

All veterinarians and their veterinary assistants need to sign in and out at the stable gate each time he or she enters and leaves the grounds. Should you have students or others along with you they will need to be signed in and out as guests.

GENERALLY GOOD INFORMATION TO KNOW

1. No medications other than a therapeutic dose of one of the three permitted NSAIDS (phenylbutazone, flunixin or ketoprofen) or furosemide under the restrictions defined in the MGC rules may be administered to a horse IV within 24 hours of a race. This restriction includes adjunct bleeder medications, corticosteroids, intra-articular injections, inhaled medications, and trans-dermal medications and patches.

NSAID Levels:

- Phenylbutazone or metabolites: 2 mcg/mL serum or less
- Flunixin or metabolites: 20 ng/mL serum or less
- Ketoprofen or metabolites: 2 ng/mL serum or less
- Please note anti-stacking levels

Furosemide Levels:

- Furosemide serum 100 ng/mL or less

*****The body weight and condition of each horse should be carefully considered when determining an NSAID dose.**

MGC rules require that the permitted pre race NSAID be administered only by IV injection. Some trainers, however, may choose to administer an oral dose and ask you, as their DVM, for advice.

Prerace:

- **IV phenylbutazone:** A single IV dose of phenylbutazone at 4 mg/kg administered to a healthy horse at 24 hours prior to race time should not result in a post race serum level greater than 2 mcg/ml serum. If the trainer is concerned for any reason (dehydration, prior history of liver or kidney disease, etc.) then 30 hours (24 hours + 6 hours [one half life]) should be utilized.
- **IV flunixin: Be very careful with your flunixin dosing.** The testing window is very narrow and overages can occur if you are not careful. Young horses, smaller and thin horses, and fillies seem to be more susceptible and the dose carefully considered based on these factors. Remember that flunixin should be dosed on the weight of the animal and that a one size dose does not fit every horse.
- **IV ketoprofen:** No special notations.
- **Oral phenylbutazone:** The routine administration of 2 grams of oral phenylbutazone at 24 hours prior to a race is **not** recommended and may result in post race serum levels greater than 2 mcg/ml. If your clients choose to do this please warn them appropriately. In addition to the normal recommendations about not leaving the feed tub overnight, etc. the dose administered should be lowered and the administration time lengthened.
- **Oral flunixin:** The use of oral flunixin is not recommended.
- **Oral ketoprofen:** The use of oral ketoprofen is not recommended.

Daily feeding:

- The daily feeding of phenylbutazone results in accumulation in the body and delayed excretion. If your clients are feeding phenylbutazone on a daily basis the best recommendation is to stop phenylbutazone at 48 – 72 hours and switch to ketoprofen or flunixin for prerace administration.

2. You cannot pass a stomach tube on an entered horse within 24 hours of race time without permission from an Official Veterinarian.
3. If you have a shock wave machine you need to register it in the Commission Veterinarians' office. You will need to provide the make, model and serial number. Only veterinarians licensed by the MGC can perform shock wave. All horses receiving shock wave therapy need to be reported on a special form and cannot race or breeze for 10 days.
4. The use of any agent to increase a horse's pH or bicarbonate level is prohibited by MGC rule. Random testing may be performed each race day.
5. The possession and use of EPO, other blood doping agents, gene modifying agents, growth hormone, and venoms is a prohibited act in Massachusetts. This means that they cannot be in your veterinary vehicle, refrigerator, bag, or buckets; in your pocket; or on your person while on association grounds.
6. Some corticosteroids and all anabolic steroids are included in routine drug testing. Be very careful with corticosteroid administration, as there is considerable horse-to-horse variation.
7. Ethanol and metabolites are routinely screened for by the testing laboratory.
8. All furosemide is administered IV in the left jugular vein.
9. A veterinarian may not be in the stall with or otherwise handle any entered horse within 24 hours of the post time of the day it is entered to race except to give furosemide. You cannot go into a stall "just to check on a horse" or otherwise feel legs or take a horse out of a stall without permission from the Official Veterinarian.
10. In the case of an emergency during racing hours, you MUST notify the Racing and/or Official Veterinarian immediately.
11. Please remind your clients that vaccination for Rhinopneumonitis within the past 6 months is strongly recommended.
12. You cannot own a horse racing in Massachusetts and you cannot bet on pari-mutuel racing in Massachusetts.
13. Please obey all driving and parking regulations as set forth by Suffolk Downs.
14. Clenbuterol may not be administered to a horse within 14 days of its next race.
15. No intra-articular corticosteroid may be administered to a horse within 7 days of its next race. Methylprednisolone acetate should not be used for at least 21 days before a race.

Controlled Therapeutic Medications

Single Dose Unless Otherwise Noted

<u>Drug</u>	<u>Dose</u>	<u>Route</u>	<u>Threshold</u>	<u>Withdrawal Time</u>
Acepromazine	0.05 mg/kg	IV	10 ng/mL (U)	48 hours
Albuterol	720 micrograms	intra-nasal	1ng/mL (U)	72 hours*
*Administration of albuterol by any means other than intra-nasally has a high likelihood in resulting in a positive finding. This specifically includes oral administration. Trainers and veterinarians are cautioned against using oral albuterol.				
Betamethasone	9 mg in one articular space	IA	10 pg/mL (S)	7 days*
*When administered intramuscular (IM), will exceed regulatory threshold for weeks or even months, making the horse ineligible to race for an extended period.				
Butorphanol	0.1mg/kg	IV	300 ng/mL (U) 2 ng/ml (S)	48 hours 48 hours
Cetirizine	0.4 mg/kg Twice daily for 5 doses	Oral	6 ng/mL (S)	48 hours*
*Do not administer ivermectin within 48 hours of a race if the horse has been treated with cetirizine.				
Cimetidine	20 mg/kg Twice daily for 7 doses	Oral	400ng/mL (S)	24 hours
Clenbuterol	0.8 mcg/kg BID	Oral	140 pg/mL (U) LOD (S)	14 days
Dantrolene	500 mg	Oral	100 pg/mL (S)	48 hours
Detomidine	40 mcg/kg GEL	Oral	1 ng/mL(U) LOD (S)	72 hours 72 hours
Dexamethasone (Na ₃ PO ₄ for IM/IV)	0.05 mg/kg	IV/IM/Oral	5 pg/mL (S)	72 hours
Diclofenac 1%	7.2 grams	Topical	5 ng/mL (S)	48 hours

(5-inch ribbon)

*see horsemen's warning at end of this schedule

DMSO	60 mLs 2 oz.	IV topically in occlusive dressing	10 mcg/mL (S) 10 mcg.mL (S)	48 hours 24 hours
Firocoxib (Equioxx®)	0.1 mg/kg x 4 days	Oral paste	20 ng/mL (S)	14 days
Flunixin	1.1 mg/kg	IV	20 ng/mL (S)	32 hours
Flunixin antistacking threshold			3.0 ng/mL (S)	>48 hours
Furosemide	up to 500 mg	IV	100 ng/mL	4 hours
Glycopyrrolate	1 mg	IV	3.0 pg/mL (S)	48 hours
Guaifenesin	2 grams Twice daily for 5 doses	Oral	12 ng/mL (S)	48 hours
Isoflupredone	10 mg 20 mg	SQ IA	100 pg/mL (S) 100 pg/mL (S)	7 days 7 days
Ketoprofen	2.2 mg/kg	IV	2 ng/mL (S)	24 hours
Ketoprophen antistacking threshold			1 ng/mL (S)	48 hours
Lidocaine HCl	200 mg	SQ	20 pg/mL (S)	72 hours
Mepivacaine	0.07 mg/kg	SQ	10 ng/mL (U) LOD (S)	72 hours 72 hours
Methocarbamol	15 mg/kg 5 grams	IV Oral	1 ng/mL (S) 1 ng/mL (S)	72 hours* >72 hours*
*When used with phenylbutazone, may be as long as 7 days				
Methylprednisolone	100mg in one articular space	IA	100pg/mL (S)	>21 days*
*When administered intramuscular (IM), will exceed regulatory threshold for weeks or even months, making the horse ineligible to race for an extended period.				
Omeprazole	1 tube (2.2 grams) Once daily for 4 doses	Oral paste	10 ng/mL (S)	24 hours

Phenylbutazone	4 mg/kg	IV	2 mcg/mL (S)	24 hours
Phenylbutazone	antistacking threshold		0.3 mcg/mL	48 hours
Prednisolone	1 mg/kg	Oral	1 ng/mL (S)	48 hours
Procaine Penicillin		IM	25ng/mL (S)	prior to entry
(administration must be reported to Stewards and horse Must be submitted to 6 hour pre-race surveillance)				
Ranitidine	8mg/kg Twice daily for 7 doses	Oral	40 ng/mL (S)	24 hours
Triamcinolone Acetonide	9 mg in one articular space	IA	100 pg/mL (S)	7 days*
* When administered intramuscular (IM), will exceed regulatory threshold for weeks or even months, making the horse ineligible to race for an extended period.				
Xylazine	200 mg	IV	200 pg/mL (S)	48 hours

U = urine
S = serum

*Horsemen's Warning from HBPA manual: Diclofenac, possibly due to its topical route of administration, has a long terminal half-life and is slowly eliminated. It may potentially be detected in urine for up to seven days or more.

Further information is available at arci.com.

These results are presented as ONLY guidelines and each horse must be evaluated on an individual basis and adjustments made accordingly. Horses used in the administration studies exceeded 1,000 lbs, so when dosing a smaller horse, you should consider decreasing the total dose or increasing the time of dosing before racing.