

GET OFF YOUR HIGH HORSE: DRUGS, BREEDING, AND LAWS OF THE MODERN AMERICAN RACEHORSE

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I. INTRODUCTION

Every year, hundreds of racehorses die at American tracks across the country. During the 2019 racing season, 49 horses died at the Santa Anita track in California alone.¹ According to the United States Jockey Club (Jockey Club), 493 thoroughbred racehorses died on American tracks in the 2018 racing season.² Jockey Club statistics also show that between 2009 and 2018, over 6,000 horses suffered fatal injuries related to racing.³

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1. Associated Press, *Prosecutor Finds No Crimes in Santa Anita Horse Racing Deaths*, SPORTS ILLUSTRATED (Dec. 19, 2019), <https://www.si.com/horse-racing/2019/12/19/santa-anita-park-horse-deaths-no-crimes-found> [<https://perma.cc/HT4S-U6T6>].

2. SUPPLEMENTAL TABLES OF EQUINE INJURY DATABASE STATISTICS FOR THOROUGHBREDS, JOCKEY CLUB (Oct. 4, 2020, 12:44 PM), http://jockeyclub.com/pdfs/eid_10_year_tables.pdf [<https://perma.cc/VUH9-VAQD>] [hereinafter SUPPLEMENTAL TABLES OF EQUINE INJURY].

3. *Id.*

Many people, in and out of the racing community, are left wondering what the leading cause in the rise of breakdowns in the American racehorse industry is and what can be done to correct the problem. The leading contender for the rise in breakdowns is the rampant use of drugs.⁴ Horses are given a variety of legal and illegal drugs during training sessions and hours before racing.⁵ The second issue is the amount of inbreeding within the racehorse population.⁶ Some claim that popular sires with known genetic flaws have been overbred into the racehorse population, causing genetic flaws to be amplified through multiple generations.⁷

There are different solutions for each of these issues. For rampant drug use, individual states have different regulations for what is and is not allowed. Many advocates turn to Congress to pass the Horseracing Integrity Act to bring all 38 separate jurisdictions under one federal policy.⁸ For breeding issues, the answers seem to be less clear cut. One potential option is to limit the number of covers each sire is allowed in his stud career, which will work on genetic diversity within the population. Another possible solution is to ensure breeders are breeding genetically sound horses, rather than breeding to increase the number of champions contained within the stud book.

4. David Wenner, *Horse racing's uncomfortable truth: Horses die*, ASSOC. PRESS (May 11, 2019), <https://apnews.com/e15e7839b8c047b286f60921f7eaa4d2> [<https://perma.cc/3723-FQLN>].

5. *Id.*

6. Matt Walker, *Are racehorses being bred to destruction?*, BBC (Nov. 18, 2011), <https://www.bbc.co.uk/blogs/wondermonkey/2011/11/bred-to-destruction.shtml> [<https://perma.cc/VJ6B-CJR5>].

7. Christa Lesté-Lasserre, *Inbreeding in Thoroughbreds: Positives and Negatives*, THE HORSE (Aug. 31, 2018), <https://thehorse.com/160220/inbreeding-in-thoroughbreds-positives-and-negatives/> [<https://perma.cc/M7V4-UCTA>].

8. *Press Release: CHRI Applauds Introduction of Bipartisan "Horseracing Integrity Act of 2019,"* THE HUMANE SOC'Y OF THE U.S. (June 12, 2019), <https://www.humane.society.org/news/chri-applauds-introduction-bipartisan-horseracing-integrity-act-2019> [<https://perma.cc/B5QB-5ZUU>].

II. THE AMERICAN RACEHORSE INDUSTRY

In 1665, the American racehorse industry started in New York.⁹ As of 2018, horse racing has become a \$3.8 billion industry.¹⁰ The Jockey Club oversees all of the races in the United States.¹¹ The Jockey Club also collects statistics on injured racehorses at over 100 tracks across the United States.¹² These statistics are comprised of the amount of breakdowns that occurred each year, the track and the track conditions, and the age of the broken down horse.¹³ A breakdown occurs when a racehorse sustains an injury that ends its career or can lead it to being euthanized.¹⁴ To qualify for the breakdown statistics, a horse has to be euthanized within 72 hours of a race because of injuries sustained from that race.¹⁵ Take, for example, the breakdown of Eight Belles, a filly euthanized at the Belmont Stakes racetrack shortly after crossing the finish line in 2008.¹⁶ She was euthanized within

9. *American Horse Racing vs. the World: What's the Same, What's Different*, AMERICA'S BEST RACING (Dec. 14, 2017), <https://www.americasbestracing.net/the-sport/2017-american-horse-racing-vs-the-world-whats-the-same-whats-different> [<https://perma.cc/DG6A-9YNK>]; Bradley S. Friedman, *Oats, Water, Hay, and Everything Else: The Regulation of Anabolic Steroids in Thoroughbred Horse Racing*, 16 ANIMAL L. 123, 128 (2009); see generally Joan S. Howland, *Let's Not "Spit the Bit" in Defense of "The Law of the Horse": The Historical and Legal Development of American Thoroughbred Racing*, 14 MARQ. SPORTS L. REV. 473, 483-86 (2004).

10. Christina Gough, *Size of the horse racing track market in the United States from 2009 to 2019*, STATISTA (Jul. 22, 2019), <https://www.statista.com/statistics/1017245/us-horse-racing-tracks-market-size/> [<https://perma.cc/7XYA-NQ88>].

11. *American Horse Racing vs. the World: What's the Same, What's Different*, *supra* note 9.

12. See *EID Participating Tracks*, THE JOCKEY CLUB (Oct. 2, 2020, 10:16 PM), <http://jockeyclub.com/default.asp?section=Advocacy&area=11> [<https://perma.cc/V3YH-DF47>].

13. *The Jockey Club Releases Data from the Equine Injury Database for 2017*, THE JOCKEY CLUB (Mar. 19, 2018), <http://jockeyclub.com/default.asp?section=Resources&area=10&story=1039> [<https://perma.cc/Y4HC-FRRP>]; see generally SUPPLEMENTAL TABLES OF EQUINE INJURY DATABASE STATISTICS FOR THOROUGHBREDS, *supra* note 2. See also THE JOCKEY CLUB, EQUINE FATALITY SUMMARY (Oct. 4, 2020, 12:52 PM), <http://jockeyclub.com/pdfs/eid/Belmont.pdf> [<https://perma.cc/8NRG-GHF4>].

14. *Glossary of Horse Racing Terms*, SARATOGARACETRACK.COM (Oct. 2, 2020, 10:24 PM), <https://www.saratogaracetrack.com/about-horse-racing/glossary-racing-terms/b/> [<https://perma.cc/A4LK-TEKW>].

15. EQUINE INJURY DATABASE FACTS, THE JOCKEY CLUB (Jan. 19, 2021, 2:37 PM), http://jockeyclub.com/pdfs/eid/EID_Facts.pdf [<https://perma.cc/WG62-K9B2>].

16. William Nack, *Eight Belles' breakdown: a predictable tragedy*, ESPN (May 16, 2008), https://www.espn.com/sports/horse/triplecrown08/columns/story?columnist=nack_bill&id=3399004 [<https://perma.cc/353X-348A>].

72 hours after the race because of multiple injuries sustained during the race, allowing her to be included in the statistics for that year. In comparison, Barbaro, a horse who died eight months after his breakdown,¹⁷ and horses that die from injuries sustained during training sessions, are not included in the statistics.¹⁸ Therefore, potentially hundreds of other racehorses, who are euthanized from breakdowns occurring outside of a race, are not included within the Jockey Club statistics.¹⁹ Within the Jockey Club parameters, of the 30 horses that died at Santa Anita from December 2018 to July 2019, only 17 will be included in the statistics because they died of injuries sustained while racing.²⁰ At this time, there is a debate within the industry about the cause of the high amount of breakdowns. The first possible cause is the drugs given to horses.²¹

III. NOT STONE COLT SOBER: SOME DRUGS OF THE MODERN AMERICAN RACEHORSE

Drugging horses to gain a competitive edge has been a part of the sport since at least the nineteenth century.²² In the 1920s, horses were given caffeine, cocaine, and various other drugs to give them an edge when they raced.²³ Trainers and owners have continued to give horses anything from common, legal drugs to exotic, illegal substances in pursuit of an edge.²⁴ There are currently 30 legal drugs for racehorses in the United States, including the controversial drugs, Lasix and

17. Joe Drape, *Barbaro Is Euthanized After Struggling With Injury*, THE N.Y. TIMES (Jan. 29, 2007), <https://www.nytimes.com/2007/01/29/sports/29cnd-barbaro.html> [<https://perma.cc/4A4V-BDV4>].

18. EQUINE INJURY DATABASE FACTS, *supra* note 15; John Cherwa, *Special Report: Statistics might not tell the whole story about horse racing deaths*, L.A. TIMES (Jul. 12, 2019 5:00 AM), <https://www.latimes.com/sports/more/la-sp-horse-racing-deaths-santa-anita-20190711-story.html> [<https://perma.cc/6D9C-8N9Y>].

19. Cherwa, *supra* note 18.

20. *Id.*

21. John Cherwa, *Undetectable drugs might have role in horse racing deaths*, L.A. TIMES (Oct. 28, 2019, 5:19 PM), <https://www.latimes.com/sports/story/2019-10-28/horse-racing-deaths-undetectable-killer-santa-anita-breeders-cup#:~:text=It's%20unclear%20how%20much%20bisphosphonates,term%20health%20of%20the%20horse.&text=Horse%20racing%20has%20never%20experienced%20a%20year%20like%20this%20one> [<https://perma.cc/5MR7-JG6J>].

22. Eliana Dockterman, *Frog Juice: Horse Racing's New Doping Scandal*, TIME (June 21, 2012), <https://newsfeed.time.com/2012/06/21/frog-juice-horse-racings-new-doping-scandal/> [<https://perma.cc/HR3E-KV43>].

23. E.W. Sydney, *How to dope a horse*, THE ECONOMIST (May 22, 2018), <https://www.economist.com/the-economist-explains/2018/05/22/how-to-dope-a-horse> [<https://perma.cc/9E49-67WF>].

24. *See id.*

Bute.²⁵ Also, exotic drugs like cobra venom and frog juice have been given to horses in the past.²⁶ These exotic drugs are deemed illegal, but might still be used by some owners and trainers to give their horses an edge.²⁷

A. Common Legal Drugs

1. Lasix

In the American racehorse industry, one of the most widely used drugs is furosemide, also called Lasix.²⁸ Lasix was originally made for humans to help control high blood pressure and edema in people who have kidney disorders, liver disease, or congestive heart failure.²⁹ Lasix has been widely used within the racehorse industry since the 1970s to prevent exercise-induced pulmonary hemorrhage (EIPH), or bleeding in the lungs.³⁰ Racehorses tend to bleed in their lungs from the amount of force exerted by the lungs and diaphragm to pump air in and out while running.³¹ Severe bleeding is sometimes visually apparent by the horse bleeding directly from the nose.³² Approximately 90% of racehorses experience EIPH caused by racing over their lifetime, with the chances of EIPH increasing with each run.³³ EIPH is a very serious condition because repeated bleeding can lead to permanent lung damage, inflammation of the lungs, tissue damage, and, in rare occurrences, fatality.³⁴

Veterinary staff or trainers will give Lasix to a horse intravenously about four hours before a race to allow time for the drug to work.³⁵ One reason most trainers prefer Lasix over other options, such as nasal strips, to reduce the amount

25. Tom Goldman, *Should Racehorses Be Medicated?*, NPR (June 5, 2019, 1:59 PM), <https://www.npr.org/2019/06/05/729344390/should-racehorses-be-medicated> [<https://perma.cc/5PNR-G5CM>].

26. Dockterman, *supra* note 22.

27. *Id.*; Marty McGee, *Cobra venom said to be in Biancone barn*, ESPN (Jul. 4, 2007), <https://www.espn.com/sports/horse/news/story?id=2926083> [<https://perma.cc/3MZR-2Q3E>].

28. Kimberly Hickok, *The Science and Controversy Behind Horse Racing's Most Popular Race Day Drug*, INSIDE SCI. (June 7, 2018, 3:30 PM), <https://www.insidescience.org/news/science-and-controversy-behind-horse-racing%E2%80%99s-most-popular-race-day-drug> [<https://perma.cc/P4WQ-BXV7>].

29. Sophia Entringer, *Lasix*, DRUGS.COM (Jan. 4, 2019), <https://www.drugs.com/lasix.html> [<https://perma.cc/2M63-QBAK>].

30. Hickok, *supra* note 28.

31. *Id.*

32. *Id.*

33. *Id.*

34. *Id.*

35. *Id.*

of EIPH is for the known effect of Lasix on horses.³⁶ Lasix is a diuretic; it flushes all excess water out of the horse's system, causing the horse to rapidly lose between 20-30 pounds of weight before the race.³⁷ A horse quickly losing so much weight often means the horse will run faster.³⁸ Lasix may help reduce the amount of bleeding in lungs and rapidly lower the racehorse's weight, but the cost can be in the form of dehydration, an increased chance of muscle failure, or collapse.³⁹

Lasix is controversial within the industry not only because of its effect on horses and the public perception against giving it to horses, but also because North America is the only horse racing region in the world that allows Lasix to be used on race day.⁴⁰ Most horse racing countries outside of North America have banned the use of Lasix on race day, with Germany banning its use entirely within the industry.⁴¹ Many different horse racing advocates, like the Jockey Club, are calling for a ban of Lasix on race day.⁴² These advocates gained a large amount of traction after multiple deaths at the Santa Anita track in 2019.⁴³ Santa Anita, along with other tracks like Churchill Downs, have agreed to phase out Lasix on race day by banning the drug in two-year-old horses beginning in 2020.⁴⁴ Critics of the ban include organizations, owners, trainers, and veterinarians who claim Lasix is not the main cause of breakdowns and a ban may not have the desired effect.⁴⁵ Many of the horses that race at Lasix ban coalition tracks, like Churchill Downs, are top horses.⁴⁶ Whereas the most endangered horses race at smaller tracks that are not voluntarily participating in the Lasix ban. Thus, vulnerable horses will be running at tracks that allow Lasix, putting them at risk to its suspected side effects.

Proponents for keeping Lasix available point towards its helpfulness in preventing EIPH for over 30 years and none of the deaths at Santa Anita were caused by the drug.⁴⁷ The Association of Racing Commissioners International's Scientific Advisory Group also stated there has not been a link found between use

36. *Id.*

37. *Id.*

38. *Id.*

39. *Id.*

40. *Id.*

41. *Id.*

42. Wenner, *supra* note 4.

43. Beth Harris, *Horse racing debates use of race-day medications*, ASSOC. PRESS (Apr. 30, 2019), <https://www.apnews.com/article/49b69190d33c4b748a9d9b2b9b0746be> [<https://perma.cc/4MPJ-G9G9>].

44. *See id.*

45. *Id.*

46. *See generally id.*

47. *Id.*

of Lasix and musculoskeletal issues in broken down horses.⁴⁸ Musculoskeletal problems are one of the leading causes of breakdowns and euthanasia in the racing industry; a broken leg is typically a death sentence for any kind of horse.⁴⁹ The rationale for euthanizing a horse after breaking a leg is their anatomy structure and low probability for the horse to heal completely.⁵⁰ Of course, the caveat to the ban that each of the top tracks is trying to uphold, is it being accepted by each state's horse racing regulatory board.⁵¹ Currently there are 38 different racing commissions in 38 states that allow horse racing.⁵² Each state and each commission has their own set of rules stating what is allowed and disallowed within that jurisdiction.⁵³

2. *Bute*

Bute is on a similar path as Lasix but is less controversial within the public eye. Bute is also called Phenylbutazone and was created to be used in humans to control inflammation and pain caused by conditions similar to gout.⁵⁴ Trainers and owners give Bute to horses to control the inflammation and pain experienced in their legs.⁵⁵ The concern about this legal drug is when given in high enough doses, the horse does not feel the pain as a signal to stop running. This potentially causes permanent damage to the legs and, in the worst case, a fracture that causes a fatal breakdown.⁵⁶

48. *Id.*

49. Sarah Evers Conrad, *What We're Learning From Horse Racing Research*, THEHORSE (Jul. 24, 2019), <https://thehorse.com/176104/what-were-learning-from-horse-racing-research/> [<https://perma.cc/KA4V-ZNZF>].

50. *Why we euthanize horses when they break their leg*, EQUENEWS.COM (Dec. 18, 2014), <https://equenews.com/miscellaneous/lifestyle-en/why-we-euthanize-horses-when-they-break-their-leg> [<https://perma.cc/5RY8-UGWY>].

51. Harris, *supra* note 43.

52. Bob Baffert, *Horse racing is in crisis. We need immediate, drastic federal action to fix it*, THE WASH. POST (Mar. 13, 2020, 6:00 AM), <https://www.washingtonpost.com/opinions/2020/03/13/bob-baffert-horse-racing-is-crisis-we-need-immediate-drastic-federal-action-fix-it/> [<https://perma.cc/AZN9-9S8M>].

53. *Id.*

54. See Eni Williams, *phenylbutazone (Butazolidine)*, MEDICINET (Oct. 2, 2020, 10:17 PM), <https://www.medicinenet.com/phenylbutazone/article.htm> [<https://perma.cc/UCT5-TVDU>]; see also *The Devastation of Horse Racing Drugs*, STATE LINE TACK (Oct. 13, 2020, 10:57 AM), <https://www.statelinetack.com/content/horse-health/the-devastation-of-horse-racing-drugs/> [<https://perma.cc/EG4M-VHVJ>].

55. *The Devastation of Horse Racing Drugs*, *supra* note 54.

56. *Id.*

Other issues can also occur if a horse is given doses of Bute that were either too high or the horse was treated with Bute for too long.⁵⁷ Horses can develop serious kidney conditions because the inflammatory chemical that is suppressed by the drug is a natural part of the horse's body and aids kidney function.⁵⁸ Having the chemical suppressed for too long does not allow the kidneys to function properly.⁵⁹ This chemical is also needed to help heal joint damage and tissue from normal wear and tear incurred by the horse.⁶⁰ Suppression of the chemical can also lead to musculoskeletal issues that may contribute to fatal breakdowns.⁶¹

To combat the issue of giving a racehorse too much Bute, many racing organizations, like Racing Commissioners International (RCI), create legal limits for the amount of Bute a horse can have in its system before a race occurs.⁶² Bute is listed as a Class 4 substance by the RCI because it is deemed therapeutic and has lower potential for affecting a race than Class 3 substances.⁶³ The current threshold of Bute allowed in a horse's system is 2 micrograms per milliliter of plasma or serum given 24 hours before a race.⁶⁴ A horse can only be given doses intravenously at a rate of 4.0 milligrams per kilogram.⁶⁵ If a horse is tested and is over this limit, the owner and trainer can face penalties under penalty section C by the RCI.⁶⁶ The severity of the punishment is determined by the amount of previous infractions the owner or trainer has within the past year and the amount of Bute present in the serum sample.⁶⁷

57. *Dangers of Bute in Horses*, EQUISEARCH (Mar. 20, 2017), <https://www.equisearch.com/articles/dangers-bute-in-horses-17311> [<https://perma.cc/A34Z-JHWF>].

58. *See id.*

59. *See id.*

60. *Id.*

61. *See id.*

62. ASS'N OF RACING COMM'RS INT'L, UNIFORM CLASSIFICATION GUIDELINES FOR FOREIGN SUBSTANCES AND RECOMMENDED PENALTIES MODEL RULE 16 (2019), <http://arci.com/wp-content/uploads/2019/01/2019-01-07-Classification-Substances.pdf> [<https://perma.cc/4ML9-XF3Q>] [hereinafter UNIFORM CLASSIFICATION GUIDELINES FOR FOREIGN SUBSTANCES].

63. *Id.*

64. ASS'N OF RACING COMM'RS INT'L INC., ARCI CONTROLLED THERAPEUTIC MEDICATION SCHEDULE FOR HORSES 1, 7 (2019).

65. *Id.*

66. UNIFORM CLASSIFICATION GUIDELINES FOR FOREIGN SUBSTANCES, *supra* note 62 at 37, 51.

67. *Id.*

B. Illegal Exotic Painkillers

In the early 2010s, there was a new drug for horse owners and trainers called dermorphin or “frog juice.”⁶⁸ The drug is called frog juice because it is derived from the skin secretion of the South American waxy monkey tree frog.⁶⁹ The secretion is given to racehorses because it is 40 times more powerful than morphine and causes feelings of excitation and euphoria.⁷⁰ The secretion masks the pain a horse feels from an injury, allowing them to run through the pain.⁷¹ The main issue is the horse is more likely to injure itself further while running injured; thus, increasing the chances of the horse having a fatal breakdown injury on the track.⁷² Companies are able to synthetically create the drug and some veterinarians have been criminally charged for giving the drug to racehorses that have won.⁷³ Shortly after a lab in Denver, Colorado created a test for frog juice, over 30 horses tested positive in four different states.⁷⁴

Cobra venom is another exotic compound that has appeared in doped racehorses.⁷⁵ The venom is injected into the horse before the race and acts as a nerve block to keep a horse from feeling pain.⁷⁶ This has a similar effect as frog juice and the same potentially lethal side effects. Blocking pain within a horse’s nerves allows injured horses to keep running, increasing their chances of having a lethal breakdown.⁷⁷ The amount of cobra venom given also poses its own risks. It

68. Walt Bogdanich & Rebecca R. Ruiz, *Turning to Frogs for Illegal Aid in Horse Races*, THE N.Y. TIMES (June 19, 2012), <https://www.nytimes.com/2012/06/20/sports/horse-racing-discovers-new-drug-problem-one-linked-to-frogs.html> [<https://perma.cc/4HHY-5XF3>].

69. Jeanna Bryner, *What is ‘Frog Juice?’*, LIVE SCIENCE (June 20, 2012), <https://www.livescience.com/21064-frog-juice-racehorse-drugs.html> [<https://perma.cc/24SP-W2RL>].

70. *Id.*

71. *Id.*

72. See Art Hovey, *Illegal ‘frog juice’ use suspected in horse-racing investigation*, LINCOLN J. STAR (Aug. 19, 2012), https://journalstar.com/news/local/illegal-frog-juice-use-suspected-in-horse-racing-investigation/article_b3cb1ed4-5da3-5f84-956c-04b4e0c8f3ff.html [<https://perma.cc/L4Z8-B5R3>]. See generally Amanda L. Busch, *Teach Me How to Derby: The Need for Standardized Regulations in Horse Racing*, 20 GAMING L. REV. AND ECON. 516, 520 (Nov. 6, 2016).

73. E.g., *Horse doping: How common is it?*, WCVB (May 4, 2017, 11:36 PM), <https://www.wcvb.com/article/horse-doping-how-common-is-it/9608300#> [<https://perma.cc/N54E-4DJT>].

74. Bogdanich & Ruiz, *supra* note 68.

75. *Id.*

76. *Id.*

77. *Id.*

only takes a very small dose to get the intended effect.⁷⁸ If a horse is given too high of a dose of cobra venom it can lead to serious side effects, like heart attack and death.⁷⁹ Because the amount given is so small, it is very hard for drug tests to detect whether a horse has been given cobra venom before the race.⁸⁰

Most states, such as Kentucky, ban substances through state regulation.⁸¹ The Kentucky Horse Racing Commission (KHRC) has a list of classifications of drugs similar to the RCI.⁸² Under the Kentucky classification, cobra venom and frog juice are both classified as Class A drugs.⁸³ For a Class A drug violation, the trainer and owner would likely be disciplined under 810 KAR 8:030 § 4, with the severity of the punishment depending on the amount of prior offenses in conjunction with 810 KAR 8:030 § 3.⁸⁴ The penalty for the first offense for a trainer is a one to three year suspension and a \$10,000 to \$25,000 fine, absent mitigating circumstances.⁸⁵ These penalties increase for a trainer's third offense from a five year to lifetime ban and a \$50,000 to \$100,000 fine, absent mitigating circumstances.⁸⁶ Owners have a different set of punishments under 810 KAR 8:030 § 4(1)(b).⁸⁷ The KHRC stewards and judges decide which of the punishments and amounts the offending owners and trainers will receive.⁸⁸ Some trainers and owners have appealed the findings of the stewards and judges, with varying degrees of success in Kentucky courts.⁸⁹

78. McGee, *supra* note 27.

79. See Barry Lichter, *How nerve venom works*, STUFF (Oct. 3, 2010), <https://www.stuff.co.nz/sunday-star-times/sport/racing/4191935/How-nerve-venom-works> [<https://perma.cc/8MNH-JWEV>].

80. See Bogdanich & Ruiz, *supra* note 68.

81. McGee, *supra* note 27.

82. See generally KY. HORSE RACING COMM'N, KENTUCKY HORSE RACING COMMISSION UNIFORM DRUG, MEDICATION, AND SUBSTANCE CLASSIFICATION SCHEDULE (Nov. 2018), <http://khrc.ky.gov/Documents/Chapter%208-020-1-Drug%20and%20Medication%20Classification%20Schedule%20-%20Final.pdf> [<https://perma.cc/A2MP-HCLD>].

83. *Id.*

84. 810 KY. ADMIN. REGS. 8:030 § 3 (West 2020); 810 KY. ADMIN. REGS. 8:030 § 4 (West 2020).

85. 810 KY. ADMIN. REGS. 8:030 § 4(1)(a) (West 2020).

86. *Id.*

87. 810 KY. ADMIN. REGS. 8:030 § 4(1)(b) (West 2020).

88. 810 KY. ADMIN. REGS. 8:030 § 2 (West 2020). See also 810 KY. ADMIN. REGS. 9:010 (West 2020).

89. See generally *Deaton v. Ky. Horse Racing Auth.*, 172 S.W.3d 803 (Ky. Ct. App. 2004); *Ky. State Racing Comm'n v. Fuller*, 481 S.W.2d 298 (Ky. 1972).

Under the RCI, cobra venom and frog juice would be classified as a Class 1 drug due to their lack of therapeutic value and high potential for affecting the horse's racing performance.⁹⁰ These drugs would also be prohibited because they are not approved for use by the FDA.⁹¹ Frog juice would also be considered a derivative of an opiate, making it a Class 1 drug.⁹² The penalty for a trainer or owner whose horse tested positive for frog juice or cobra venom would be severe under the RCI rules. The drugs are listed under penalty category A, and the severity of punishment is determined by the number of previous lifetime offenses the trainer or owner has on his or her record.⁹³

The main issue with exotic drugs, like frog juice and cobra venom, is drug testing agencies are having a hard time keeping up.⁹⁴ Every day some trainers and owners push their horses to the highest capacity, heedless to the consequences of the horse's wellbeing. They create new concoctions of drugs to get the horse to perform at a high level, regardless of whether the horse should be running.⁹⁵ Drug testing laboratories have to create new tests constantly to keep up with the new drugs being used.⁹⁶ Drug testing laboratories are doing their best to keep up with the rapidly changing drug use in the industry, but it is still not enough to catch every horse that is being drugged before a race.

IV. GOING COLT TURKEY: MOVING TOWARDS DRUG FREE RACING

The first national step towards having drug-free races is through nationwide legislation and regulation. Having 38 states with different sets of rules is not working anymore.⁹⁷ Many advocates for drug-free racing are looking towards the

90. See ASS'N OF RACING COMM'RS INT'L, *supra* note 62, at 4.

91. See *id.* at 5.

92. *Id.* at 6.

93. See *id.*

94. See Bogdanich & Ruiz, *supra* note 68; Kimberli Gasparon, *The Dark Horse of Drug Abuse: Legal Issues of Administering Performance-Enhancing Drugs to Racehorses*, 16 JEFFREY S. MOORAD SPORTS L.J. 199, 208 (2009).

95. See generally MARY A. ROBINSON, UNIV. OF PA., EQUINE DRUG TESTING IN THE 21ST CENTURY (Oct. 2, 2020 10:01 PM), https://www.vet.upenn.edu/docs/default-source/penn-annual-conference/pac-2017-proceedings/equine-track/equine-drug-testing-in-the-21st-century---dr-robinson.pdf?sfvrsn=e243e1ba_2 [https://perma.cc/DG4U-3SQN].

96. See Dockterman, *supra* note 22.

97. See Baffert, *supra* note 52; see also Associated Press, *Major tracks to ban race-day use of anti-bleeding medication*, USA TODAY (Apr. 18, 2019 6:44 PM), <https://www.usatoday.com/story/sports/horseracing/2019/04/18/major-us-racetracks-to-ban-race-day-lasix-in-2021/39362243/> [https://perma.cc/8LR2-PZL8].

government to help solve the issue.⁹⁸ Others are fighting against having the government involved.⁹⁹ Lasix is the most current drug at issue because it is controversial both in and out of the racehorse industry.

Many advocates have petitioned lawmakers to pass a bill about drugs, like Lasix, being used in the industry.¹⁰⁰ The current version of the bill, H.R. 1754, is commonly called the Horseracing Integrity Act of 2020.¹⁰¹ In past Congressional sessions, versions of this bill have never made it to the point of being voted on in either the House or Senate.¹⁰² The Horseracing Integrity Act of 2020, and its 2019 Senate equivalent, proposes “[t]o improve the integrity and safety of horseracing by requiring a uniform anti-doping and medication control program to be developed and enforced by an independent Horseracing Anti-Doping and Medication Control Authority.”¹⁰³ The bill cites interstate and international commerce, as well as “a platform for consistency with all major international horseracing standards,” as grounds for enactment.¹⁰⁴

The bill proposes that the United States Anti-Doping Agency will oversee the drug testing of the horses because the agency already handles the nation’s Olympic athletes with a high degree of credibility and expertise.¹⁰⁵ The hope with passing this bill is to create a national standard for what medications will be

98. See Tim Sullivan, *The Horseracing Integrity Act urges Congress to save horse racing 'from itself'*, LOUISVILLE COURIER J. (Jan. 28, 2020 6:14 PM), <https://www.courier-journal.com/story/sports/horses/horse-racing/2020/01/28/horseracing-integrity-act-advocates-want-federal-intervention/4598251002/> [<https://perma.cc/97AK-7RL4>].

99. See Victor Reklaitis, *Bill creating new horse-racing authority amid track deaths draws opposition from Kentucky Derby owner*, MARKETWATCH (Jan. 30, 2020 10:27 PM), <https://www.marketwatch.com/story/bill-creating-new-horse-racing-authority-after-track-deaths-draws-opposition-from-kentucky-derby-owner-2020-01-29/> [<https://perma.cc/TB4E-XF68>].

100. See generally THE JOCKEY CLUB, VISION 2025: TO PROSPER, HORSE RACING NEEDS COMPREHENSIVE REFORM (MAR. 28, 2019), http://jockeyclub.com/pdfs/vision_2025.pdf [<https://perma.cc/MC6S-GCNK>].

101. See generally Horseracing Integrity and Safety Act of 2020, H.R. 1754, 116th Cong. (2d Sess. 2020).

102. Kaitlyn Mattson, *Once more around the track: Racetrack-led coalition created to address horse racing deaths, safety concerns*, AVMA (Jan. 15, 2020), <https://www.avma.org/javma-news/2020-02-01/once-more-around-track> [<https://perma.cc/4CY9-8Q3K>]; Busch, *supra* note 72, at 519.

103. Horseracing Integrity and Safety Act of 2020, H.R. 1754, 116th Cong. (2d Sess. 2020); Horseracing Integrity Act of 2019, H.R.1754, 116th Cong. (2019).

104. Horseracing Integrity Act of 2019, S. 1820, 116th Cong. (1st Sess. 2019).

105. Horseracing Integrity Act of 2019, H.R.1754, 116th Cong. (2019).

allowed for horses, a standard set of drug testing procedures, simplification of the rules around medications between different states, and to bring the industry as a whole closer to the international standard of competition.¹⁰⁶ With the amount of horses traveling interstate for races, it only makes sense to have one national policy, rather than 38 different state policies for what medications a horse can take. Streamlining the medications will allow owners and trainers to know what their horses can and cannot take, while not worrying what state the horse will be racing in throughout the season.

As of January 2020, the bill had the support of over 218 co-sponsors in the House, indicating it was nearly fit for passing the House.¹⁰⁷ Even with all of this support, there are many in the industry who oppose it. The opposition is comprised of various trainers, owners, tracks, veterinary associations, and other organizations.¹⁰⁸ These groups believe the bill brings too much regulation to the sport.¹⁰⁹ Many of these groups believe the government is uneducated about the industry and it should be regulated by groups who know the industry.¹¹⁰ They advocate to maintain its current system of associations, tracks, and states creating the rules, instead of the federal government.¹¹¹

A different issue the bill has is the sunset provision. Section 1820 states it will be effective for only five years, unless the conditions listed under section 4(e) are not met.¹¹² In order to meet section 4(e), 75% of states with racing must agree to either keep the authority created by the bill or include input from all stakeholders in the industry to create another authority.¹¹³ This provision will allow the states to

106. See Horseracing Integrity Act of 2019, S. 1820, 116th Cong. (1st Sess. 2019).

107. Sullivan, *supra* note 98.

108. Amy L. Kluesner, *And They're Off: Eliminating Drug Use in Thoroughbred Racing*, 3 HARV. J. OF SPORTS & ENT. L. 297, 316 (2012); U.S. Trotting Association opposes the Horse Racing Integrity Act of 2019 (S. 1820), U.S. TROTting ASSOC. (June 13, 2019), <http://ustrottingnews.com/u-s-trotting-association-opposes-the-horse-racing-integrity-act-of-2019-s-1820/> [<https://perma.cc/BH79-LWGW>]; Reklaitis, *supra* note 99.

109. See Keith Crupper, *Congress should listen to veterinarians before considering race day Lasix ban*, COURIER J. (Sep. 23, 2019 7:35 AM), <https://www.courier-journal.com/story/opinion/2019/09/23/horseracing-integrity-act-congress-should-listen-veterinarians/2367559001/> [<https://perma.cc/WMD4-9ZJM>].

110. See generally Gasparon, *supra* note 94; Jason Frakes, *Trainers respond to racetracks' call for phasing out of Lasix*, COURIER J. (Apr. 18, 2019 6:20 PM), <https://www.courier-journal.com/story/sports/horses/horse-racing/2019/04/18/lasix-phased-out-racetracks-churchill-downs-keeneland-trainers-react/3507997002/> [<https://perma.cc/N5X5-LH2J>].

111. Kluesner, *supra* note 107, at 317.

112. Horseracing Integrity Act of 2019, S. 1820, 116th Cong. (2019).

113. *Id.*

modify the authority to better fit with the changing industry and international standards.¹¹⁴ If the bill is enacted, but section 4(e) is triggered, then some states will likely revert to the current system because the bill does not require 100% agreement.¹¹⁵ Having some states revert to the current system would set the industry back and recreate horse welfare issues.

This race to the bottom would likely be similar to usury laws in consumer law. As with predatory credit card companies headquartered in states with lax usury laws, states with minimal regulations on medications will quickly attract crooked owners and trainers who will use the system to their advantage. This would likely lead to horses racing in these more lenient states who could not otherwise qualify to race in states with strict regulations on medications and cause a higher number of unfit racehorses racing and breaking down on the track. Thus, the vulnerable horses that should not race, but are given medications to race anyways, would not be protected as they should, or would be, under section 1820.

While the industry waits to see if the Horseracing Integrity Act passes, thoroughbred clubs and organizations are working with individual state authorities to start changing the way races are conducted. One of the newest organizations is the Thoroughbred Safety Coalition, which was launched on November 19, 2019.¹¹⁶ This organization's goal is to make changes to the medical, organization, and operations of the industry.¹¹⁷ It is comprised of more than 85% of the graded stakes racing in the country.¹¹⁸ The proposals of the coalition range from changing the medication timetables for racing periods, adding in a mandatory system for medical reporting of the horses, and creating a more unified system of rules throughout all of the states.¹¹⁹ One of the largest problems the coalition faces is getting all 38 states to agree to the same set of rules.¹²⁰ The National Thoroughbred Racing Association has tried in the past to change race day medications in a universal way without government regulations and not having all of the states signed on.¹²¹ In 2011, the RCI tried to implement a five-year phase out plan for

114. *See id.*

115. *Id.*

116. Mattson, *supra* note 102.

117. *Id.*

118. *Leading Thoroughbred Racing Organizations Launch Safety Coalition*, KEENELAND (Nov. 19, 2019), <https://keeneland.com/media/news/leading-thoroughbred-racing-organizations-launch-safety-coalition> [<https://perma.cc/WC96-BS45>].

119. Mattson, *supra* note 102.

120. *See* Joanna M. Frederick, *Saving Silent Sufferers: The Case for Federal Regulation of Drug Use in Horseracing*, 1 MISS. SPORTS L. REV. 411, 419 (2012).

121. *See* Mattson, *supra* note 102; Emily Barone, *Horse Deaths Are Haunting the Racing World Ahead of the Kentucky Derby. Here's What's Being Done to Stop Them*, TIME (May 3,

medications given to the horses for races.¹²² RCI recommended this zero-tolerance policy but it was not fully enacted because every jurisdiction allows for race day medications in some capacity.¹²³

Some states, like Kentucky, have implemented their own changes within their jurisdiction.¹²⁴ The KHRC is the governing body for the state of Kentucky on race horing law and received this power from the state legislator.¹²⁵ The KHRC has a partnership with the University of Kentucky Veterinary Diagnostic Laboratory, so every horse that has a breakdown on a Kentucky track must have a necropsy to determine the cause of the breakdown.¹²⁶ The findings of each recent necropsy are posted online with limited identifying information on the horse and the cause of the breakdown.¹²⁷ Some people say the KHRC should give the public more of the identifying information for each breakdown, but, at the time, Kentucky cited privacy concerns for the owners of the dead racehorses and open record laws for not doing so.¹²⁸ Since then, the state has released more personal information on each horse that has broken down at Kentucky tracks.¹²⁹

Kentucky, through the KHRC, has recently started a plan to phase out the use of race day Lasix.¹³⁰ This plan states that, starting in 2020, two-year-old

2019, 2:45 PM), <https://time.com/5582343/horse-deaths-kentucky-derby/> [<https://perma.cc/VD5X-FZ43>]; see generally, Kjirsten Lee, *Transgressing Trainers and Enhanced Equines: Drug Use in Racehorses, Difficulty Assigning Responsibility and the Need for a National Racing Commission*, 11 J. ANIMAL & NAT. RES. L. 23, 41 (2015).

122. Kluesner, *supra* note 108, at 312.

123. *Id.*

124. Mattson, *supra* note 102.

125. Ky. Rev. Stat. § 230.260.

126. See Tom LaMarra, *KY Necropsy Program Disproves 'Bad Step' Myth*, BLOODHORSE (Oct. 20, 2014), <https://www.bloodhorse.com/horse-racing/articles/111180/ky-necropsy-program-disproves-bad-step-myth> [<https://perma.cc/T2C3-7JPT>].

127. See generally *Kentucky Horse Racing Commission*, PUBLIC PROTECTION CABINET (Oct. 2, 2020), <http://khrc.ky.gov/Pages/EquineHealth.aspx> [<https://perma.cc/6WRK-VD6J>].

128. Caitlin McGlade, *How Kentucky Keeps Horse Racing Deaths Secret*, NPR (Jun. 8, 2019 8:31 AM), npr.org/2019/06/08/730898394/how-kentucky-keeps-horse-racing-deaths-secret [<https://perma.cc/5Q7P-DMZ4>].

129. Tim Sullivan, *Horse fatality reports made public for first time by Kentucky Horse Racing Commission*, COURIER JOURNAL (Jun. 27, 2019 2:41 PM), <https://www.courier-journal.com/story/sports/horses/2019/06/27/kentucky-horse-racing-commission-makes-necropsy-reports-public/1556756001/> [<https://perma.cc/5AR7-996E>].

130. Martin Finley, *Kentucky adopts new horse racing safety reforms, bans controversial drug*, LOUISVILLE BUS. FIRST (Dec. 11, 2019 11:22 AM), <https://www.bizjournals.com/louisville/news/2019/12/11/kentucky-adopts-new-horse-racing-safetyreforms.html> [<https://perma.cc/G9E7-CTZG>].

racehorses, and, starting in 2021, three-year-old horses for all graded stake races will not be given Lasix on race day.¹³¹ This plan also includes other changes to the administration and timing of other race day drugs at state race tracks.¹³² The KHRC also posts a document on their website of the amount of drug tests performed for a specific year and includes the breakdown of what, when, and how many samples were taken.¹³³ It also accounts for how many violations were found per the number of races. For example, in 2019 there were 15,456 race starts and the KHRC found on average one violation per 552 starts.¹³⁴

Each state also has their own approach for dealing with those that break the drug laws in the state.¹³⁵ In Kentucky, legislation outlines what happens to trainers and owners that break the drug laws. The severity of the punishment is determined by the number of previous offenses and the class of drug or drugs found in the horse's system.¹³⁶ For example, if a trainer in Kentucky were found to have given the horse a Class A drug, the trainer and owner would likely be disciplined under 810 Kentucky Administrative Regulations 8:030, section 4, with the severity of the punishment depending on the amount of prior offenses in conjunction with 810 Kentucky Administrative Regulations 8:030, section 3.¹³⁷ If this infraction was the trainer's first offense, the trainer could face a zero to three year suspension and a \$10,000 to \$25,000 fine, absent mitigating circumstances.¹³⁸ If this infraction was the trainer's third offense, the trainer would face a five year to lifetime ban and a \$50,000 to \$100,000 fine, absent mitigating circumstances.¹³⁹ In comparison, if the same hypothetical occurred in New York, the trainer would instead face a penalty of a suspension based on the number of points given for the current and previous infractions and any other punishment as determined by the steward or judge.¹⁴⁰ It is this difference in punishment that gives the racing commissions of each state a

131. *Id.*

132. *Id.*

133. *See generally* 2019 DRUG TESTING SUMMARY, KENTUCKY HORSE RACING COMM'N (2019), <http://khrc.ky.gov/Documents/2019%20Drug%20Testing%20Summary.pdf> [<https://perma.cc/UDJ7-XFLN>].

134. *Id.*

135. Gasparon, *supra* note 94, at 200.

136. *See generally* 810 KY. ADMIN. REGS. 8:030 § 4 (West 2020).

137. 810 KY. ADMIN. REGS. 8:030 §§ 3, 4 (West 2020).

138. 810 KY. ADMIN. REGS. 8:030 § 4(1)(a) (West 2020).

139. *Id.*

140. *See Horse Racing*, N.Y. ST. GAMING COMM'N (Oct. 2, 2020, 5:30 PM), <https://www.gaming.ny.gov/horseracing/edrugtest.php> [<https://perma.cc/C5FT-A4PM>]; N.Y. COMP. CODES R. & REGS. POINTS. 9 § 4045.3(a), 4045.4(a), 4550.11 (West 2020).

bad reputation.¹⁴¹ The lack of uniformity allows for trainers of ill repute to racehorses in jurisdictions with more lax punishments, putting the horse's welfare at risk.

Recently in New York, the FBI and the United States District Attorney's office of the Southern District of New York indicted 27 people for doping racehorses among other charges.¹⁴² The drugs were a banned substance called SGF-1000, which increases red blood cell counts among other benefits.¹⁴³ Because the doping ring crossed both state and international borders, there are questions of how each jurisdiction will prosecute and punish each person in the indictment.¹⁴⁴ So far, the New York State Gaming Commission has suspended all of the trainers indicted and placed all horses under those trainers on the Stewards' List for the ease of drug testing.¹⁴⁵

Individual tracks also implement their own rules and regulations for what can occur at their facilities and races.¹⁴⁶ Over 20 leading tracks have planned to phase out race day use of Lasix.¹⁴⁷ This plan states that two-year-old horses cannot be given Lasix 24 hours before a race in 2020 and extends to three-year-old horses in 2021.¹⁴⁸ This plan is limited to the tracks that have agreed to it. As seen above, the state of Kentucky has also moved the entire state to a similar plan.¹⁴⁹ This is a good start for individual tracks beginning to self-govern the amount of Lasix given to racehorses but does not stop the use entirely. It does not stop the administration of Lasix on horses that do not or cannot qualify to race at those tracks. This plan

141. See Gasparon, *supra* note 94, at 204-206; Frederick, *supra* note 120, at 420-421. See generally Lee, *supra* note 121.

142. Sonia Moghe & Eric Levenson, *Trainer of champion horse Maximum Security among 27 people indicted in horse-racing doping scheme*, CNN (Mar. 10, 2020, 9:12 AM), <https://www.cnn.com/2020/03/09/us/racehorse-doping-indictments/index.html> [<https://perma.cc/W9SH-UFZZ>].

143. Eric Mitchell, *The Mystery of SGF-1000, at Center of Indictments*, BLOODHORSE (Mar. 9, 2020), <https://www.bloodhorse.com/horse-racing/articles/238970/the-mystery-of-sgf-1000-at-center-of-indictments> [<https://perma.cc/L4EN-BY6C>].

144. See Moghe & Levenson, *supra* note 142.

145. SCOTT E. PALMER, NYSGC DIRECTIVE FOR THOROUGHBRED HORSES LINKED TO ALLEGED DRUG VIOLATIONS, N.Y. STATE GAMING COMM'N (Mar. 17, 2020), <https://www.gaming.ny.gov/pdf/EMD%20Advisory-NYSGC%20TB%20Protocol%20for%20horses%20linked%20to%20equine%20drug%20allegations.pdf> [<https://perma.cc/R85J-URJN>].

146. See Barone, *supra* note 121.

147. *Id.*

148. Associated Press, *supra* note 97.

149. Finley, *supra* note 130.

also does not regulate other race day drugs given to horses, or outline what happens to owners and trainers that do not comply with the plan.

With the amount of scrutiny the industry is under after the highly publicized death toll at the Santa Anita track in 2019, uniformed national rules need to be adopted to boost public confidence in the industry and to increase the welfare of the horses. Individual tracks, coalitions, and states doing their own plans will likely not be enough to fix the rampant overuse of drugs within the industry.¹⁵⁰

V. MANY ARE COLT, FEW ARE CHOSEN: BREEDING MISMANAGEMENT

For the American racehorse industry, the best prediction of a foal's success on the track comes from the amount of champions it has in its stud book.¹⁵¹ The overemphasis on certain champion lines has led to overbreeding and the heightening of common genetic issues within the current genetic pool.¹⁵² Most of the horses within the American horse racing industry are very inbred. Nearly all American thoroughbreds are related to the three original sires that started the racehorse industry in America.¹⁵³ According to one finding, 95% of the current racehorses are related to the same distant sire from the 1700s.¹⁵⁴ A more modern example appeared in 2008. The filly Eight Belles had the same sire, Native Dancer, appear in four different locations within her stud book.¹⁵⁵ Native Dancer was also listed as a sire for every one of the horses that ran in the 2008 Kentucky Derby with Eight Belles.¹⁵⁶ Descendants of Native Dancer are known for having inherited weak ankles and bad feet, which has led to multiple breakdowns within his genetic lineage, similar to Eight Belles.¹⁵⁷ In a career ending race, Eight Belles broke both of her front legs at the ankles and was euthanized on the track.¹⁵⁸ Many within the

150. See generally Barone, *supra* note 121.

151. See Nack, *supra* note 16.

152. David Derbyshire, *How Genetics Can Create the Next Superstar Racehorse*, THE GUARDIAN (June 22, 2014, 2:30 PM), <https://www.theguardian.com/science/2014/jun/22/horse-breeding-genetics-thoroughbreds-racing-dna> [<https://perma.cc/67CU-VD98>]; see Walker, *supra* note 6.

153. *Breeding Thoroughbreds*, IOWA PBS (OCT. 2, 2020, 6:04 PM), <https://www.pbs.org/wgbh/americanexperience/features/seabiscuit-breeding/> [<https://perma.cc/3NTN-6WMV>]; Lee, *supra* note 121, at 40.

154. Derbyshire, *supra* note 152.

155. Nack, *supra* note 16.

156. *Id.*

157. *Id.*; Anthony Russolello, *Avoiding a Triple Frown: The Need for a National Horse Racing Commission*, ANIMAL LEGAL & HIST. CTR.: MICH. STATE UNIV. (2009), <https://www.animallaw.info/article/avoiding-triple-frown-need-national-horse-racing-commission> [<https://perma.cc/3DY7-3FQS>].

158. Russolello, *supra* note 157.

industry knew about the historic problems of Native Dancer's genetic flaws, but continued to use his genetics in breeding, regardless of the risk to the foal.¹⁵⁹ Some veterinarians worry the combination of overusing top sires and the diminishing need for foal because of national economic conditions will further shrink the genetic pool.¹⁶⁰

Genetic flaws within the breed are not only limited to the risk of broken ankles. Exercise-induced pulmonary hemorrhage (EIPH) is also an inherited trait.¹⁶¹ Without the use of Lasix, some horses would be unable to compete because of the risk of EIPH.¹⁶² Yet, because they continue to race, these horses are able to pass this trait along to the next generation, causing future generations to have the possibility of EIPH.

Germany has banned the use of Lasix and the breeding of horses that are known bleeders.¹⁶³ By doing this, the German race horsing industry is trying to eliminate this gene from the gene pool, and allow trainers and owners to avoid the need for Lasix.¹⁶⁴ As seen in international competition, horses already have the ability to race without the use of the drug.¹⁶⁵ A national ban on Lasix will affect the American thoroughbred population in the next decade because those horses that need Lasix will no longer be able run races, nor collect stud fees.¹⁶⁶ This will lower the value of these horses, causing an increase in the number of unwanted racehorses.¹⁶⁷ By not allowing known bleeders to race or breed, the chances of foals inheriting the gene will likely decrease over time as the gene is lowered in the population.¹⁶⁸

Other issues with breeding are the goals of the breeders. Breeders today have different goals for the next generation of champions than breeders in the past. In the past, horses were bred for speed and stamina because champions, like Man O'

159. *Id.*

160. Ann Gibbons, *Racing for Disaster? Breeding Thoroughbreds for Speed May Harm Their Health*, 344 *SCIENCE* 6149, 1213 (June 13, 2014).

161. Kentucky Equine Research Staff, *Study Suggests Heritability of EIPH in Horses*, *KY. EQUINE RSCH.* (Mar. 19, 2015), <https://ker.com/equine/news/study-suggests-heritability-eiph-horses/> [<https://perma.cc/N63N-T9FJ>].

162. *See* Russolello, *supra* note 157.

163. Hickok, *supra* note 28.

164. *See id.*

165. *Id.*

166. Associated Press, *supra* note 97.

167. *See* Wes Bright, *Lasix and Horseracing: Till Death Do Them Part*, 6 *KY. J. EQUINE, AGRIC. & NAT. RESOURCES L.* 1, 118 (2013).

168. *See id.*

War, Seabiscuit, and Seattle Slew, raced in multiple events a year and had careers that lasted longer than a single season.¹⁶⁹ The champions of today, like American Pharoah and Justify, only ran in a handful of races before being retired.¹⁷⁰ Some believe shortening the race careers is due in part to inbreeding.¹⁷¹ Owners purposefully shorten the careers of champions to prevent them from breaking down because a champion horse cannot collect stud fees after a breakdown from a genetically inherited disposition.¹⁷² For example, Justify was retired quickly after winning the Triple Crown because of an ankle problem in his front leg.¹⁷³ His owners were worried about his minor pain turning into a lethal injury if they continued to race him.¹⁷⁴ Thus, Justify was retired and his breeding rights sold to Coolmore Corporation, where he claims a six figure stud fee.¹⁷⁵

Another difference between breeders of the past and present is current breeders are also breeding horses for the prices they can command at auction.¹⁷⁶ As Gibbons wrote, “[f]oals sired by top stallions command the highest prices at auction”¹⁷⁷ At Keeneland’s 13 day auction in 2018, over \$377 million was spent on buying racehorses, with an average price of \$129,331 per horse and some as high as \$2 million.¹⁷⁸ Horses with high conformation counts and pedigrees of

169. See Terry Conway, *Man o’ War: The Measuring Stick for Greatness*, AM.’S BEST RACING (Dec. 26, 2016), <https://www.americasbesttracing.net/the-sport/2016-man-o-war-the-measuring-stick-greatness> [<https://perma.cc/N72Y-ZSLZ>]; see also *Seabiscuit - An American Legend*, THOROUGHBRED GREATS (Oct. 2, 2020), <http://tbgreats.com/seabiscuit/rr.html> [<https://perma.cc/N748-RGMF>]; *Seattle Slew*, AM. CLASSIC PEDIGREES (Aug. 8, 2020), <http://www.americanclassicpedigrees.com/seattle-slew.html> [<https://perma.cc/B36U-DVD7>].

170. See, e.g., *Justify*, COOLMORE (Oct. 2, 2020 7:14 PM), <https://coolmore.com/farms/america/stallions/justify> [<https://perma.cc/5UVJ-WKRG>].

171. Gibbons, *supra*, note 160, at 1213; Liz Hardin, *Are Thoroughbred Racehorses Being “(In)bred to Death?”*, PETHelpful (Jul. 28, 2019), <https://pethelpful.com/horses/Are-Thoroughbred-Racehorses-Really-Being-Bred-to-Death> [<https://perma.cc/64FJ-7GSB>]; see also Russolello, *supra* note 157.

172. Russolello, *supra* note 157.

173. Associated Press, *Triple Crown winner Justify retired from racing, won all six career starts*, ESPN (Jul. 25, 2018), https://www.espn.com/horse-racing/story/_/id/24192089/triple-crown-winner-justify-retires-racing [<https://perma.cc/AGM8-BB47>].

174. *Id.*

175. See *Justify*, *supra* note 170; see also JR Minkel, *Horse Racing’s Cripple Crown?: Industry Works to Prevent Fatal Injuries*, SCIENTIFIC AMERICAN (May 16, 2008), <https://www.scientificamerican.com/article/horse-industry-breeding-to-prevent-injuries/> [<https://perma.cc/8AM3-V2UA>].

176. See Gibbons, *supra* note 160, at 1214; Hardin, *supra* note 171.

177. Gibbons, *supra* note 160, at 1214.

178. Miriam Gottfried, *Hundreds of Millions Spent on Racehorses Based on False X-Rays, Buyers Claim*, WALL ST. J. (Mar. 22, 2019 2:59 PM),

well-known champions typically claim bigger amounts at the auctions.¹⁷⁹ For example, a filly sired by American Pharoah was sold at the Keeneland September yearling sale for \$8.2 million in 2019.¹⁸⁰ The filly had never raced, but still received the highest price for a filly ever sold at Keeneland and the highest price for a yearling since 2006.¹⁸¹ After the auction, whether the horse goes on to be a champion is no longer a concern to the breeder because they have already made their money on the horse.

If the horse does go on to be a champion, then it adds to the reputation of the sire.¹⁸² Champion progeny boost the prices breeders can charge for the sire's stud fees.¹⁸³ Stud fees are determined through a combination of demand, the horse's career earnings and titles, and the earnings of its progeny.¹⁸⁴ One example is the increase in stud fees of Seabiscuit's sire, Hard Tack.¹⁸⁵ As Seabiscuit won more races and became famous, the stud fees for Hard Tack rose.¹⁸⁶ A modern example is Tapit, a horse who only won three out of six races in his career and has a history of lung problems.¹⁸⁷ When he started as a stud in 2004, he had a \$15,000 fee, which increased to \$150,000 in 2014 due to the amount of champions he sired.¹⁸⁸ Tapit is currently on the downward trend after 2018.¹⁸⁹ From 2015 to 2018, Tapit had the highest stud fee in the nation at \$300,000 a cover, which dropped to

<https://www.wsj.com/articles/misdating-of-x-rays-calls-into-question-the-integrity-of-thoroughbred-auction-11553256066> [<https://perma.cc/U4ET-K2ZU>].

179. See *10 Things To Know About Buying Yearlings At The Keeneland September Sale*, KENEELAND (Sep. 14, 2018),

<https://www.keeneland.com/media/news/10-things-know-about-buying-yearlings-keeneland-september-sale> [<https://perma.cc/WV4H-5G7Y>].

180. Jason Frakes, *Filly sired by American Pharoah purchased for \$8.2 million at Keeneland sale*, COURIER J. (Sep. 11, 2019, 5:28 PM), <https://www.courier-journal.com/story/sports/horses/horse-racing/2019/09/11/american-pharoah-filly-purchased-8-2-million-keeneland-sale/2292065001/> [<https://perma.cc/P232-AT8U>].

181. *Id.*

182. See generally Nicole Russo, *War Front, Tapit, Medaglia d'Oro still commanding top stud fees*, DRF (Feb. 8, 2019), <https://www.drf.com/news/war-front-tapit-medaglia-doro-still-commanding-top-stud-fees> [<https://perma.cc/8W3S-NBXC>].

183. See generally *id.*

184. *Breeding Thoroughbreds*, *supra* note 153.

185. *Id.*

186. *Id.*

187. Zack Guzman, *How 'America's most valuable stallion' makes over \$35 million a year without setting hoof on the track*, CNBC (Jun. 8, 2017 9:15 AM), <https://www.cnbc.com/2017/06/07/how-americas-most-valuable-stallion-makes-35-million-a-year.html> [<https://perma.cc/5G6V-AUQV>].

188. *Id.*

189. Russo, *supra* note 182.

\$225,000.¹⁹⁰ Tapit dropped again to a \$200,000 stud fee for 2020 after siring 25 Grade I winners, having 28 yearlings claiming at least \$1 million at auction, and all his progeny combined earning more than \$155 million in races.¹⁹¹

With the success of horses like Tapit in the breeding shed, the industry has become stuck in the mindset that a champion horse should only be raced enough times to secure high breeding rights, then be retired to sire as many foals as possible. This trend may also be pushed with the rise of syndicate ownership. As syndicates have become more popular, investors want a higher return on their investments. Fusaichi Pegasus is a prime example of this.¹⁹² The syndicate who owns him paid \$60 million for the stallion and retired him at the age of three after a two-year racing career.¹⁹³ The average thoroughbred has a lifespan of 25 years.¹⁹⁴ If Fusaichi Pegasus covers 50 mares a year for the next 20 years at \$200,000 a cover, the syndicate will make about \$200 million in stud fees.¹⁹⁵ That number does not account for inflation, the possibility of the stud fee growing larger from champion foals, the covering of more mares through a larger book, or shuttling to a different hemisphere.

It is not uncommon for stallions to cover as many mares as in the Fusaichi Pegasus hypothetical. During the 1960s, many of the top stallions covered 40 to 50 mares every year.¹⁹⁶ In the 1990s, this number jumped to 150 or more for the top stallions.¹⁹⁷ According to Jockey Club statistics, in the 2018 breeding season each stallion covered between 1 and 296 mares.¹⁹⁸ American Pharoah covered 182 mares, siring 140 foals,¹⁹⁹ and Tapit covered 115 mares, siring 77 foals.²⁰⁰ With top horses creating a large proportion of the next generation of horses, the depth

190. *Id.*

191. *Tapit*, GAINSWAY (Oct. 4, 2020 12:45 PM), <https://gainesway.com/stallions/tapit/> [<https://perma.cc/GJB9-9ETH>].

192. *Breeding Thoroughbreds*, *supra* note 153.

193. *Id.*

194. *Id.*

195. *See id.*

196. Walker, *supra* note 6.

197. *Id.*

198. *See Breeding Statistics*, THE JOCKEY CLUB (Feb. 22, 2021, 8:45 PM), <http://jockeyclub.com/default.asp?section=Resources&area=19&report=LF&reportyear=2018&letter=I> [<https://perma.cc/3CS6-MYDB>].

199. *Breeding Statistics*, THE JOCKEY CLUB (Oct. 2, 2020, 6:03 PM), <http://jockeyclub.com/default.asp?section=Resources&area=19&report=LF&reportyear=2018&letter=A> [<https://perma.cc/R35W-ARPN>].

200. *Breeding Statistics*, THE JOCKEY CLUB (Feb. 22, 2021, 8:42 PM), <http://jockeyclub.com/default.asp?section=Resources&area=19&report=LF&reportyear=2018&letter=T> [<https://perma.cc/5EVP-B6JS>].

of the gene pool is rapidly shrinking and the amount of inherited genetic flaws are increasing.²⁰¹

VI. TAKING A COLT HARD LOOK TOWARDS BETTER BREEDING PRACTICES

To help alleviate the issues of drug dependence and the breeding flaws discussed in the previous sections, the American racehorse industry needs to create new guidelines for breeding practices. The first reason for creating this change is to reduce the amount of known genetic disorders within the population. Not all genetic disorders can be bred completely out of the population, but occurrences of the main disorders plaguing racehorses may be reduced with better breeding practices.²⁰²

EIPH is an example of an inherited trait among horses that may be lessened through breeding.²⁰³ With the removal of Lasix in current races at certain courses and a national ban planned within the Horseracing Integrity Act, it will become more important to breed not only for speed, but a reduced chance of bleeding related to EIPH.²⁰⁴ If horses are bred with a conscious concern of speed, and also avoidance of EIPH, then the amount of horses needing to take Lasix will likely be reduced.²⁰⁵

One issue here is what happens to a horse that bleeds on the track from racing. Horses with EIPH could continue to race using alternatives such as nose strips, but should not be allowed to breed.²⁰⁶ Germany has already taken this step and actually bans the breeding of known EIPH bleeders within their industry.²⁰⁷ Breeding horses that are known to bleed perpetuates the genetic material that causes bleeding to continue to the next generation.²⁰⁸

Some would say banning known EIPH bleeders from breeding would cause several issues of its own within the industry.²⁰⁹ One potential issue is figuring out

201. Gibbons, *supra* note 160, at 1214.

202. *See, e.g., id.*

203. *See* Eric Mitchell, *Study: EIPH is an Inherited Trait*, BLOODHORSE (Jun .14, 2011), <https://www.bloodhorse.com/horse-racing/articles/135743/study-eiph-is-an-inherited-trait> [<https://perma.cc/466P-WCX8>].

204. *See generally id.*

205. *See id.*

206. Hickok, *supra* note 28.

207. *Id.*

208. *See* Mitchell, *supra* note 203.

209. *See generally* Sid Fernando, *Taking Stock: Beneath Lasix, EIPH Is Real*, THOROUGHBRED DAILY NEWS (May 31, 2019, 12:02 PM.),

who would decide whether a horse is considered a known bleeder.²¹⁰ Currently, in Kentucky, the racehorse commission maintains a list of each horse that has bled, when and where it occurred, and the reason for the bleed in the horse.²¹¹ This information is useful for current breeders, allowing them to be aware of the bleeding history of the horse and the severity of the bleed. The categories used for identification in Kentucky can be adapted on a national scale. The Jockey Club already has the capabilities to create and manage a national database for bleeding in racehorses and would likely be the best candidate for running a database as they already oversee the American stud books and approval of racehorses into those books.²¹²

Another issue many would point to is that a ban on breeding and the inability to breed a horse that later bleeds would cause a downturn of interest in the market and the number of foals born every year in the United States to drop.²¹³ With less horses being born every year, the number of races would also shrink. This has yet to be seen because, overall, the North American area has been shrinking in the number of foals born every year, even without a Lasix or breeding ban in place.²¹⁴ In 2017, there were 20,598 registered foals in the United States.²¹⁵ From 2009-2017 this was a 30.4% drop in the total number of foals being born in the United States, all before the Lasix ban at several individual tracks was implemented.²¹⁶ The number of foals born in the United States is dropping, but the quality of foals is still in question due to the importance of bloodline rather than possible inherited genetic problems. The horse racing industry as a whole has been losing popularity

<https://www.thoroughbreddailynews.com/taking-stock-beneath-lasix-eiph-is-real/>
[<https://perma.cc/8PVU-6ERR>].

210. See generally *id.*

211. See *Equine Health and Medication*, KY. HORSE RACING COMM'N (Oct. 27, 2020 10:34 AM), http://khrc.ky.gov/new_docs.aspx?cat=30&menuid=30#details246
[<https://perma.cc/L858-Z5P7>].

212. *The American Stud Book Principal Rules and Requirements*, THE JOCKEY CLUB (Oct. 2, 2020 10:50 PM),
<http://www.registry.jockeyclub.com/registry.cfm?Page=tjcRuleBook#main>
[<https://perma.cc/N2VL-P3KC>].

213. See Joe Drape, *Horse Deaths Are Threatening the Racing Industry. Is the Sport Obsolete?*, N.Y. TIMES (Apr. 29, 2019), <https://www.nytimes.com/2019/04/29/sports/horse-deaths-kentucky-derby.html> [<https://perma.cc/8SK5-UVND>].

214. See, e.g., *Distribution of Registered US Foal Crop by State*, THE JOCKEY CLUB, (Oct. 2, 2020 6:18 PM), <https://jockeyclub.com/default.asp?section=FB&area=4>
[<https://perma.cc/N28C-5A7H>].

215. *Id.*

216. See *id.*

with the general public in America due to concerns about horse deaths and rampant drug use.²¹⁷

Ever since the economic crash of 2008, fewer people have been willing to get into the market for buying horses because the risk of return is so high.²¹⁸ As an individual owner of a single horse, the risk the horse will not be a champion or claim high breeding fees is substantial.²¹⁹ This risk of return would be heightened further with a ban on breeding the horse if it develops a bleeding problem. It is typical to lose money owning a racehorse because the odds of winning are so slim.²²⁰ The lack of people interested and capable of owning a racehorse has dropped the number of foals because there is not enough demand for them at the price point the breeders desire.²²¹

Only when breeders are able to predict the likelihood of a horse developing EIPH will they be able to claim top dollar at auction.²²² Breeders will no longer be able to rely solely on the stud book and the look of the horse to claim top dollar. A yearling, filly, or colt will not be worth much if it cannot be raced or bred to recover the investment and create a profit for the new owner.²²³ By breeding responsibly and looking at the sire and dam's known genetic issues, only then can breeders create the next generation with fewer genetic issues. Horses bred with fewer genetic issues will likely create a healthier population and lead to more sound racehorses that can have careers rather than a couple of races.

The second issue, overbreeding of popular sires causing an increase in the genetic inbreeding of the population, also has a possible solution through the use of better breeding practices. This could be done through book size limits.²²⁴ The

217. Joe Drape, *Horse Deaths Are Threatening the Racing Industry. Is the Sport Obsolete?*, THE N.Y. TIMES (Apr. 29, 2019), <https://www.nytimes.com/2019/04/29/sports/horse-deaths-kentucky-derby.html> [https://perma.cc/25DS-4R2Y].

218. Graham Winfrey, *The Unconventional Way ZipRecruiter Is Tracking the Next Recession*, INC. (Sep. 24, 2019), <https://www.inc.com/graham-winfrey/recession-economic-indicator-horse-racing-keeneland-auction.html> [https://perma.cc/M6Z3-WQVN].

219. Hillary Haffower, *Forget owning a sports team: Rich people are snapping up race horses for up to \$2.4 million, and they'll probably never get that money back*, BUSINESS INSIDER (Oct. 14, 2018 8:05 AM), <https://www.businessinsider.com/rich-people-buy-yearling-racehorses-investment-keeneland-2018-10> [https://perma.cc/3L3B-3MG2].

220. *Id.*

221. *Id.*

222. *See generally* Mitchell, *supra* note 203.

223. *See* Haffower, *supra* note 219.

224. *See generally* BloodHorse Staff, *The Jockey Club Exploring Book Size Limits*, BLOODHORSE (Sep. 6, 2019), <https://www.bloodhorse.com/horse->

book size in this case is the amount of mares a single stallion will breed during a given season.²²⁵ The Jockey Club currently passed a limit on the book size of the American stallions that have a birth year of 2020 or later.²²⁶ The Jockey Club hopes by limiting the top stallions to a certain amount of mares every year, the amount of shared genetics between horses will begin to slow.²²⁷ The current limit is 140 mares per stallion in the United States if the stallion is born during or after 2020.²²⁸ For horses born before 2020, the Jockey Club does not impose a limit.²²⁹ This new rule may create issues with older horses still being allowed to breed as many mares as possible, while younger sires are limited in their breed books.²³⁰ Breeders may complain this will affect their bottom line because they will no longer be able to breed their top stallions as much as they want to maximize their profits from stud fees. This will likely not be the case, as demonstrated through stallions like War Front.

War Front's owners have capped his book to around 80 mares each season.²³¹ War Front's owners cap his book because it limits the amount of progeny produced, raising the auction prices of his progeny.²³² Having a limited supply of spots also raises the demand for War Front and allows the owners to increase the amount of stud fees to reflect the current market.²³³ Thus, the owners of War Front have been able to demand higher stud fees and create a greater demand for War Front's progeny.²³⁴

In order for the Jockey Club to have success in slowing down the inbreeding of the thoroughbred population they will need support from different areas. First, book limits for stallions is a good first step in reigning in the number of foals bred from the same sire. Second, more research is needed in horse genetics and within the thoroughbred population. Currently, there is not a lot of research completed on

racings/articles/235617/the-jockey-club-exploring-book-size-limits [https://perma.cc/3N5X-R45V].

225. *Id.*

226. Eric Mitchell, *The Jockey Club Adopts Cap of 140 Mares Bred*, BLOODHORSE (May 7, 2020), <https://www.bloodhorse.com/horse-racing/articles/240035/the-jockey-club-adopts-cap-of-140-mares-bred> [https://perma.cc/P7X7-ZJ6C] [hereinafter *The Jockey Club Adopts Cap of 140 Mares Bred*].

227. BloodHorse Staff, *supra* note 224.

228. *The Jockey Club Adopts Cap of 140 Mares Bred*, *supra* note 226.

229. *Id.*

230. *See id.*

231. *See* Russo, *supra* note 182.

232. *Id.*

233. *Id.*; *see generally* *The Jockey Club Adopts Cap of 140 Mares Bred*, *supra* note 226.

234. Russo, *supra* note 182.

thoroughbred genetics and how these are affected through different breeding practices.²³⁵ Without this research, organizations like the Jockey Club are left without scientific evidence to be the basis for new rules and regulations.

Third, international organizations across the world would have to help. The Jockey Club can only control the horses within the United States, so breeding practices in other racing countries fall outside of its jurisdiction.²³⁶ This is already exploited by shuttling stallions from the Northern Hemisphere countries to Southern Hemisphere countries.²³⁷ This doubles the breeding season of a stallion each year, allowing the owners to collect more stud fees and avoid book limits because of multiple jurisdictions.²³⁸ Thus, after the Jockey Club implemented a book limit, an owner of a stallion born in 2020 could breed it up to the 140 mare book limit in America, then shuttle the stallion to Australia and continue to breed him there within the same year.²³⁹ Without international help in preserving the genetic diversity of the thoroughbred population, there are only so many limits and rules the Jockey Club can put in place to protect the breed.

VII. CONCLUSION

In conclusion, drug use is rampant across the United States within the horse racing industry. With 38 states having their own sets of rules,²⁴⁰ it is too easy to ship a horse that does not conform in one state to another state that has laxer rules. The use of Bute and Lasix is common and accepted within the industry but may not be what is best for the health of the horses; especially if these medications are being used to prevent, rather than treat, the conditions they have. Exotic drugs like frog juice and cobra venom should be and are banned in multiple states.²⁴¹ They

235. See generally University College Dublin, *Increased inbreeding in thoroughbreds may compromise future sustainability of breed*, PHYS.ORG (Jan. 22, 2020), <https://phys.org/news/2020-01-inbreeding-thoroughbreds-compromise-future-sustainability.html> [<https://perma.cc/U9C2-QR5H>].

236. See *The American Stud Book Principal Rules and Requirements*, *supra* note 212.

237. Walker, *supra* note 6; see *Shuttle Stallions Do Double Duty*, KY. EQUINE RSCH. (Nov. 4, 2002), <https://ker.com/equine/shuttle-stallions-double-duty/> [<https://perma.cc/F7R6-5QX7>].

238. See *id.*

239. See generally *The Jockey Club Adopts Cap of 140 Mares Bred*, *supra* note 226.

240. Associated Press, *supra* note 97.

241. See KY. HORSE RACING COMM'N, *supra* note 82; see also UNIFORM CLASSIFICATION GUIDELINES FOR FOREIGN SUBSTANCES, *supra* note 62, at 1, 4, 20.

do not provide a therapeutic use and can be abused to the point of causing multiple fatal breakdowns because of unfit horses being entered into races.²⁴²

The Horseracing Integrity Act is one way to help solve the issue of drugs. By having one set of rules across the country, it will bring the industry closer to the international standards and provide clear rules as to what drugs are and are not allowed to be given to racehorses.²⁴³ The act will also help to boost public opinion surrounding the racehorse industry, causing more people to come back to the sport. Only by changing the public's perception and taking care of the horses will the industry as a whole begin to come out of its downward spiral.

Better breeding practices are also needed to curb drug use and slow down the rate of inbreeding. By not allowing horses to compete using Lasix, breeders will have to breed genetically better horses that can compete without the use of drugs. With the addition of book limits for studs,²⁴⁴ breeders will have to look into alternative sires when the top sires are full, causing a greater diversity in the stud books of future generations. Thus, by taking steps today towards better breeding practices, the industry will be one step closer to having racehorses that are physically sound and able to race on their own abilities with a lower amount of inbreeding.

242. See Busch, *supra* note 72, at 520; see generally ASS'N OF RACING COMM'RS INT'L, *supra* note 62, at 5.

243. See Horseracing Integrity and Safety Act of 2019, H.R.1754, 116th Cong. (2019).

244. *The Jockey Club Adopts Cap of 140 Mares Bred*, *supra* note 226.