

Washington Horse Racing Commission

**2008 Equine Health and Safety
Report**

April 17, 2009

Washington Horse Racing Commission

2008 Equine Health and Safety Report

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Executive Summary

The 2008 Equine Health and Safety Report is submitted to the Washington Horse Racing Commission (WHRC) as required by WAC 260-70-510. The annual report includes data on equine medication violations, equine medication and treatment, postmortem examination of racehorses, statistical reports, and quantitative threshold medication levels.

During the 2008 racing season the stewards issued rulings on eighteen medication violations at Emerald Downs: eleven for overages of permitted medications, five for presence of prohibited substances, and two for improper medication administration.

With the data collected in 2008, the WHRC now has eight years of data available for analysis on racehorse injuries and illnesses. The data from postmortem examinations indicates the majority of fatalities (68.2%) occur during training or racing. The average fatalities per year for the three largest categories are 12.0 during racing, 7.9 during training and 9.1 in the barn area. In 2008, there were thirty-six fatalities: eleven racing fatalities, eleven training fatalities, and fourteen fatalities in the barn area due to illness.

Goals for the postmortem program include (1) determining the nature of injuries, (2) determining the cause of injuries, and (3) developing preventative strategies. The partnership between WHRC and Washington State University (WSU) College of Veterinary Medicine focuses on providing accessible data for equine health research.

In July 2008, after a one-year pilot project, The Jockey Club announced implementation of the Equine Injury Database (EID). There are now seventy-eight racetracks, including Emerald Downs, participating in the EID. In addition, the WHRC took action to limit the height of toe grabs on front shoes of thoroughbreds prior to the 2008 racing season in an attempt to reduce the potential for injuries. Amendments to the equine medication threshold levels were adopted in February 2008 by the WHRC based on model rules developed nationally to restrict concentrations of androgenic-anabolic steroids effective June 1, 2008.

Recently the WHRC has begun to reassess its priorities for the necropsy program, due partly to declining parimutuel tax revenues which support the WHRC. Consequently, the WHRC discontinued the Magnetic Resonance Imaging (MRI) examination on racehorse injuries for the 2009 racing season.

“Putting the Horse First,” a white paper by the American Association of Equine Practitioners (AAEP) released on February 18, 2009, contains a comprehensive list of veterinary recommendations for the safety and welfare of the thoroughbred racehorse, which will generate much discussion in the year ahead. In addition, proposed accreditation standards by the National Thoroughbred Racing Association require racetracks to enter postmortem veterinary examination data into the Equine Injury Database.

Introduction

The WHRC and its veterinary staff are committed to the health and safety of horses racing in Washington. The 2008 Equine Health and Safety Report is submitted to the WHRC pursuant to WAC 260-70-510. The annual report includes data on equine medication violations, equine medication and treatment, and a review of the WHRC's list of quantitative medication levels.

This was the eighth complete year that the postmortem program has been in operation. This report provides an overview of the WHRC equine health and safety program and consists of three parts:

1. Equine medication testing;
2. Postmortem examination of racehorses; and
3. Statistical reports.

In addition, the appendices include copies of the WHRC rules on equine medications, and the list of approved equine split sample drug testing laboratories.

Part 1. Equine Medication Testing

Equine medication testing is required by chapter 260-70 WAC to protect the integrity of horse racing, to ensure the health and welfare of animals under the jurisdiction of the WHRC, and to safeguard the interests of the public and participants in racing.

The equine testing program tests the winner of each race, the winner plus second and third place finishers in stakes races, horses selected at random, and those horses whose action or performance raises questions or concerns from the Stewards or official Veterinarians. Blood and urine samples are collected by WHRC staff and shipped to Truesdail Laboratories, Inc. for testing. Laboratory reports are provided to the WHRC veterinary staff and violations are forwarded to the Stewards for possible enforcement action.

During the 2008 race meet Stewards at Emerald Downs issued rulings on eighteen medication violations as follows:

- Eleven for overages of permitted medications (nine phenylbutazone, and two furosemide).
- Five for presence of prohibited substances. One class 3 (clenbuterol) and four class 4 substances (two methocarbamol, one boldenone, and one isoxsuprine). These medications are used therapeutically, but can not be present on race day.
- Two for improper medication administration.

Table 1a provides a four-year summary of Stewards' rulings on equine medication violations at Emerald Downs.

Table 1a. Stewards' Rulings on Medication Violations at Emerald Downs, 2004-2008					
Violation	2004	2005	2006	2007	2008
Overages on permitted medications	13	22	15	12	11
Presence of prohibited substances	1	4	3	3	5
Improper medication administration	2	2	4	3	2
Failure to deliver forms on time	1	1	1	2	0
Presence of contraband items	1	0	1	0	0
Total	18	29	24	20	18

In 2008 there were three rulings for overages on permitted medications (two phenylbutazone and one flunixin) at the class C nonprofit racetracks (see Table 1b). There was one ruling for the presence of a prohibited substance, boldenone (a class 4 substance).

Table 1b. Stewards' Rulings on Medication Violations at the Nonprofit (class C) Racetracks, 2004-2008					
Violation	2004	2005	2006	2007	2008
Overages on permitted medications	1	2	3	0	3
Presence of prohibited substances	0	0	0	1	1
Improper medication administration	0	0	0	0	0
Failure to deliver forms on time	0	0	0	0	0
Presence of contraband items	0	0	0	0	0
Total	1	2	3	1	4

To clarify the differences in permitted medications, prohibited substances, and quantitative threshold medications:

Permitted medications

The permitted medication rule, WAC 260-70-640 (see Appendices), allows one non-steroidal anti-inflammatory drug (NSAID) to be administered no closer than twenty-four hours before post time. The three permitted NSAIDS are flunixin (banamine), ketoprofen (ketofen), and the traditional NSAID, phenylbutazone.

Prohibited substances

According to WAC 260-70-620 “prohibited substances” include:

- (a) Drugs or medications for which no acceptable threshold concentration has been established;
- (b) Therapeutic medications in excess of established threshold concentrations;
- (c) Substances present in the horse in excess of concentrations at which such substances could occur naturally; and
- (d) Substances foreign to a horse at concentrations that cause interference with testing procedures.

Please note that the prohibited substances reported at both Emerald Downs and the class C tracks are therapeutic medications commonly used in horses, but can not be present on race day. According to WAC 260-28-295(3): “The trainer is responsible for the presence of any prohibited drug, medication, or other prohibited substance, including permitted medication in excess of the maximum allowable concentration, in horses in his/her care.”

Quantitative threshold medications

Current quantitative threshold levels for medications and environmental contaminants are listed in WAC 260-70-630, Threshold Levels (see Appendices). This permits presence of certain medications in test samples up to the stated concentrations.

Model Rules

Over the next several years the Racing Medication and Testing Consortium (RMTC) is expected to provide concentration thresholds for forty-four medications to the Model Rules Committee of the Association of Racing Commissioners International (ARCI). The establishment of these concentrations is being determined by scientific research. If adopted by the ARCI, these thresholds will be submitted to the WHRC for adoption in Chapter 260-70 WAC.

Amendments to the threshold levels were adopted in February 2008 by the WHRC based on model rules developed by RMTC and supported by ARCI. These amendments restrict concentration levels for androgenic-anabolic steroids effective June 1, 2008.

Part 2. Postmortem Examination of Racehorses

The WHRC established a postmortem program to examine horses that died at Emerald Downs beginning in 2001. This was a joint effort of Washington's horse racing industry which includes the Washington Horsemen's Benevolent and Protective Association (HBPA), Northwest Racing Associates, LP (Emerald Downs), and Washington Animal Disease Diagnostic Laboratory (WADDL) at Washington State University College of Veterinary Medicine. Autopsies are conducted on horses that have suffered catastrophic injuries during racing and training, as well as those who died from illness or from no apparent cause.

The WHRC has had three goals since the beginning of the postmortem program in partnership with WSU and the horse racing industry:

1. Determining the nature of injuries suffered by racehorses in the state.
2. Determining the causes of those injuries.
3. Developing preventative strategies for reducing the number of injuries.

When a horse dies at Emerald Downs, WHRC staff transport the horse by refrigerated truck to WADDL for postmortem examination. At WADDL, each horse is systematically examined and detailed injury information and pertinent clinical data are recorded. Various specimens from the necropsies are shared with faculty at WSU College of Veterinary Medicine for analysis of specific injuries. Final reports are submitted to WHRC veterinary staff and are available to be shared with the owner, trainer and practicing veterinarian. Copies of the necropsy reports are posted on the WHRC server for review by WHRC veterinarians, but are not accessible to the public.

The cost of the postmortem program is born by the WHRC. In 2006, the WHRC enhanced the postmortem program to include two of the recommendations adopted by the WHRC in June 2005: (1) increase the amount and availability of the postmortem program data to WHRC veterinary staff, faculty and researchers at WADDL; and (2) implement Magnetic Resonance Imaging (MRI) as an enhanced tool in diagnosing limb injuries. MRI examinations were conducted on eighty-eight horses over the past three racing seasons. Thus far the findings from WSU research are similar to what Dr. Sue Stover has found at UC Davis where well over ninety percent of catastrophic injuries have evidence of pre-existing injury at the site of complete fracture.¹

However, the recent down turn in the U. S. economy has affected the tax revenues derived from parimutuel wagering which support the WHRC. This has prompted the WHRC to reassess its priorities for the necropsy program. Consequently, the WHRC has decided to discontinue MRI examination of racehorse injuries during the 2009 racing season. The WHRC appreciates the efforts of WSU over the past three years, and hopes the MRI research will provide baseline data for future research efforts.

¹ Reported in an interview with Dr. Stover, "Welfare and Safety of the Racehorse Summit" newsletter, published by the Grayson-Jockey Club Research Foundation (Issue 1, July 2007), page 2.

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Emerging Issues

The Grayson-Jockey Club Research Foundation has coordinated and underwritten the Welfare and Safety of the Racehorse Summit whose members have identified critical issues that affect horse health and/or shorten the career of racehorses. The Foundation has developed action plans to address each issue, and has created a web site to more widely distribute the scientific research to industry stakeholders.

National Thoroughbred Racing Association

Proposed accreditation standards by the National Thoroughbred Racing Association require racetracks to enter the results of postmortem veterinary examination data into the Equine Injury Database (EID).

“Putting the Horse First”

This white paper by the American Association of Equine Practitioners (AAEP) released on February 18, 2009, contains a comprehensive list of veterinary recommendations for the safety and welfare of the thoroughbred racehorse. By promoting the health and safety of racehorses, the AAEP hopes to shore up the image of the horse racing industry which has been marred by doping scandals and catastrophic injuries at major events. These recommendations will generate much discussion at the national level and may result in the development of new model rules which would require new rules and regulations and/or legislation to implement.

Some of the key recommendations include:

- The adoption of uniform rules of medication usage, testing, security and enforcement by all industry participants.
- A period of rest for all horses to provide an opportunity to refresh and diminish the volume of persistent cyclic loading that occurs in the absence of rest.
- No horse shall be permitted to race within 10 days of its last start.
- Uniform participation by all jurisdictions in injury reporting for both racing and training injuries.
- Universal adoption in all racing jurisdictions of the Association of Racing Commissioners International (ARCI) model rules, as proposed by the Racing Medication and Testing Consortium (RMTC), including no race-day medication except furosemide (Salix). The industry should work with the RMTC, where advisable, to make progress toward uniform medication rules that are in the best interest of the horse.
- Universal adoption of the penalty structures recommended in ARCI model rules and proposed by the RMTC.

Drug Testing Standards and Practices

The ARCI has sponsored this program since 1981. It is designed to improve the efficiency of laboratories that conduct performance animal drug testing. This is accomplished through research that provides testing and confirmation methodology on difficult-to-detect drugs. Laboratories are checked for competency through a double-blind sample testing program. The ARCI has categorized over 700 drugs used in racing into five different classes depending on potency (narcotic in class 1 – therapeutics in class 5) and has recommended standard fines and suspensions for violations. The WHRC has supported this program for at least ten years and provided a contribution of \$11,000 in 2008.

Equine Injury Reporting System

In 2007 the veterinarians at Emerald Downs began participating with thirty-one other racetracks in the Equine Injury Reporting System developed by Dr. Mary Scollay, DVM, Senior Association Veterinarian, Calder Racecourse, who is now the Kentucky Equine Medical Director. This program is conducted in coordination with The Jockey Club and the Grayson-Jockey Club Research Foundation, and was initiated from the action plans coming from the Welfare and Safety of the Racehorse Summit in October of 2006. Reporting criteria includes any horse's condition that requires regulatory intervention prior to racing (the prerace exam, and the gate or post parade scratch), during and after racing. The data collected is encrypted to keep the identity of horses, racetracks, and trainers confidential.

Equine Injury Database

On July 22, 2008, the Jockey Club announced launch of the Equine Injury Database (EID) following the one-year pilot project. There are now seventy-eight racetracks signed up to participate in the EID. According to The Jockey Club the primary objectives of the database are:²

- Identify the frequency, types and outcome of racing injuries using a standardized format that will generate valid statistics.
- Identify markers for horses at increased risk of injury.
- Serve as a data source for research directed at improving safety and preventing injuries.

As Washington continues to participate in the EID, more information will be available from The Jockey Club's extensive history on each horse. As this data is compiled it is hoped that researchers will be able to access the data to develop better questions leading to better research and ultimately less injury to racehorses.

² The Jockey Club press release dated July 22, 2008, by Bob Curran Jr.

Musculoskeletal Injury Reporting Form

In 2007 the WHRC initiated confidential musculoskeletal injury reporting of any horse on the backside requiring withdrawal from training for ten days or more. In 2008 more veterinarians have agreed to help collect this data, thus providing a more accurate picture of which injuries are occurring and the attrition rates experienced.

WHRC/WSU Data Sharing Partnership

The Equine Licensing and Management System (ELMS) has been modified to allow a variety of different queries using up to 155 data fields in the equine health and safety module. All information is consolidated into one database that can be accessed via secure password from any authorized user. WHRC staff is working with WSU staff to incorporate the WSU postmortem report into the equine health and safety module for the WHRC database. The database is structured so that sensitive information such as the horse's name, owner, trainer, etc. is restricted.

Training History Questionnaires

WSU college of Veterinary Medicine faculty developed a survey questionnaire which is distributed by the HBPA to the trainer of a horse euthanized. The trainer is asked to forward the completed questionnaire directly to the WSU College of Veterinary Medicine. The WHRC does not have access to these questionnaires.

Special Studies

In 2006, the WHRC provided a \$42,446 grant to Dr. Robert K. Schneider at WSU for "An Evaluation of a New Surgical Treatment for Desmitis of the Proximal Insertion of the Suspensory Ligament in Horses." A progress report on this study was presented to the WHRC on March 13, 2008.. The clinical component has been completed and the project is in the final stages of data collection and statistical analysis. Six horses had the surgical treatment performed on one limb and were placed in a six-month rest and rehabilitation program. Healing was evaluated with ultrasound, MRI and lameness examinations. After six months the suspensory ligaments were analyzed to determine if there was an increase in cellularity and healing in the injured ligament. The MRI examinations and videotaped lameness examinations were reviewed by experienced veterinarians who were not advised when the horses were treated and which limbs were treated. Dr. Schneider presented the final report to the commission in March 2009. Dr. Schneider concluded that they have developed a reliable research model for studying treatment of desmitis of the proximal insertion of the suspensory ligament. Dr. Schneider also said that based on this research project he does not favor this surgical treatment.

Part 3. Statistical Reports

This report summarizes postmortem results for calendar years 2001-2008. The data from this period addresses the first goal of the necropsy program - determining the nature of injuries.

Table 2. Status at Time of Fatality, 2001-2008											
Year	2001	2002	2003	2004	2005	2006	2007	2008	Total	Percent	Average
Racing	9	13	10	8	18	10	14	11	93	39.9%	11.6
Starting Gate	0	0	0	1	0	1	1	0	3	1.3%	0.4
Training	8	6	8	3	8	8	11	11	63	27.0%	7.9
Paddock	1	0	0	0	0	0	0	0	1	0.4%	0.1
Barn	5	8	13	8	7	9	9	14	73	31.3%	9.1
Total	23	27	31	20	33	28	35	36	233	100.0%	29.1

Table 2 shows the fatalities by status at the time of the incident, indicating the majority of fatalities (68.2 percent) are during training or racing. The average fatalities per year for the three largest categories are 12.0 during racing, 7.9 during training and 9.1 in the barn area. The thirty-six fatalities in 2008 included a decrease in racing fatalities, but an increase in barn fatalities due to illness.³

Table 3. Number of Racing Days, Training Days, Races & Starters, 2001-2008											
Year	2001	2002	2003	2004	2005	2006	2007	2008	Total	Average	
Racing Days	96	91	91	90	101	90	91	91	741	93	
Training Days	226	224	231	231	258	238	241	240	1,649	236	
Races	854	829	830	813	925	822	824	827	6,724	841	
Starters	6,684	6,457	6,069	5,894	7,237	6,456	6,252	6,362	51,411	6,426	
Racing Fatalities	10	13	10	9	18	11	15	11	97	12.1	
Fatalities/1,000 Starts	1.50	2.01	1.65	1.53	2.49	1.70	2.40	1.73	1.89	1.89	

Table 3 provides data on the number of live race days, training days and starters by year at Emerald Downs. The statistics for 2008 are similar to the eight-year averages.⁴

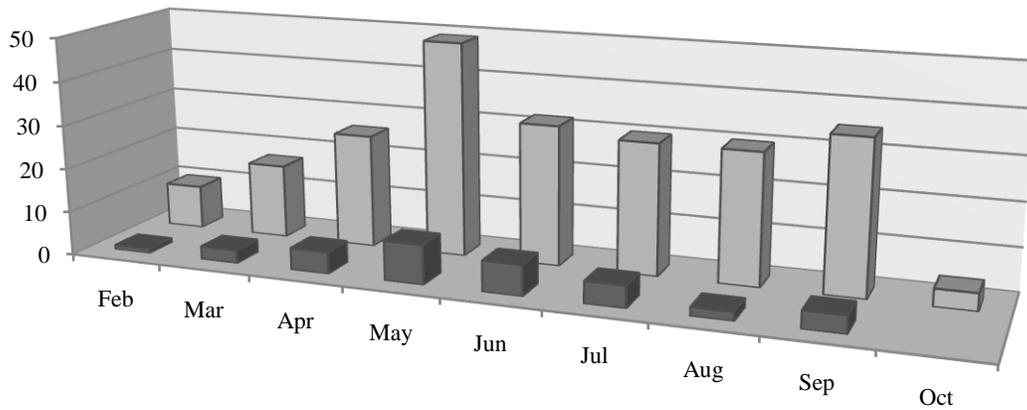
Chart 1 is a summary by month showing that the majority of fatalities over the past eight years have occurred in May, although late season injuries are also common.

³ Fluctuations are likely to occur by year due to the relatively small number of incidents in each category.

⁴ Note that starting gate and paddock fatalities are included with racing fatalities as summarized hereafter in this report.

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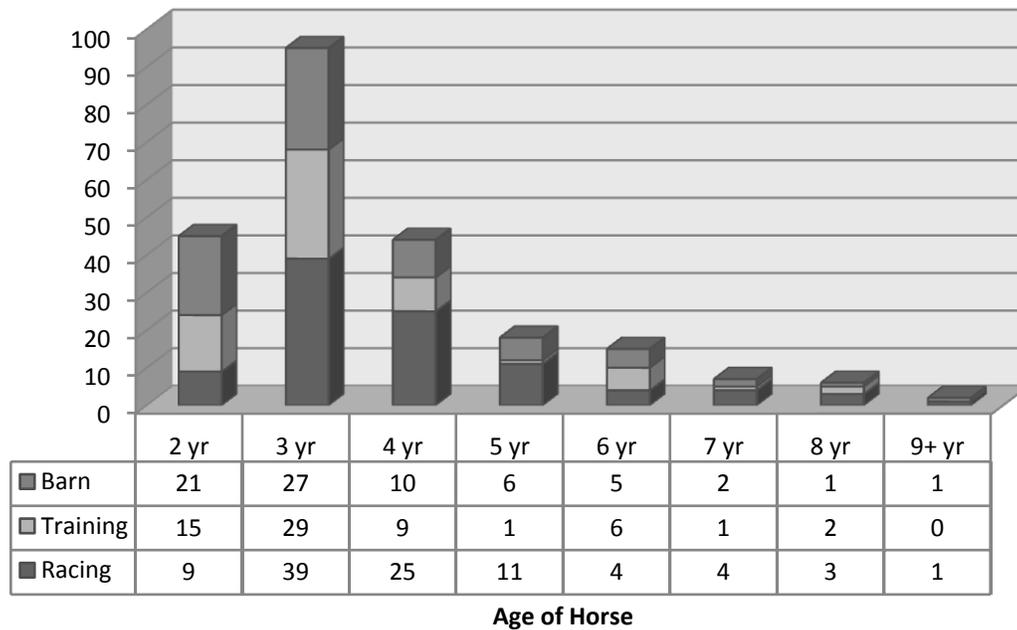
Chart 1. Fatalities by Month, 2001-2008



	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
■ 2008	1	3	5	9	7	5	2	4	
■ Total	10	17	26	49	32	30	30	35	4

Chart 2 shows that the majority of fatalities were three year olds presumably because more three year olds race than other ages.

Chart 2. Fatalities by Age and Status, 2001-2008



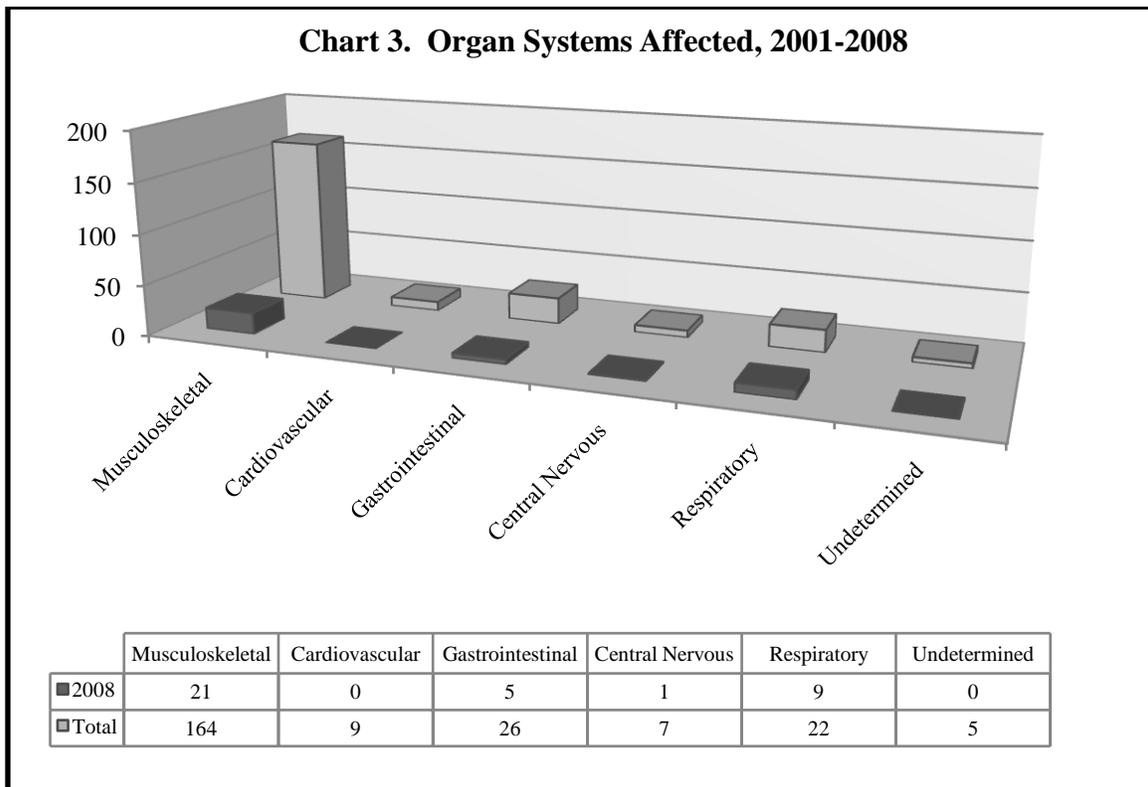


Chart 3 shows that approximately 70.4 percent of the horse fatalities (164 of 233) over the past seven years were due to injuries of the musculoskeletal system.

- Musculoskeletal – In 2008 there were twenty-one horse fatalities with thirty injuries. The data for Chart 3 is displayed below in Table 4.
- Five gastrointestinal fatalities include two with twisted cecums, two with small intestine strangulation, and one splenic displacement which resulted in torn gastrosplenic vessels and shock.
- One central nervous system fatality was due to EPM (equine protozoal myeloencephalitis).
- Nine respiratory fatalities included one bronchopneumonia and eight pleuropneumonias. All nine of these deaths were due to a streptococcus subtype called zooepidemicus. This bacterium is considered a normal inhabitant of the equine respiratory system but for some unknown reason was able to be especially deadly in susceptible horses this year.

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Table 4. Data for Chart 3 - Organ Systems Affected, 2001-2008

	2001	2002	2003	2004	2005	2006	2007	2008	Total	Percent	Average
Musculoskeletal	17	20	20	15	26	18	27	21	164	70.4%	20.5
Cardiovascular	3	1	2	2			1	0	9	3.9%	1.5
Gastrointestinal	1	1	3	3	4	6	3	5	26	11.2%	3.3
Central Nervous	2	1	1				2	1	7	3.0%	1.4
Respiratory		4	3		3	1	2	9	22	9.4%	3.7
Undetermined			2			3		0	5	2.1%	1.7
Total	23	27	31	20	33	28	35	36	233	100.0%	29.1

Musculoskeletal Injuries

Musculoskeletal injuries include those occurring to all muscles, tendons, ligaments, joints and bones. Some horses had more than one injury; therefore, the total number of injuries may be greater than the number of horses. In 2008 twenty-one horses had a total of thirty injuries.

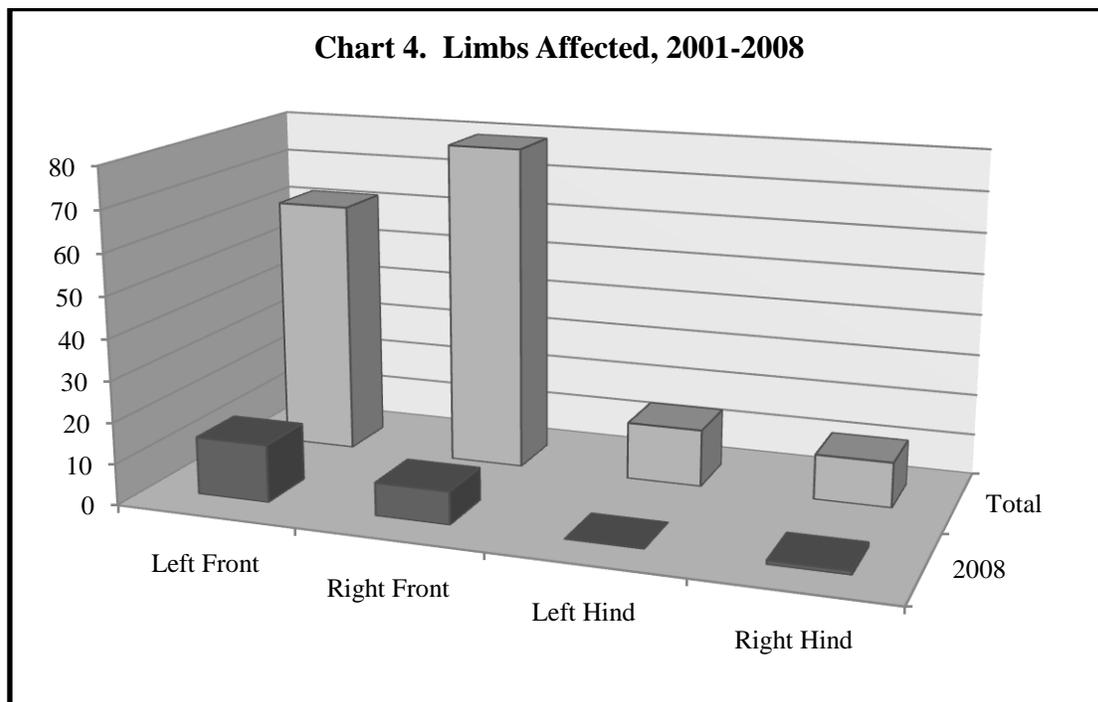
Table 5. Musculoskeletal Injuries, 2001-2008

Year	2001	2002	2003	2004	2005	2006	2007	2008	Total	Percent	Average
Carpus	2	4	4	1	9	4	5	3	32	16.3%	4.0
Humerus	2	1	3	1	6	2	3	4	22	11.2%	2.8
Scapula	0	4	0	0	2	0	2	2	10	5.1%	1.3
Metacarpal	2	2	3	3	2	1	5	6	24	12.2%	3.0
Metatarsal	2	0	0	0	1	1	2	1	7	3.6%	0.9
Pastern	3	3	3	2	4	5	1	1	22	11.2%	2.8
Sesamoids	4	3	5	4	5	2	8	8	39	19.9%	4.9
Suspensory	0	1	1	0	2	1	2	3	10	5.1%	1.3
Tibia	1	1	0	1	0	0	2	0	5	2.6%	0.6
Vertebra	1	0	1	0	1	0	1	0	4	2.0%	0.5
Laminitis	1	0	0	0	1	2	0	0	4	2.0%	0.5
Flexor Tendon	0	0	1	0	3	1	1	2	8	4.1%	1.0
Olecranon	0	0	0	1	0	0	0	0	1	0.5%	0.1
Pelvis	0	0	0	1	0	1	1	0	3	1.5%	0.4
Rib	0	0	0	0	1	0	0	0	1	0.5%	0.1
Skull	0	0	0	0	0	1	1	0	2	1.0%	0.3
Femur	0	0	0	0	0	0	1	0	1	0.5%	0.1
Muscle Laceration	0	0	0	0	0	0	1	0	1	0.5%	0.1
Total	18	19	21	14	37	21	36	30	196	100.0%	24.5

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The largest category, musculoskeletal injuries, is further broken down in Table 5.

- The largest number (49) for the last six years was due to injuries of the suspensory apparatus (10 suspensory ligament and 39 sesamoid bone injuries).
- In 2008 twenty-one horses had 30 musculoskeletal injuries.
- Of these, 85.0 percent of the limb injuries were to the front limbs (141 of 166), as shown on Chart 4.
- Injuries to the right front limbs are more common than left front. In 2008 left front injuries (14) were higher than the seven-year average (7.75) – see Table 6, which displays the data for Chart 4.



Concerns about the track surface contributing to the increase in musculoskeletal injuries in 2007 were discussed at the December 10, 2007 WHRC meeting. According to an article published in the Washington Thoroughbred magazine,⁵ Emerald Downs management contracted with a national expert who found that “the higher clay content in the track surface was causing the track surface to stiffen up faster.” This was aggravated by higher than usual rainfall during the 2007 racing season. Emerald Downs added an inch of sand prior to the 2008 racing season to dilute the amount of clay in the track surface.

⁵ “Emerald Downs Racetrack Surface Report and Maintenance Plans for 2008,” Washington Thoroughbred, Washington Thoroughbred Breeders Association, January/February 2008 (Vol. 62, No. 1), pp. 40-41.

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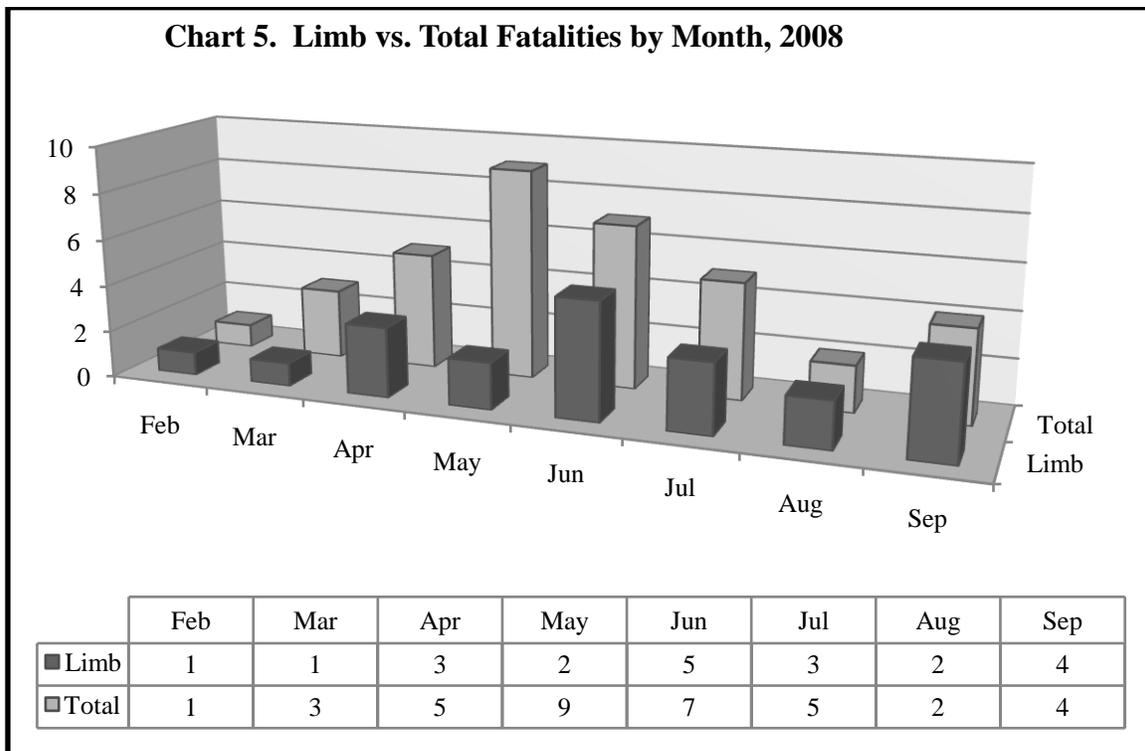
The following table shows the annual data from Chart 4. The number of limb injuries in 2008 slightly exceeded the eight-year average. Please note that two horses had both front limbs affected; therefore, twenty-three limb injuries occurred on twenty-one horses as reported on Chart 5.

Table 6. Data for Chart 4 - Limbs Affected, 2001-2008

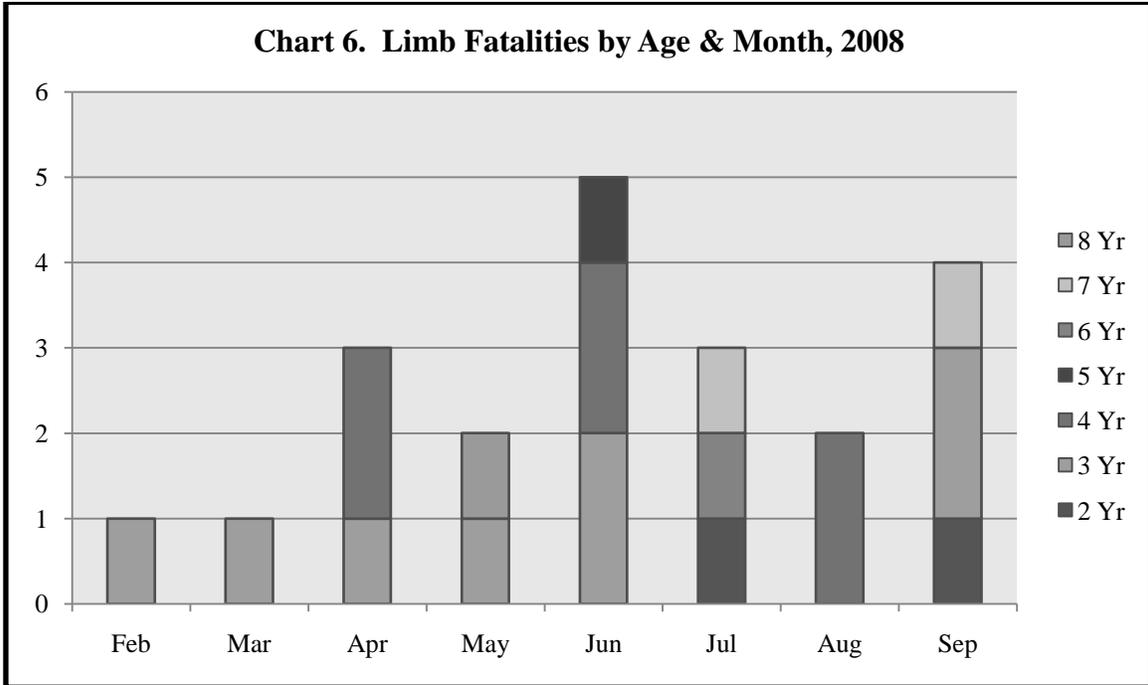
Limb	2001	2002	2003	2004	2005	2006	2007	2008	Total	Percent	Average
Left Front	3	7	10	6	5	6	11	14	62	37.3%	7.8
Right Front	9	12	8	5	18	7	12	8	79	47.6%	9.9
Left Hind	3	4	2	0	1	0	4	0	14	8.4%	1.8
Right Hind	1	2	1	3	0	1	2	1	11	6.6%	1.4
Total	16	25	21	14	24	14	29	23	166	100.0%	20.8

Chart 5 shows the monthly pattern of limb fatalities that occurred in 2008 as compared to total fatalities for 2008. Chart 6 shows limb fatalities by age and month for 2008.

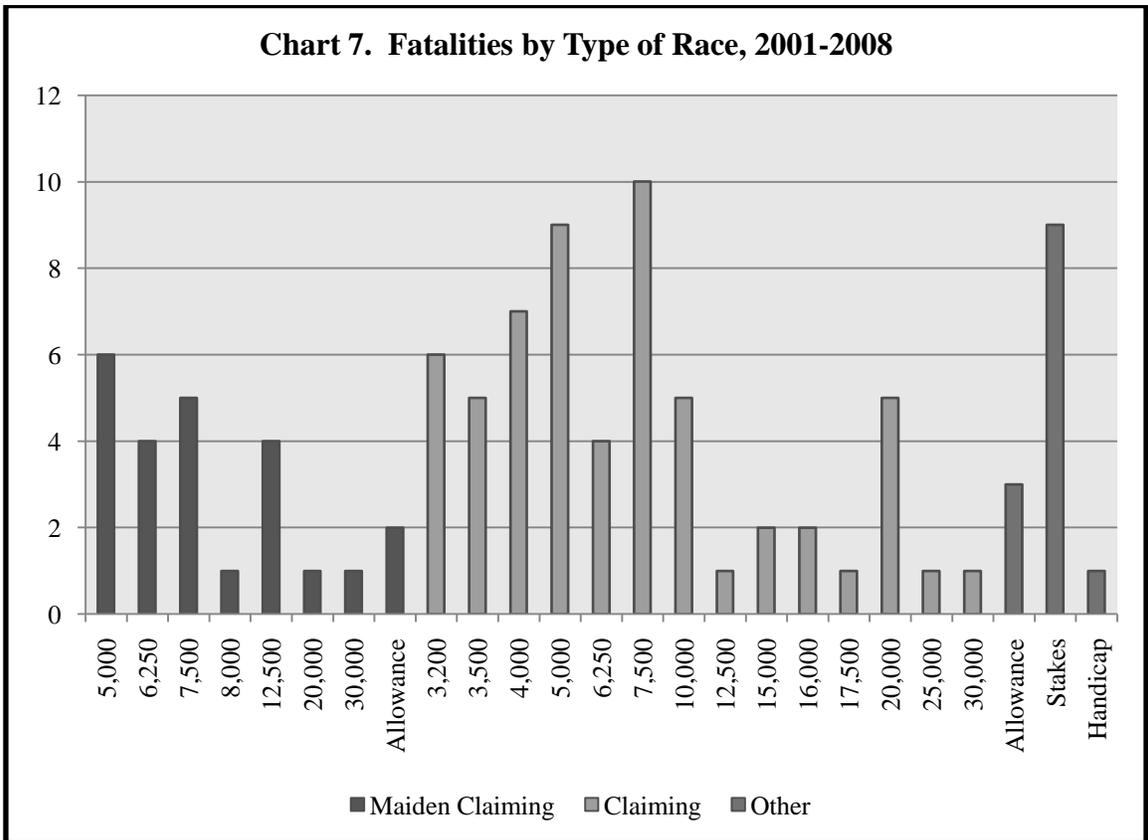
Chart 5. Limb vs. Total Fatalities by Month, 2008



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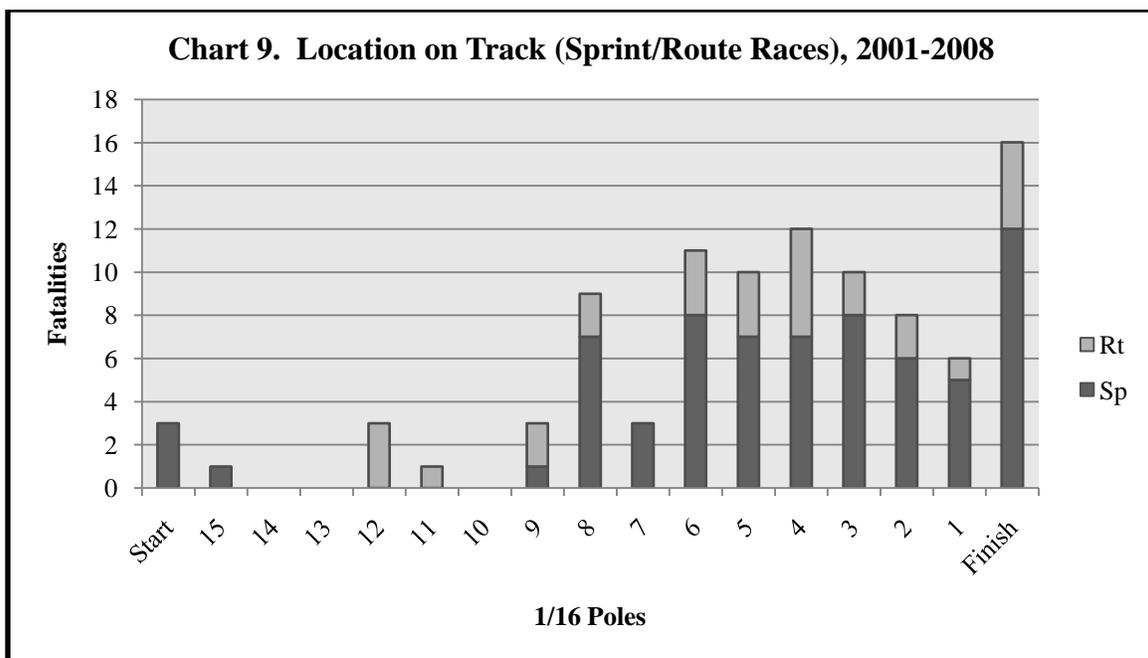
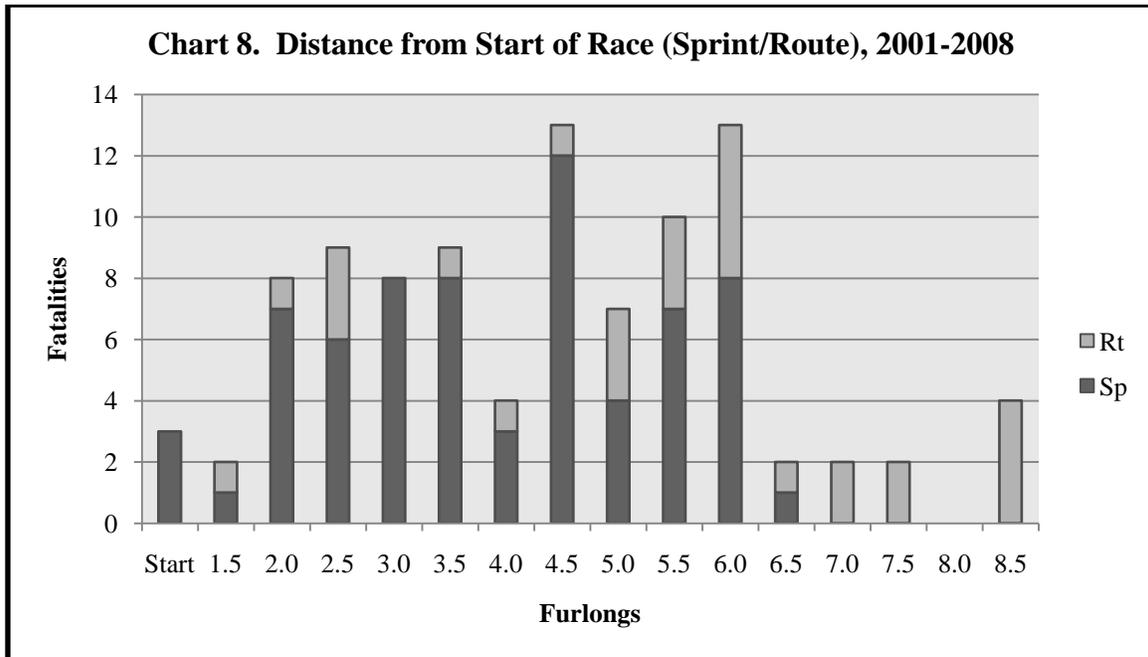


As shown in Chart 7, there are more catastrophic injuries in lower claiming (\$12,500 or less) and stakes races.



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Chart 8 shows the distance from the start of the race in furlongs (1/8 of a mile) for fatal injuries with sprint races 6.5 furlongs or less and route races longer than 6.5 furlongs. Chart 9 shows the location of fatal injuries on the track by sixteenth pole marker.



Appendices

WAC 260-70-610 Storage and Shipment of Split Samples.

(1) Split samples obtained in accordance with WAC 260-70-600 (2)(b) and (c) will be secured and made available for further testing in accordance with the following procedures:

(a) A split sample must be secured in the test barn in the same manner as the primary sample acquired for shipment to a primary laboratory. The split samples will be stored until the primary samples are packed and secured for shipment to the primary laboratory. Split samples will then be transferred to a freezer at a secure location approved by the executive secretary.

(b) A freezer used to store split samples will be closed and locked at all times except as specifically provided by these rules.

(c) A freezer for storage of split samples may only be opened to deposit or remove split samples, for inventory, or for checking the condition of samples.

(d) An official veterinarian will maintain a split sample log that must be used each time a split sample freezer is opened. The log will record the following:

(i) The name of the person opening the split sample freezer;

(ii) The purpose for opening the freezer;

(iii) The split samples deposited or removed from the freezer;

(iv) The date and time the freezer was opened;

(v) The time the freezer was closed; and

(vi) A notation verifying that the lock was secured after the freezer was closed.

(e) If at any time it is discovered that the split sample freezer failed or samples were discovered not in a frozen condition, an official veterinarian must document this discovery on the split sample freezer log and immediately report this to the executive secretary.

(2) A trainer or owner of a horse having been notified that a written report from a primary laboratory states that a substance has been found in a specimen obtained pursuant to these rules may request that a split sample corresponding to the portion of the specimen tested by the primary laboratory be sent to another laboratory approved by the Commission. The request must be made in writing and delivered to the stewards not later than forty-eight hours after the trainer of the horse receives written notice of the findings of the primary laboratory. The split sample must be shipped within seventy-two hours of the delivery of the request for testing to the stewards.

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(3) The owner or trainer requesting testing of a split sample is responsible for the cost of shipping and testing. A split sample must be removed from the split sample freezer, and packaged for shipment by an official veterinarian or designee in the presence of the owner, trainer, or designee. Failure of the owner, trainer or designee to appear at the time and place designated by an official veterinarian to package the split sample for shipping will constitute a waiver of all rights to split sample testing. Prior to shipment, the split sample laboratory's willingness to provide the testing requested and to send results to both the person requesting the testing and the commission, must be confirmed by an official veterinarian. Arrangements for payment satisfactory to the split sample laboratory must also be confirmed by the owner or trainer. A laboratory for the testing of a split sample must be approved by the commission. The commission will maintain a list of laboratories approved for testing of split samples.

(4) Prior to opening the split sample freezer, the commission must provide a split sample chain of custody verification form. The split sample chain of custody verification form must be completed and signed by the representatives of the commission and the owner, trainer or designee. A commission representative will keep the original and provide a copy to the owner, trainer or designee.

The split sample chain of custody verification form must include the following:

- (a) The date and time the sample is removed from the split sample freezer;
- (b) The sample number;
- (c) The address where the split sample is to be sent;
- (d) The name of the carrier and the address where the sample is to be taken for shipment;
- (e) Verification of retrieval of the split sample from the freezer;
- (f) Verification of each specific step of the split sample packaging in accordance with the recommended procedure;
- (g) Verification of the address of the split sample laboratory on the split sample package;
- (h) Verification of the condition of the split sample package immediately prior to transfer of custody to the carrier; and
- (i) The date and time custody of the sample is transferred to the carrier.
- (j) The split sample chain of custody verification form must be signed by both the owner's representative and an official veterinarian or designee to confirm the packaging

of the split sample.

(5) The exterior of the package must be secured and identified with initialed tape, evidence tape or other means to prevent tampering with the package. The owner, trainer or designee may inspect the package containing the split sample immediately prior to transfer to the delivery carrier to verify that the package is intact and has not been tampered with.

(6) The package containing the split sample will be transported to the location where custody is transferred to the delivery carrier charged with delivery of the package to the commission approved laboratory selected by the owner or trainer.

[Statutory Authority: RCW 67.16.020 and 67.16.040. 07-07-036, § 260-70-610, filed 3/12/07, effective 4/12/07; 06-09-009, § 260-70-610, filed 4/10/06, effective 5/11/06; 05-07-067, § 260-70-610, filed 3/11/05, effective 4/11/05. Statutory Authority: RCW 67.16.020. 03-11-018, § 260-70-610, filed 5/12/03, effective 6/12/03. Statutory Authority: RCW 67.16.040. 96-10-001, § 260-70-610, filed 4/17/96, effective 5/18/96.]

WAC 260-70-630 Threshold levels.

(1) Permitted medications.

(a) The following quantitative medications are permissible in test samples up to the stated concentrations:

Procaine - 25 ng/ml urine
Benzocaine - 50 ng/ml urine
Mepivacaine - 10 ng/ml urine
Lidocaine - 50 ng/ml urine
Bupivacaine - 5 ng/ml urine
Clenbuterol - 25 pg/ml serum or plasma
Acepromazine - 25 ng/ml urine
Promazine - 25 ng/ml urine
Salicylates - 750,000 ng/ml urine
Albuterol - 1 ng/ml urine
Pyrilamine - 50 ng/ml urine
Theobromine - 2000 ng/ml urine

(b) The official urine or blood test sample may not contain more than one of the above substances, including their metabolites or analogs, and may not exceed the concentrations established in this rule.

(2) Environmental substances.

(a) Certain substances can be considered "environmental" in that they are endogenous to the horse or that they can arise from plants traditionally grazed or harvested as equine feed or are

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present in equine feed because of contamination or exposure during the cultivation, processing, treatment, storage, or transportation phases. Certain drugs are recognized as substances of human use and could therefore be found in a horse. The following substances are permissible in test samples up to the stated concentrations:

Caffeine - 100 ng/ml serum or plasma
Benzoyllecgonine - 50 ng/ml urine
Morphine Glucuronides - 50 ng/ml urine

(b) If a preponderance of evidence presented shows that a positive test is the result of environmental substance or inadvertent exposure due to human drug use, that evidence should be considered as a mitigating factor in any disciplinary action taken against the trainer.

(3) Androgenic-anabolic steroids.

(a) The following androgenic-anabolic steroids are permissible in test samples up to the stated concentrations:

Stanozolol (Winstrol) - 1 ng/ml urine in all horses regardless of sex.
Boldenone (Equipose) - 15 ng/ml urine in intact males. No level is permitted in geldings, fillies or mares.
Nandrolone (Durabolin) - 1 ng/ml urine in geldings, fillies, and mares, and for nandrolone metabolite (5 α -oestrane-3 β ,17 α -diol) - 45 ng/ml urine in intact males.
Testosterone - 20 ng/ml urine in geldings. 55 ng/ml urine in fillies and mares. Samples from intact males will not be tested for the presence of testosterone.

(b) All other androgenic-anabolic steroids are prohibited in race horses.

[Statutory Authority: RCW 67.16.020 and 67.16.040. 08-17-051, § 260-70-630, filed 8/14/08, effective 9/14/08; 08-05-091, § 260-70-630, filed 2/15/08, effective 6/1/08; 06-09-009, § 260-70-630, filed 4/10/06, effective 5/11/06; 05-07-067, § 260-70-630, filed 3/11/05, effective 4/11/05. Statutory Authority: RCW 67.16.020. 04-05-095, § 260-70-630, filed 2/18/04, effective 3/20/04; 03-11-019, § 260-70-630, filed 5/12/03, effective 6/12/03. Statutory Authority: RCW 67.16.040. 96-10-001, § 260-70-630, filed 4/17/96, effective 5/18/96.]

WAC 260-70-640 Permitted Medication.

Trainers using permitted medication in the care of their horses are subject to all rules governing such medications. Failure to administer permitted medication to a horse on a program of permitted medication is a violation of these rules.

(1) The use of one of three approved nonsteroidal anti-inflammatory drugs (NSAIDs) is permitted under the following conditions:

(a) The drug may not exceed the following permitted serum or plasma threshold concentrations, which are consistent with administration by a single intravenous injection at least twenty-four hours before the post time for the race in which the horse is entered:

- (i) Phenylbutazone - 5 micrograms per milliliter;
- (ii) Flunixin - 50 nanograms per milliliter;
- (iii) Ketoprofen - 10 nanograms per milliliter.

(b) No NSAID, including the approved NSAIDs listed in this rule, may be administered within the twenty-four hours before post time for the race in which the horse is entered.

(c) The presence of more than one of the three approved NSAIDs, with the exception of phenylbutazone in a concentration below 1 microgram per milliliter of serum or plasma or any unapproved NSAID in the post-race serum or plasma sample is not permitted. The use of all but one of the approved NSAIDs must be discontinued at least forty-eight hours before the post time for the race in which the horse is entered.

(2) Any horse to which a NSAID has been administered is subject to having a blood and/or urine sample(s) taken at the direction of an official veterinarian to determine the quantitative NSAID level(s) and/or the presence of other drugs which may be present in the blood or urine sample(s).

[Statutory Authority: RCW 67.16.020 and 67.16.040. 08-09-044, § 260-70-640, filed 4/10/08, effective 5/11/08; 07-07-036, § 260-70-640, filed 3/12/07, effective 4/12/07; 06-09-009, § 260-70-640, filed 4/10/06, effective 5/11/06; 05-07-067, § 260-70-640, filed 3/11/05, effective 4/11/05. Statutory Authority: RCW 67.16.040. 96-10-001, § 260-70-640, filed 4/17/96, effective 5/18/96.]

WHRC Approved Equine Split Sample Drug Testing Laboratories

The following split sample drug testing labs are approved for the 2008 racing season. The prices listed are the split sample lab prices quoted by each lab. These prices are subject to change and will be verified prior to shipping a split sample - call for a quote.

Industrial Laboratories

4046 Youngfield St.
Wheat Ridge, CO 80033
Phone: (303) 287-9691
Contact: Petra Hartman, Laboratory
Manager petra@industriallabs.net
NSAID Quantitation: \$200 & up
Urine: \$400

Racing Chemistry Veterinary Diagnostic Laboratory, Iowa State University

Ames, IA 50011
Phone: (515) 294-0508, (515) 294-1950
Contact: Dr. Walter Hyde, Ph.D., Director
NSAID Quantitation: \$225
GC/MS: \$450-\$650 plus \$150 for quantitation
LC/MS: \$650-\$1000 plus \$150 for quantitation

LSU Equine Medication Surveillance Laboratory, School of Veterinary Medicine

Skip Bertman Drive
Louisiana State University
Baton Rouge, LA 70803
Phone: (225) 578-3602
Contact: Dr. Steve Barker, Director
sbarker@mail.vetmed.lsu.edu
Blood or urine: \$400
LC/MS call for quote

Texas Veterinary Medical Diagnostic Laboratory

Drawer 3040
College Station, Texas 77841-3040
Phone: (979)845-3414, (979)845-9011
Contact: Mr. Kenneth Peck, Director
k-peck@tvmddl.tamu.edu
NSAID Quantitation: \$300 (Bute)
\$1000 (Flunixin)
Urine: \$500 non quantitated
LC/MS: \$1000 quantitated

Michigan Department of Agriculture

Laboratory Division
Equine Drug Testing Section
1615 South Harrison Road
East Lansing, MI 48823
Phone: (517) 337-5082
Contact: Dr. Steve Reh, Director
Bradley J. Skiba, Supervisor
skibab@michigan.gov
Blood or urine: \$500

Center for Tox Services

1819 W. Drake Drive, Suite 102
Tempe, Arizona 85283
Phone: (480) 345-7454
Contact: Jeanne B. Mahoney, Director
NSAID Quantitation: \$150
GC/MS: \$300 per drug
LC/MS: \$300-\$600 per drug

Dalare Associates

217 S. 24th St.
Philadelphia, PA 19193
Phone: (215) 567-1953
Contact: Mr. Joseph Strug, Director
joestrug@aol.com
NSAID Quantitation: \$250
Urine: \$500
LC/MS: \$1000-\$1500

Racing Laboratory College of Veterinary Medicine University of Florida

1200 S.W. 34th St.
Gainesville, Florida 32607
Phone (352) 392-4700, ext 3700
Contact: Margaret H. Wilding, Associate
Director
NSAID Quantitation: \$200
Urine GC/MS: \$400
Urine LC/MS: \$400-\$800