

The Health Status of Thoroughbred Jockeys

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For the Jockeys' Health Initiative Study Group

The Jockeys' Health Initiative

- Study Team
 - Carlton A. Hornung, PhD, MPH;
 - University of Louisville
 - Bonne Farbarow, RN, CCRA, CCRP;
 - University of Pennsylvania
 - Lee Goldberg, MD, MPH;
 - University of Pennsylvania
 - David Seftel, MD;
 - Jockeys' Guild
 - Barry Broad, Esq.;
 - Jockeys' Guild

Health Initiative Survey

Methods

- Adaptation of the National Health Interview Survey ---a 35 page self-administered questionnaire
- Prepared in both English and Spanish
- Administered in a group setting at the 2006 Annual Assembly in Las Vegas, December 3-5.
 - All Senators and Board Members were required to attend.
 - All Guild members were encouraged to attend.
 - **Probably biased toward a 'healthy worker effect'**

Survey Content

- Demographics
- Jockey Safety and Track Facilities
- Anchor Track Medical Facilities
- Injuries and Medical Care
 - During Exercise Periods
 - Racing
- Medical History
 - Acute and Chronic Conditions
- Health Behaviors
 - General
 - Weight related

Age at Start of Jockey Career and Years of Riding Experience

- Some 28% began their career before age 18; 50% before age 20 and 75% before age 22.



- 70% have been riding more than 15 years and 32% have been riding more than 20 years.



- Age of respondents:
 - Mean = 39.0
 - Std. Dev. = 7.6
 - Median = 38.0

Jockeys' Workload

- 90% say they ride all year around and 70% ride both night and day races.
- 71% ride 3, 4, or 5 races in a typical day.
- 83% regularly exercise horses
 - 4 out of 5 of them do not receive extra compensation for their exercise work.

Injuries While Exercising Horses

- The morning exercise period is the most dangerous.
- 62% of jockeys say they have suffered an injury that has prevented them from riding that day.
- 14 jockeys reported suffering a total of 33 injuries while exercising horses within the past 30 days.
 - Half reported that there was no physician on the grounds when they were injured.
 - Two reported that the ambulance crew never came to their aid.

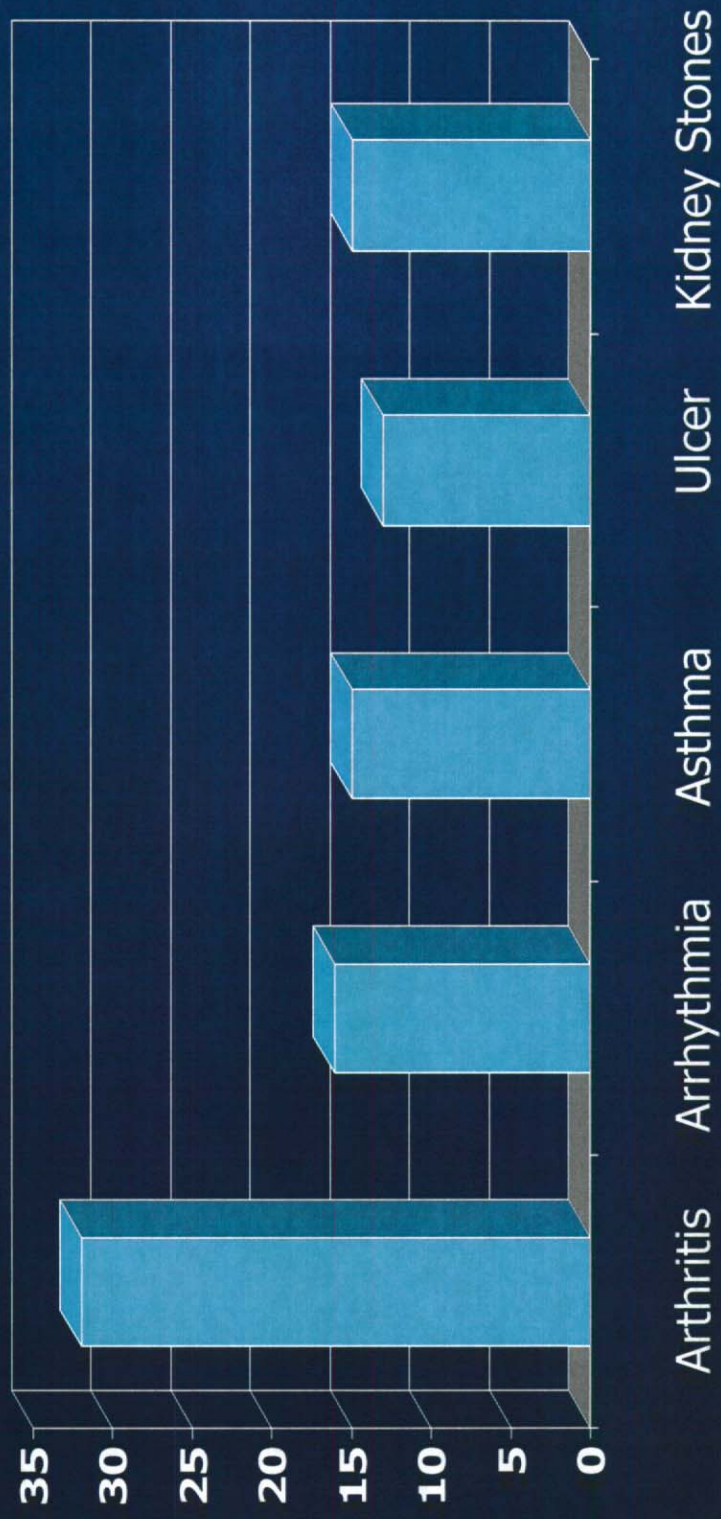
Injuries While Racing

- 98% say that they have been injured at least once while racing. 56% reported 10 or more injuries over their careers.
- 40% say they have been injured and taken to the ER or hospitalized within the past month.
 - Frequent ER visits involve increased exposure to CT scans and X-rays and 10 to 15 times the radiation.

Medical Care for Injured Jockeys

- 26% told us that there was no physician available at the track to provide emergency care.
- Six jockeys claim to have suffered permanent physical harm that could have been prevented if adequate medical care was available.
 - Three said their injuries were career ending.

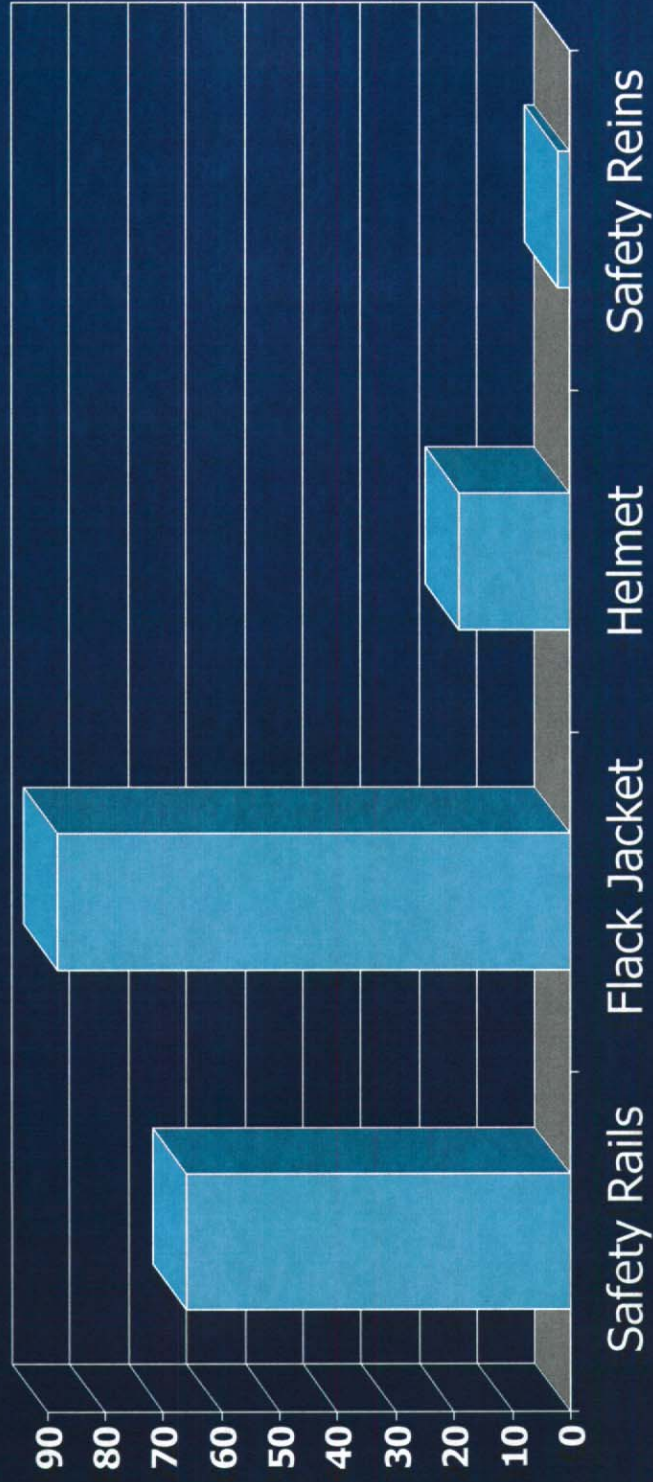
Prevalence of Selected Chronic Conditions



Other Chronic Conditions or Symptoms

- 26% report limitations of daily activity by symptoms of arthritis.
- 77% report low back pain.
- 36% report migraines or severe headaches within the past 3 months.
- 62% report symptoms of depression.
- 13% say they have tried but have been unsuccessful at having children.

Track and Jockey Safety



*56.6% report reins snapping during a race.

Pb $\mu\text{g}/\text{ft}^2$ from Dust Wipes at 42 Tracks Nationwide

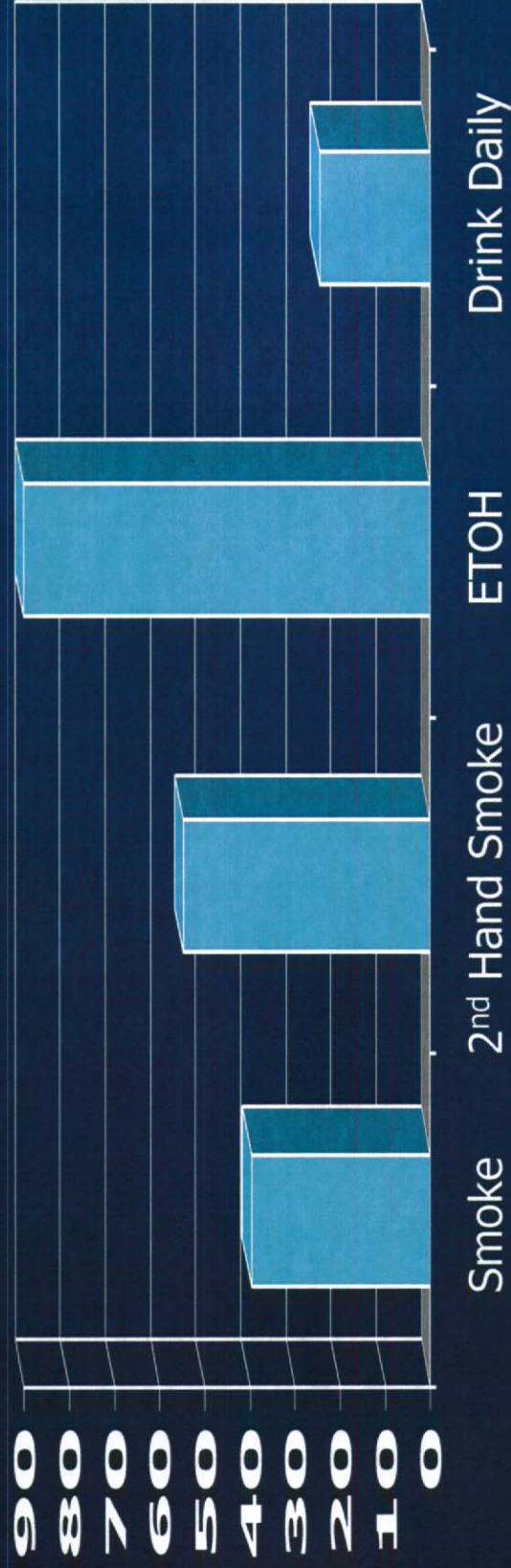
- Two dust wipes of were done: one at the scale and the other where the saddles are placed between races.
- 50 $\mu\text{g}/\text{ft}^2$ is the upper limit for floors;
- 200 $\mu\text{g}/\text{ft}^2$ is the upper limit for window sills.
 - **More than 90% of jockeys in our survey said that they have never had a blood lead level done.**

Statistics

	Scale	Valet Table
N	42	42
Valid		
Missing	0	0
Mean	3521.26	1339.17
Median	1450.00	345.00
Std. Deviation	4627.964	2463.090
Minimum	5	5
Maximum	18000	13000
Percentiles		
25	325.00	34.75
50	1450.00	345.00
75	5875.00	1650.00

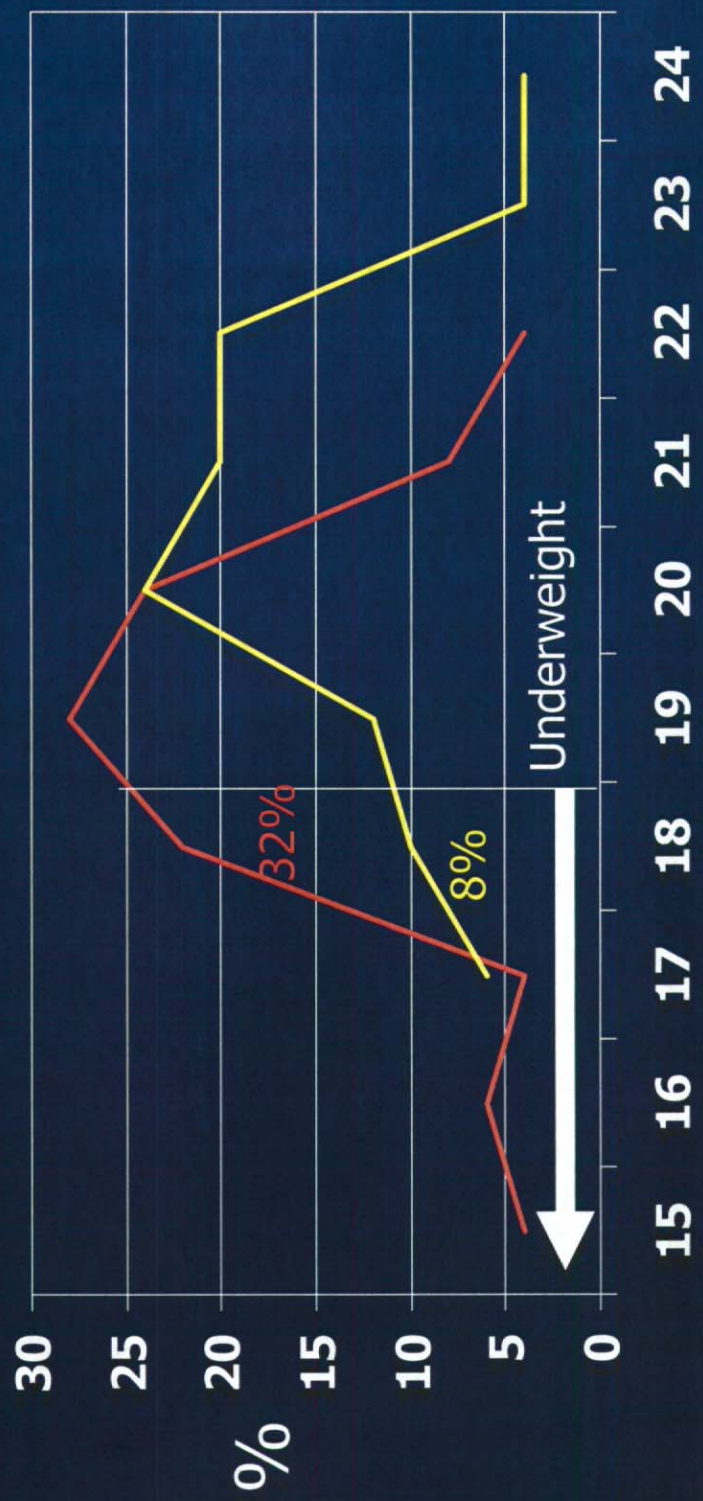
Source: Citadel Environmental Services, Inc.

Behavioral Risk Factors



- 40% Smoke but 54% are exposed to second hand smoke in the jockey's room.
- While 89% use alcohol, 25% drink daily.

Highest and Lowest Body Mass Index in the Past Year

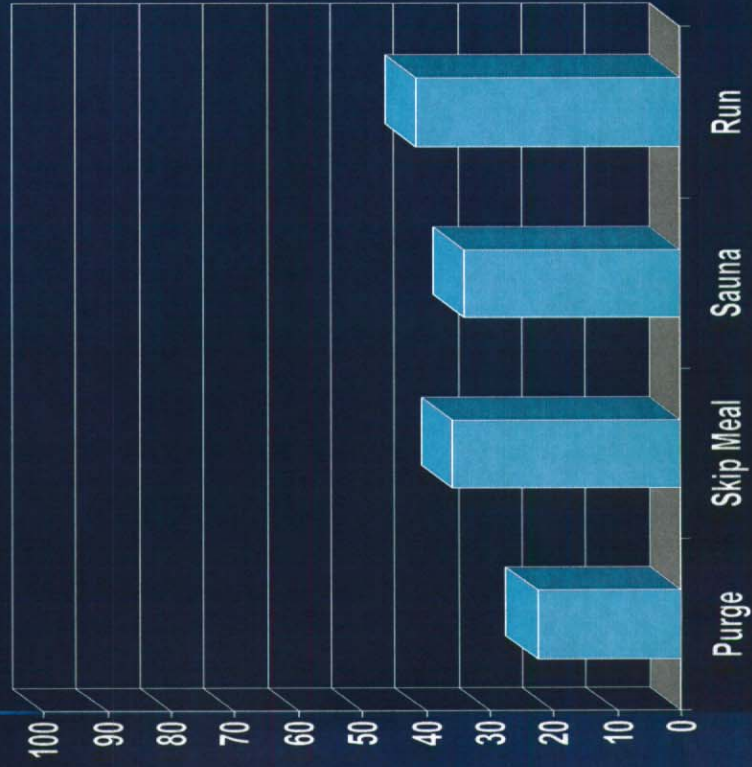


— Lowest — Highest

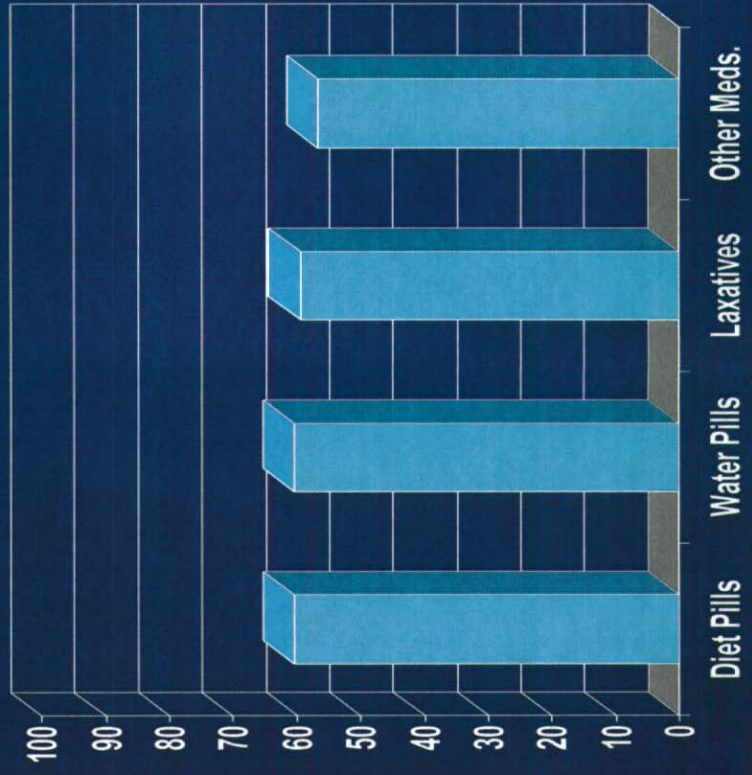
Mean 19.3 20.9
 Std.Dev. 1.7 1.6

In Order to Make Weight:

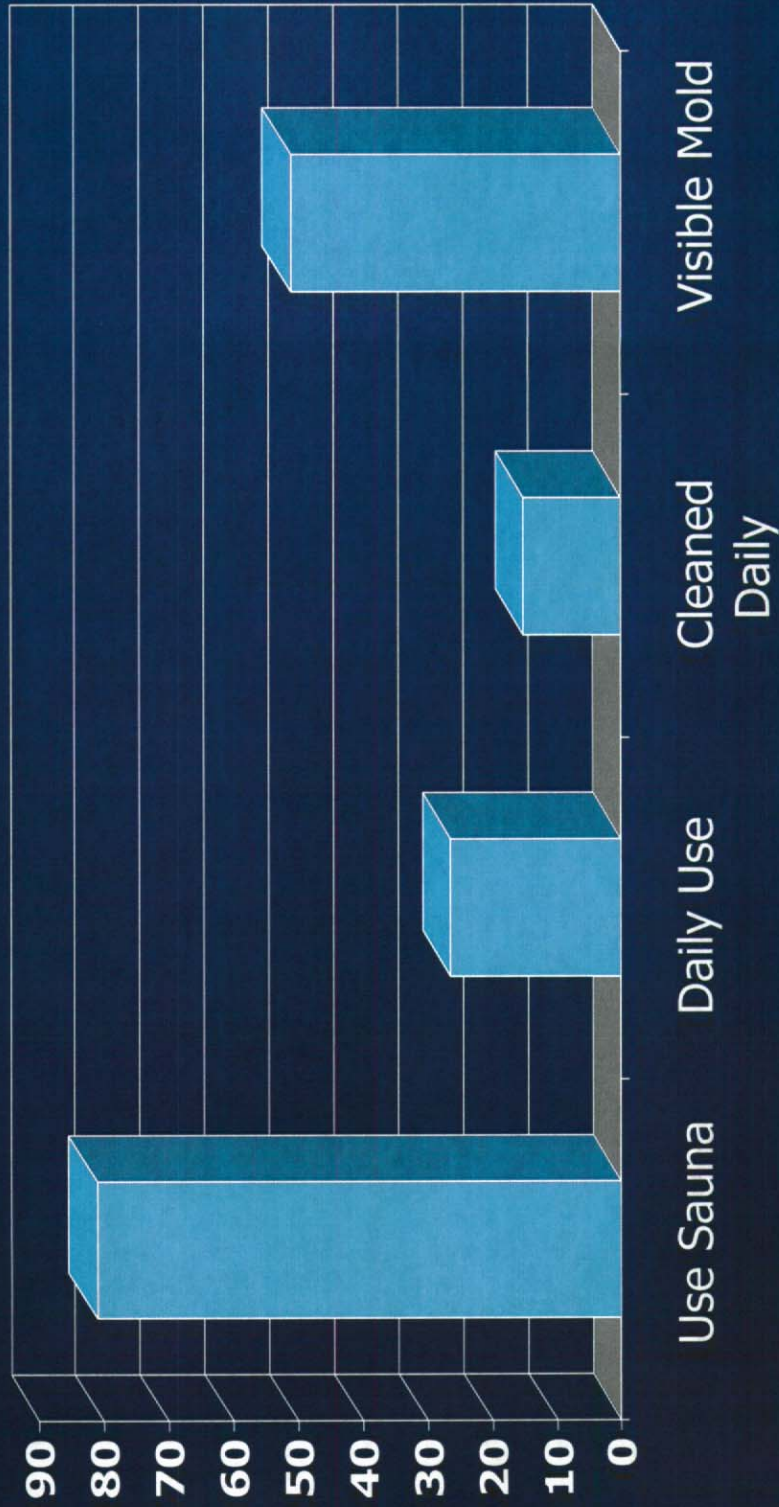
If I gained a pound.....



Regularly use each week.....



Use of the "Hot-Box"



Fit to Ride

- 41% said that they experienced a dizzy spell or passed-out just before a race.
- 24% said have felt dizzy *during* a race.
- 48% said they have felt dizzy or passed-out following a race.
- 75% reported at least one instance of not feeling well enough to ride.
 - Only 53% said that the stewards would allow them to take off from their mount.
 - In less than 30% of the cases was there a physician available to evaluate the jockey's fitness to ride.

Health Examination At the Race Track (HEART)—A Grant Application to NIOSH

- In response to: PA-07-318 "Occupational Safety and Health Research (R01); February 5, 2007.
- A collaborative effort involving:
 - CA Hornung and P Quesada. UofL
 - L Goldberg and B Farberow, U Penn
 - D Seftel and B Broad, Jockeys' Guild
 - An Advisory Board with representatives from:
 - Jockeys' Guild (Velazquez), NTRA (Fravel), Grayson-Jockey Club Research Foundation (Bowen), Magna Entertainment (Mills), Churchill Downs Inc. (Sexton), California Medical Association (Gusman), and the California Horse Racing Board (Shapiro)

Health Examination At the Race Track (HEART)—A Grant Application to NIOSH

1. Assess health history and current health status of a sample of jockeys and assess changes by repeat physical examinations and health interviews a 1 year.
2. Determine the prevalence of occupational, environmental and behavioral risk factors, particularly those related to mandated weight limits, and assess their impact on health status.
3. Determine physiologic changes in homodynamic (e.g., hydration, electrolytes, etc.) parameters and blood glucose that occur over a typical race day and assess their impact on balance and muscle fatigueability.
4. Compare health status and occupational, environmental and behavioral risk factors within and between states to identify potential ways in which Federal, State and industry stakeholders can improve the safety and health of jockeys.