

# *Jockeys; Health Screening Case Studies*

**NIOSH Public Meeting 2007  
Jockey Health  
May 22, 2007  
Crystal City, Hyatt**

Bonne Farberow, RN, CCRA, CCRP  
University of Pennsylvania  
Clinical Care Experts, Inc. - VP

## A Clinic at the Race Track

- A family practice setting
- A acute triage clinic
- A remote emergency room



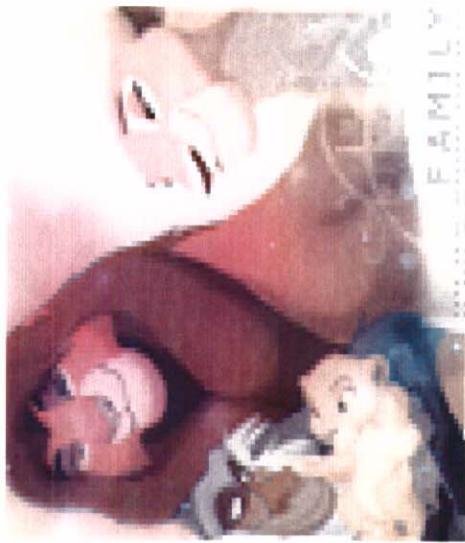
# Medical Treatment (s)



- Acute Asthmatic Attacks
  - Fractures
  - Concussion
  - Dehydration
  - Acute Trauma
  - Hypertension
  - Arrhythmias
- TEAM:**
- Physician (some tracks)
  - Nurse (some tracks)
  - EMT (tracks side)

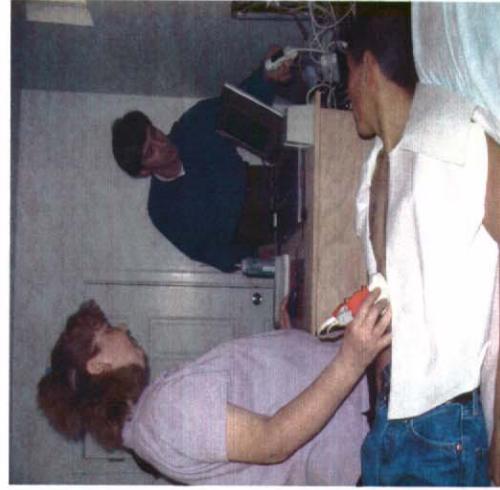
# Jockeys:

- Athlete
- Partner
- Parent
- Friend
- Colleague



# Case Studies: Jockeys

- Study on 43 “healthy” volunteers
- Screening completed to evaluate differences in 2 devices
- Population: Jockeys at 2 race tracks in Ca
- Tests performed:
  - 2D/3D Ultrasound
  - ECG
  - Spirometry



# Current Ultrasound Procedure

- Minimal to no preparation
- Non-invasive
- Out-patient; radiology center
- In-patient; institution
- Performed by Ultrasonographer
- Read by Radiologist

# Advances in Telemedicine

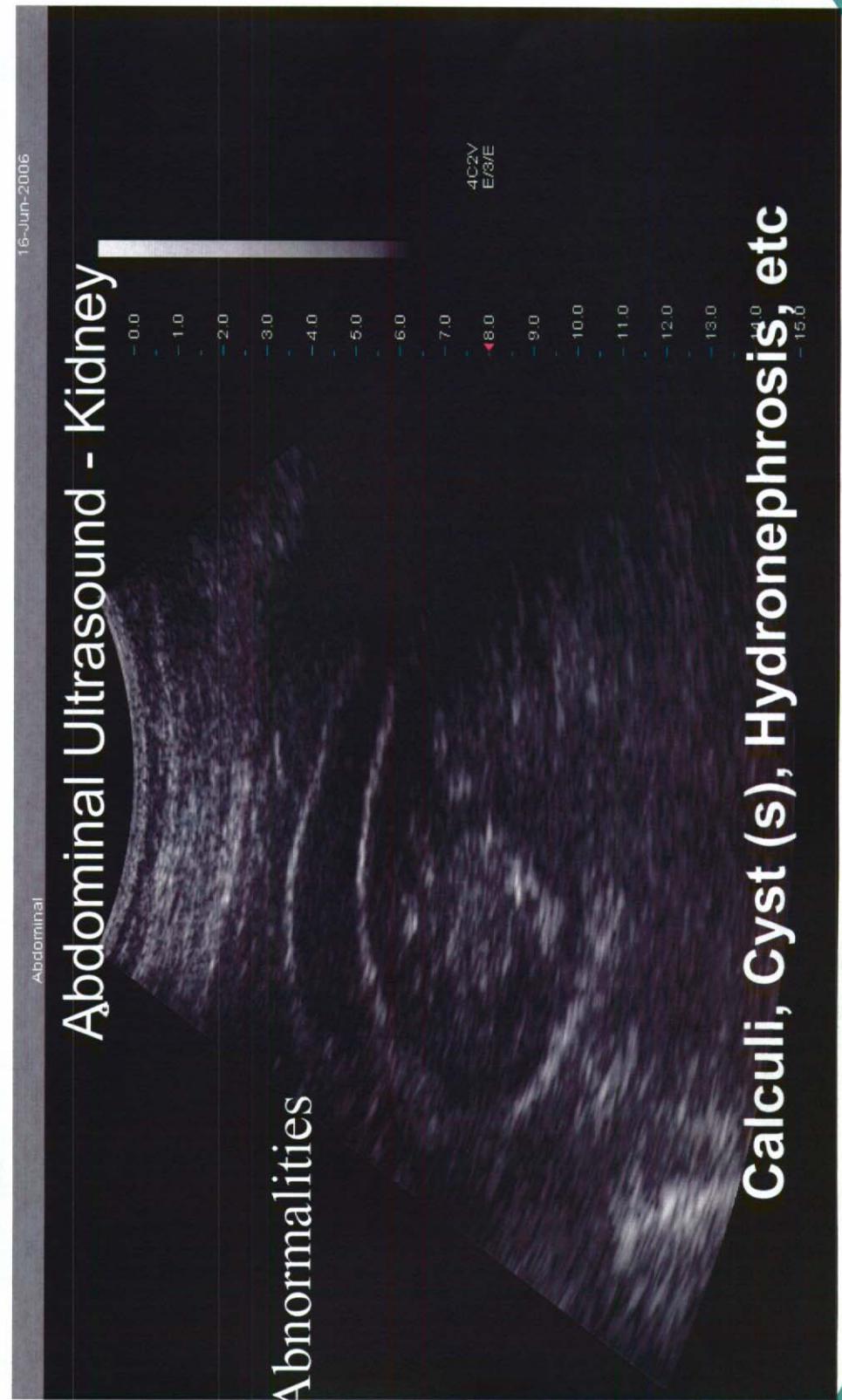
- **Ultrasonography in Remote Locations:**

- Emergency Medicine
- Public Health Screening Vans
- Thoroughbred Horse Racing Tracks
- Out-patient clinics (rural, urban, military)

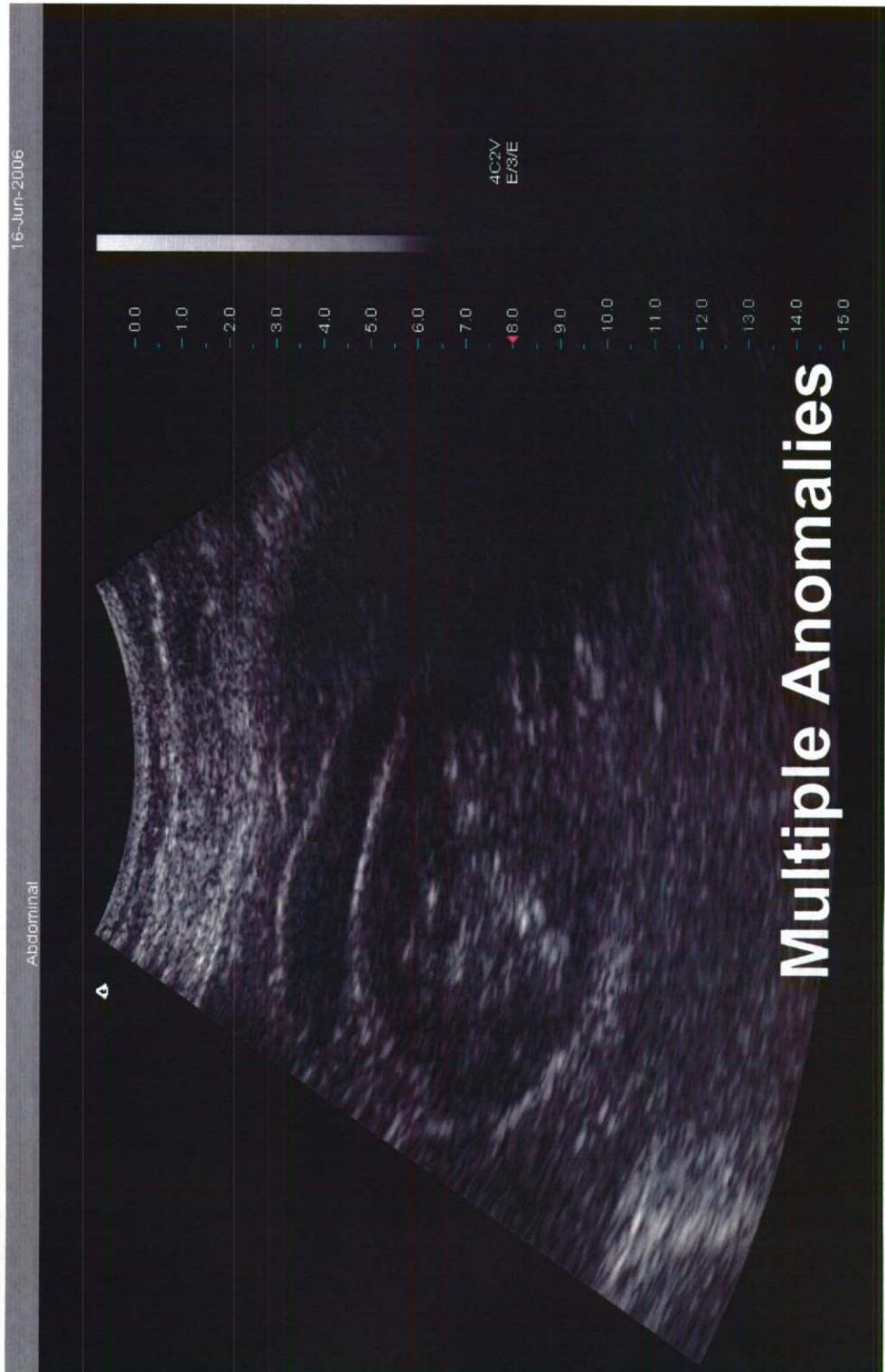
- **Tests Conducted and Read By:**

- Physicians
- Nurses or Ultrasonographers
- Remote Radiologist

# The Data



# A Healthy Athlete?

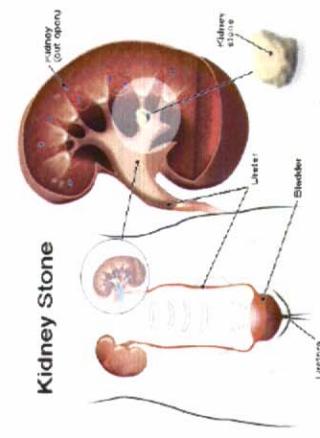


**Multiple Anomalies**

# Unexpected Findings

*Not a “healthy” population*

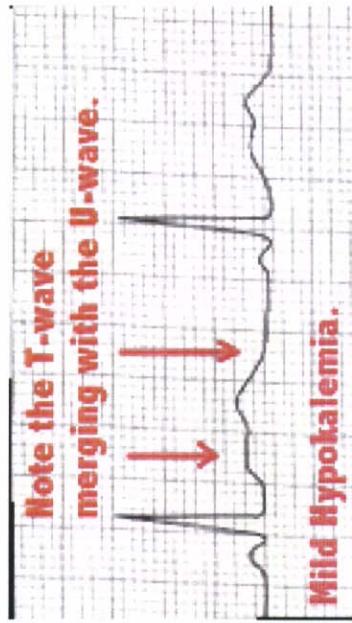
- 15 Jockeys showed evidence of renal pathology:
  - Diminished kidney size
  - Multiple micro and macro renal calculi



- 5 had significant cholelithiasis

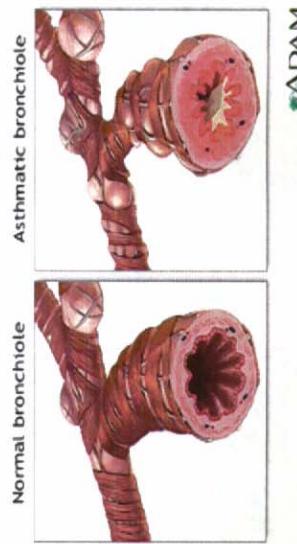
# Significant Heart and Lung Disease

- ECG abnormalities due to hypo and hyperkalemia were evident in 7 of 28



**Mild Hypokalemia.**

- 7 had obstructive or asthmatic-type lung disease.



## Closing Considerations:

- Importance of Increasing Safety
- Proactive versus Reactive Treatment
- Identify Health Issues & Treat
- Increase Quality of Life



Intervention

Targeted

# JOCKEY: AMERICA UNDERCOVER

The stories of three jockeys are told in this Emmy (R)-winning film that details the sacrifices it takes to make it in horse racing.



- Date 05-07-07 through 06-03-07
- HBO Documentaries
- Director Kate Davis (84 Minutes)
- Producer David Heilbroner

# Questions



*Thank you for attending!*

*Have a great day*