

Use of Furosemide (Lasix/Salix) for Prevention and Management of Exercise Induced Pulmonary Hemorrhage (Bleeding) EIPH in Horses

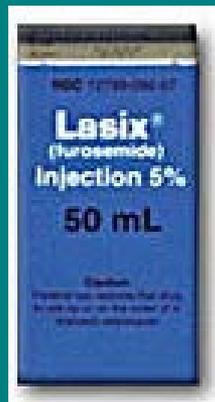


Use of Furosemide (Lasix/Salix) to control and prevent Exercise Induced Pulmonary Hemorrhage (EIPH) is preventative medicine, the same as the use of vaccinations or antiparasitic medications.



American Ingenuity

In the 1960's when U.S. Astronauts were going to the moon, American horsemen figured out how to prevent and manage Exercise Induced Pulmonary Hemorrhage (EIPH) or bleeding in horses with the use of Furosemide (Lasix/Salix).



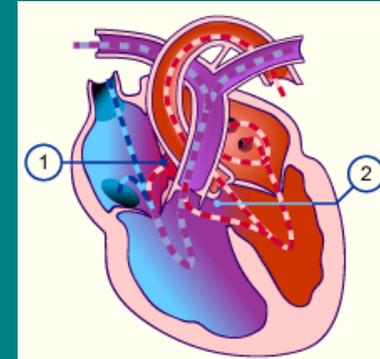
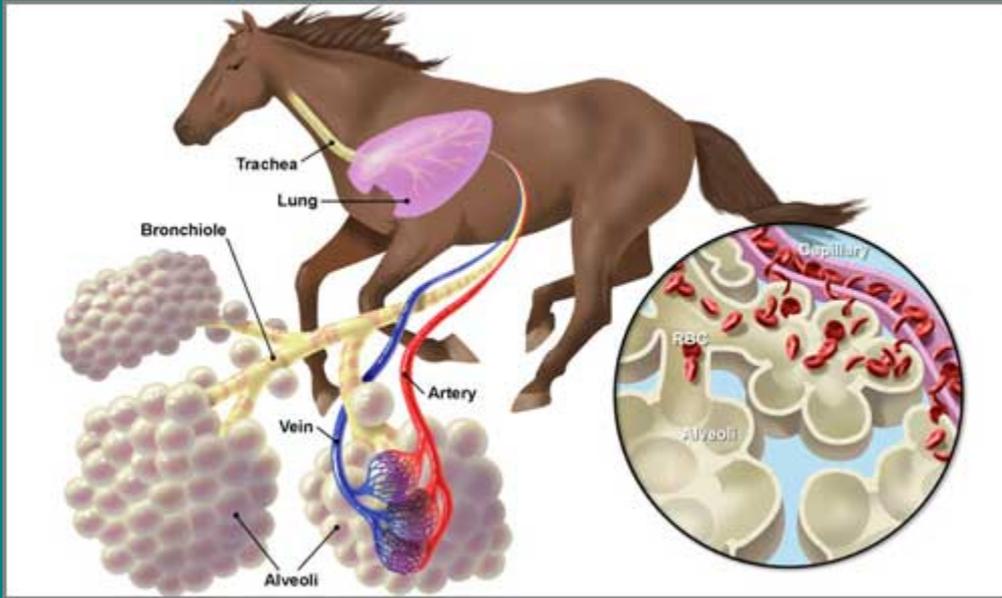


The Association of Racing Commissioners international (ARCI), the Jockey Club, and others are proposing a ban on race day medication.

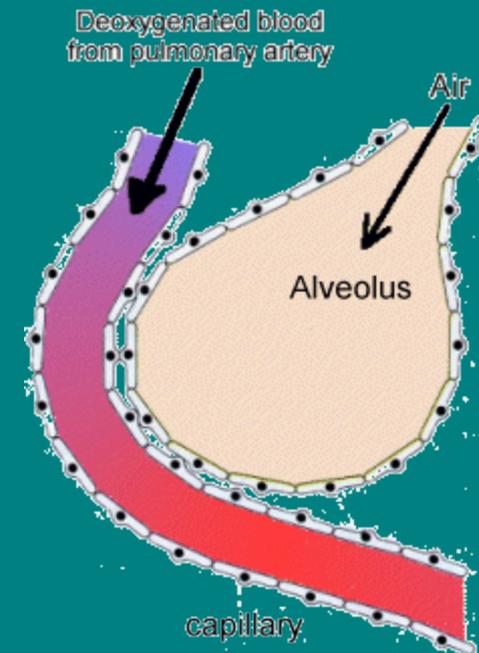
This will eliminate the use of race day administration of Furosemide (Lasix/Salix).

This is a terribly inhumane idea and a danger to both horses and riders!

Exercise Induced Pulmonary Hemorrhage (EIPH) Bleeding In Horses



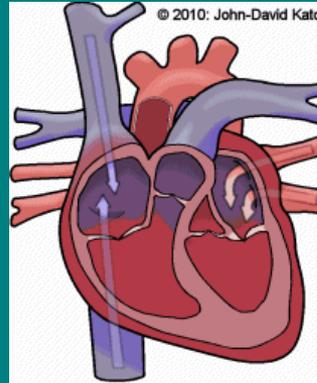
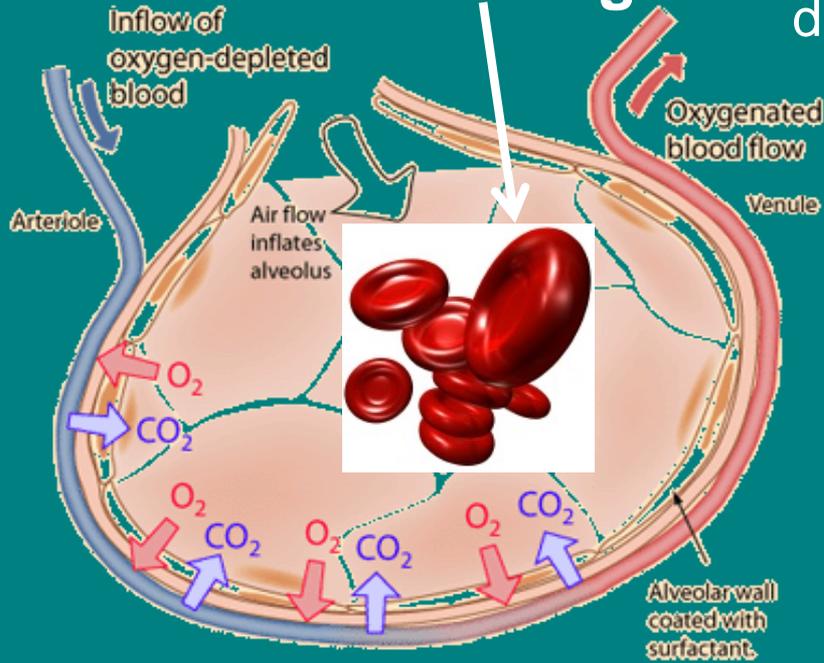
Rupture of the capillaries in the area of the air sacs (Alveoli) of the lungs is where the blood breaks out of the vascular system.



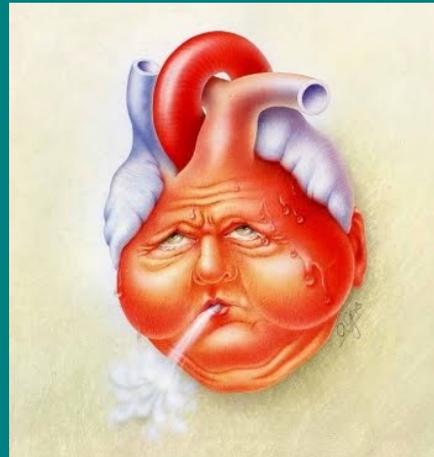
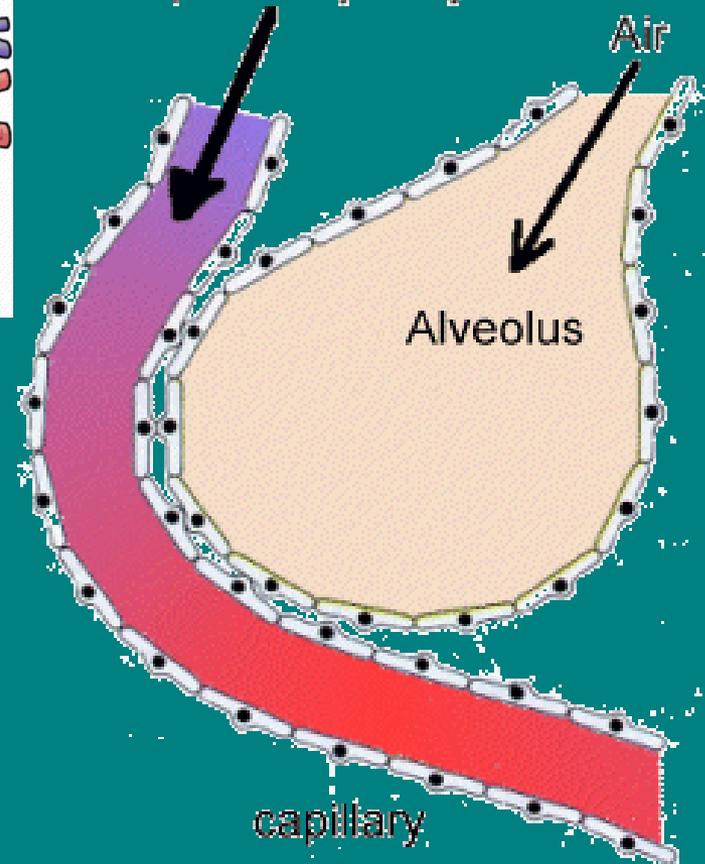
Exercise Induced Pulmonary Hemorrhage

Blood burst out of the capillaries to air sacs, depriving oxygen, & **Horse Drowns in Blood**

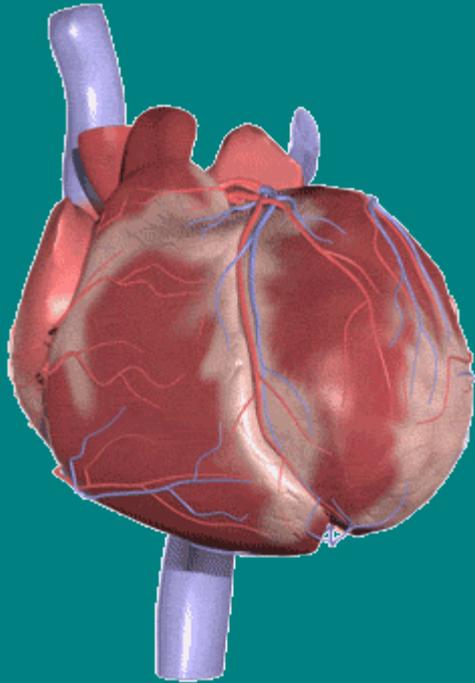
Hemorrhage



Deoxygenated blood from pulmonary artery



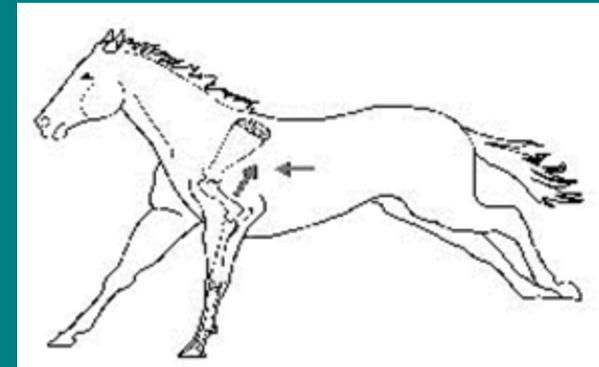
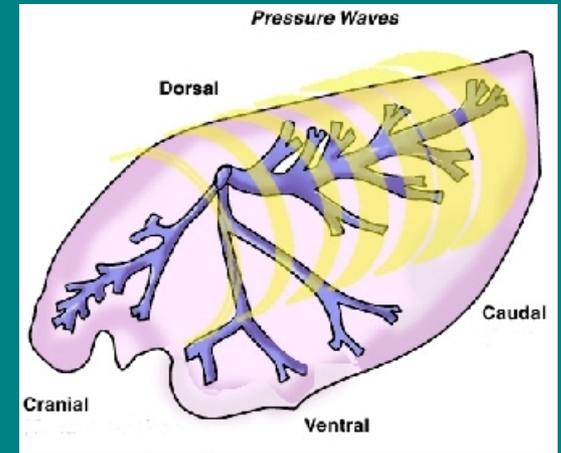
➤ EIPH is a syndrome that is produced by conditions of racing



The average horse's heart can pump 75 gallons of blood per minute to the lungs

The horse's powerful heart pumping blood at high pressure combined with the shock wave produced when the horse hits the ground when running, are contributing causes of EIPH or bleeding in horses.

Lungs



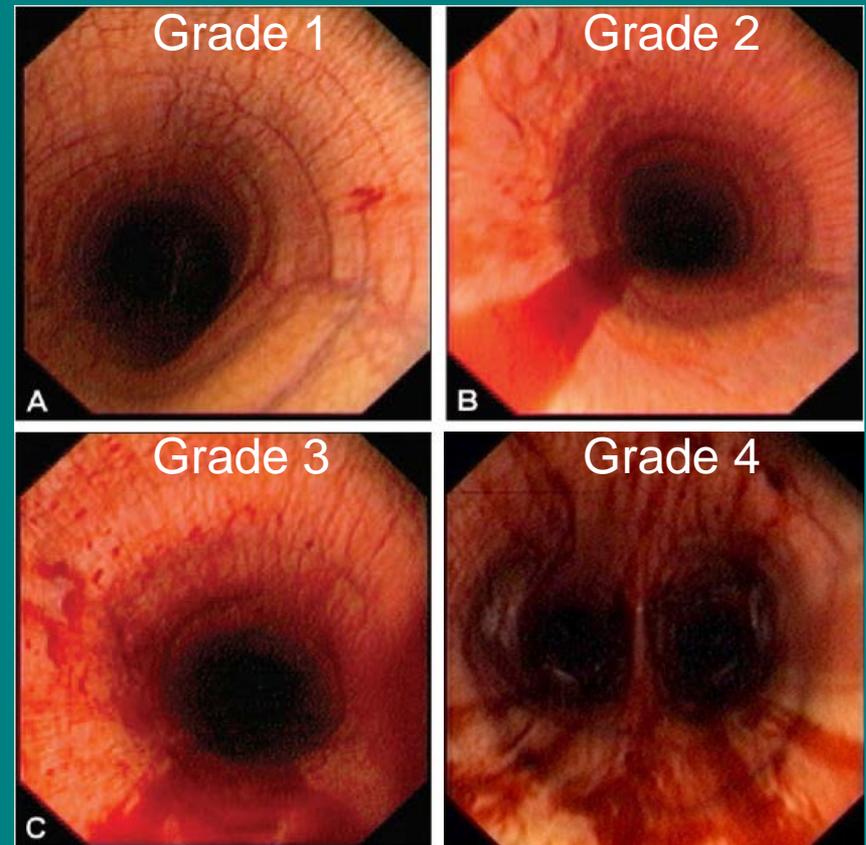
Exercise Induced Pulmonary Hemorrhage EIPH (bleeding) is most often diagnosed with the use of a fiber optic endoscope.



Blood in trachea

Endoscopic grades of EIPH

- Grade 0 = No blood detected
- Grade 1 = One or more flecks of blood or ≤ 2 short, narrow streams ($<10\%$ of tracheal surface)
- Grade 2 = One long stream or > 2 short streams occupying less than 33% of tracheal circumference
- Grade 3 = Multiple distinct streams of blood covering greater than 33% of tracheal circumference
- Grade 4 = Multiple, coalescing streams of blood, covering more than 90% of the tracheal surface with blood pooling at the thoracic inlet



Epistaxis (blood in the nostrils)

- Profuse blood from nostrils, very serious
- **NOT** a simple nose bleed,
- Most severe form of EIPH
 - ***DEATH***
 - Small percentage of horses with EIPH

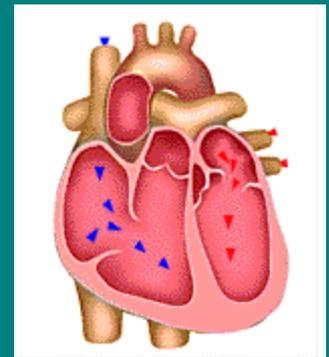


EIPH Epistaxis causes harm to horses.



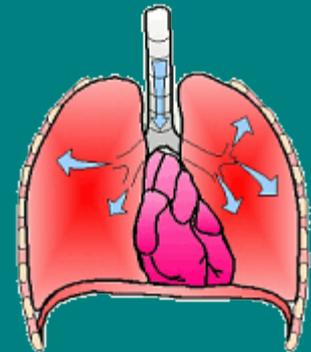
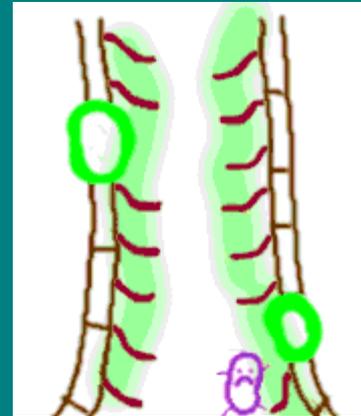
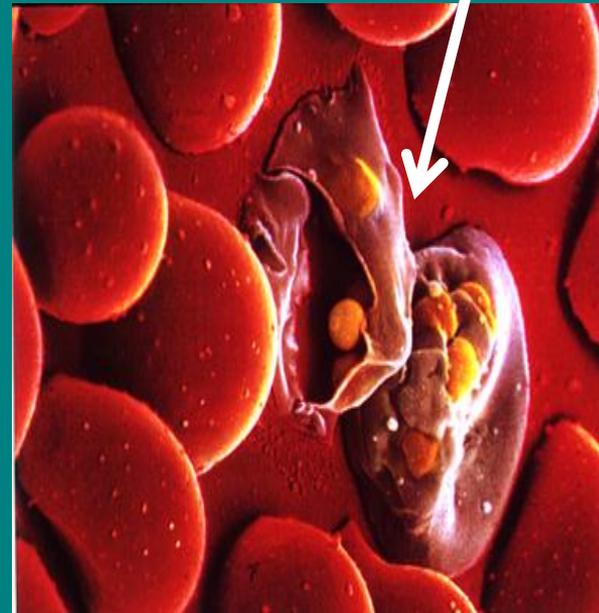
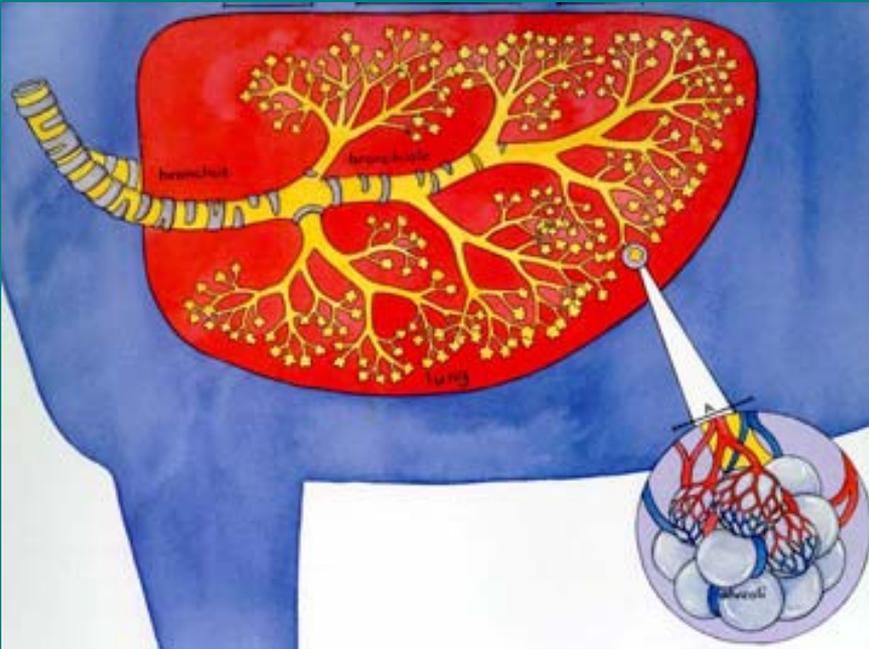
- Blood in lungs
- Reduced oxygen intake
- Fatigued muscles
- Sudden death

This is a danger to both horses and jockeys



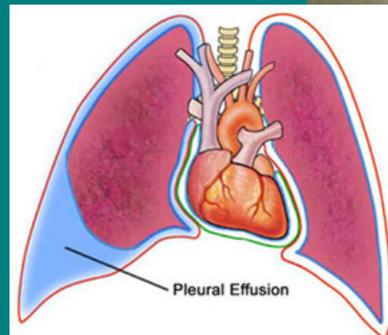
EIPH (Bleeding) a progressive disease in Horses

EIPH, bleeding in the horse's lungs sets up a nidus (place) for infection, both damages & destroys lung tissue. Repeated EIPH further destroys lung tissue often making it unable to heal. The lungs get scar tissue, cannot expand normally and lose some of their functional ability. If enough lung tissue is destroyed, it is the end of the horse for racing.



Pleuropneumonia

EIPH or bleeding in horses can lead to serious lung infections that require extensive treatment in an attempt to save the horse's life.



A bucket of purulent material drained from the horse's lungs

The Rest Of The World Should Look To The United States

EIPH or bleeding in horses occurs across the world.

The rest of the world is not addressing the problem like we do in the United States



EIPH and Lasix

- Furosemide (Lasix/Salix) is the only tool we have to prevent EIPH
- Furosemide (Lasix/Salix) is effective

The scientific evidence is irrefutable.
Horses bleed. Lasix works.



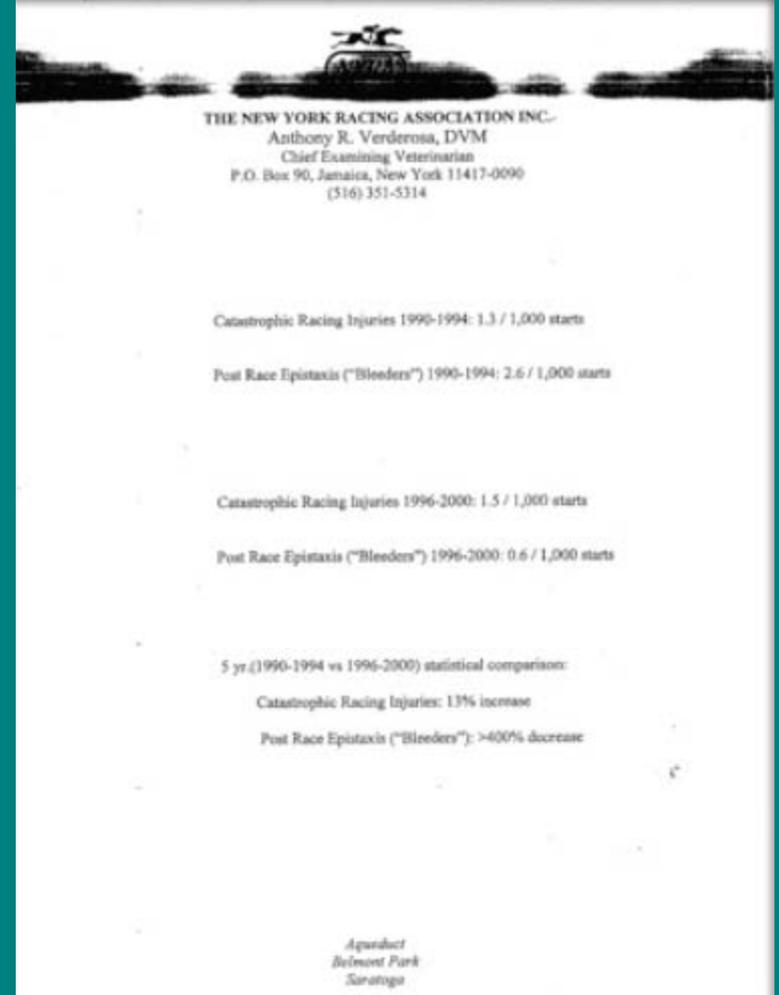
Bleeding predates current breeding and racing practices

“Bleeding Childers”
“Hermit”
“Eclipse”



New York Racing Association

Dr. Anthony Verderosa
analysis of incidence
of epistaxis in year
before and after Lasix
is allowed **GREATER
THAN 400%
DECREASE IN
EPISTAXIS WITH
LASIX USE**



Efficacy of Furosemide (Lasix/Salix) for Prevention of Exercise-Induced Pulmonary Hemorrhage (EIPH) in Thoroughbred Racehorses



The study that was funded by the Jockey Club in South Africa, determined nearly all horses bleed and that Furosemide (Lasix/Salix) was effective in preventing or managing EIPH

EIPH Is A Danger To Jockeys

Horses suffering from EIPH are subject to slowing down abruptly (stopping) in a race or crashing down in a race which not only puts their lives at risk, but also puts the lives of other horses and jockeys in a dangerous situation.





A horse suffering from EIPH (bleeding) and oxygen deprivation collapsing in a race could be fatal not only the horse, but also the jockey

A situation where the horse died from EIPH (bleeding) most likely would be prevented with the use of Furosemide (Lasix/Salix)

No Substitute for Furosemide (Lasix/Salix)

It is the only humane
thing to do for horses
that race



The Association of Racing Commissioners International (ARCI) ban on Lasix/Salix will have the following effects:



- Place both horses and riders in danger
- Some horses will not be able to race at all. Other horses will have their careers shortened
- This will cause a huge negative economic impact
- Will promote a negative perception of the entire horse racing industry