Equine Influenza Virus and Horse Racing

Introduction
Equine Influenza Virus (EIV) is a highly contagious respiratory disease among horses that has had an impact on the world’s horse racing industry.

Characteristics of the virus:
- Anorexia
- Harsh dry cough
- Nasal discharge

The virus has spread around the world in the equine population, with new strains of the virus appearing in different places. The horse racing industry has been especially affected by EIV because racehorses travel a lot more than the regular horse and are in close proximity to a large number of other horses.

How Contagious is the Virus?
The signs of EIV often appear one to five days after being introduced to the virus. EIV spreads quickly through the barns where racehorses are stabled, because there are a lot of horses in a small area and there are always horses moving around to different tracks. Racehorses are moving to tracks around the country and the world. Even vaccinated horses have been able to contract the virus.

- In Japan in 1971, more than 80% of the racehorses stabled at eight racetracks were infected.
- During three months in the United Kingdom, more than 1,300 racehorses were infected.

Figure 1. Changes in number of positive horses for EIV in Japanese racing stables.
Source http://www.jstage.jst.go.jp/article/jvms/70/6/623/_pdf
What about the Vaccination?

There are many different brands of vaccines available on the market today. The vaccines Boehringer and ProteqFlu have been found to be the best. Research has suggested the vaccine should be given in three doses instead of the traditionally two.

When the ProteqFlu vaccine was used in a study of Welsh mountain ponies, only half of the vaccinated ponies showed any sign of the virus, and the ponies that did had very mild symptoms. The unvaccinated ponies had severe coughing and had to be treated with antibiotics.

What is the Impact on the Racing Industry?

The ban of moving horses and canceling races has happened around the world when the virus breaks out, causing the world racing industry to be affected, not just the racing of the infected area. More racehorses are traveling overseas for racing and breeding, so an outbreak can cause severe economic loss for the industry.

Racing continued at the United Kingdom racetrack during the outbreak in 2003. The virus did not spread very much because only healthy horses were brought in to race; those with coughs were left behind. However, an outbreak did occur in Italy as a result of horses from a Newmarket sale being transported there.

Positive results of EIV in Japan in 2007 lead to a ban in the movement of horses for almost a month. Movement was only partially resumed in the following months with strict restrictions.

Conclusion

Equine Influenza Virus is highly contagious and can affect horses who have been vaccinated for the virus. The virus has greatly affected the world horse racing industry because EIV affects not only the health of horses but the transportation of them as well. This affects the horse racing industry because the virus has to be contained and stopped from spreading. Approximately half of all calls that veterinarians make to racehorses are for respiratory disease; they are not all EIV, but the virus has had a large impact. The symptoms of EIV occur very quickly once a horse has been introduced to the virus, so proper care needs to be given immediately to horses that show any signs of having contracted the virus. The vaccines Boehringer and ProteqFlu have been found to work the best and increasing the vaccine's dosage from two to three doses has been beneficial.

The horse racing industry has been greatly affected by the disease because the horses are constantly moving. The disease has been allowed to spread around the world and vaccinations may not be able to work on the different strains arriving. Even countries with strict quarantine measures have been affected by the virus.

The horse industry has been working to solve the problem of EIV and limit the spread of this virus, so horse, in the racing industry and any other industries, will be able to travel and perform around the world.
References


