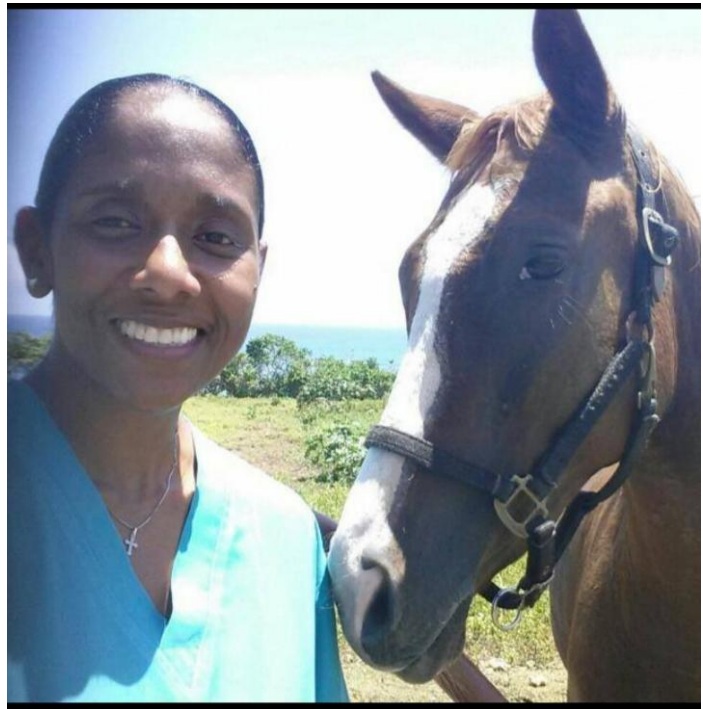


Horses Get the Flu too.

Dr. Sophia Ramlal, JP
Senior Commission Veterinarian
Jamaica Racing Commission

There are approximately 3500 horses in Jamaica of which the 30% involved in Thoroughbred breeding and racing are the most routinely vaccinated sub-population. This vaccination programme was occasioned by the equine influenza outbreak of 1989 which resulted in six months of racing being lost at Jamaica's lone racetrack, Caymanas Park, forcefully



demonstrating the impact of equine health on business continuity. Fast forward 30 years to Britain, February 2019: six days of horse racing cancelled, 120 stables quarantined and 1000 horses tested for equine influenza after three **vaccinated** horses tested positive for Equine Influenza. The natural question then becomes: What is the use of vaccinating when influenza is known to be a self-limiting respiratory disease with very low mortality in horses? There are a number of reasons.

- 1) The Equine influenza Virus (EIV) is one of the most important respiratory pathogens of horses. It spreads rapidly among horses causing high fevers, coughing, depression, inappetence, inability to work. Mortality has occurred in foals and donkeys. There is no cure. Recovery and full return to work often require 3 to 4 weeks.
- 2) Equine Influenza (EI) is caused by two viral subtypes H7N7 and H8N8 which have been responsible for EI outbreaks in many countries: in 2003: South Africa; in 2007: Australia, India, China, Sweden, Mongolia and Japan; the UK in 2008 are some examples. The H3N8 subtype previously thought to be confined to equines has been reported in dogs (racing greyhounds) (*Crawford et al 2005*), zebras and camels (*Yondon et al 2014*). Serological evidence of exposure has been reported even in humans (*Larson et al 2015*) though virus isolation has not been successful.
- 3) The ever-increasing global movement of horses for competition and breeding coupled with the endemic nature of the EIV in many countries, provide fertile opportunities for infection. In the 2007 Australia outbreak for instance, the improper quarantine of horses that were sub-clinically infected and insufficiently vaccinated are reported to have led to the introduction of EIV into Australia and subsequent EIV infection of 75,000 known horses in that continent. EIV was also detected in dogs in close proximity to the infected horses.
- 4) Vaccinating a pregnant mare will only provide maternal antibody protection to her foal until it is 6 months old.
- 5) Under-vaccinating, (ie skipping vaccines, starting too long after the foal is 6 months-old etc) results in horses that can be sub-clinically infected and

shedders of the virus, thereby acting as a source of infection for other horses.

- 6) Similar to human influenza viruses, equine influenza virus undergoes antigenic shift/drift, necessitating the routine use of updated vaccines to provide on-going protection.

The flu is here to stay. Prophylaxis and proper bio-security are the best measures to minimize infection in horses. Flu protection for a horse should include vaccination starting with pregnant mares 1 month prior to foaling and then vaccinating the foal at 6 months followed by a 21 day booster. Thereafter routine vaccinations every 4 months for racehorses and every 6 months for other horses should be done to maintain optimal immunity. Prevention is always better than cure!