Vaccinations

Influenza is topical at the moment with fears of 'Bird Flu' being caught by humans. Horses get Equine Influenza and this virus has no risk of human transmission. There have been limited reports of Horse to Dog transmission but these are very rare. There are 2 major types of Equine Flu – Group 1 & 2. Group 1 has not been isolated for over 20 years but Group 2 strains have been active over the last few years. Group 2 strains are designated 'European' and 'American' and the American strains are the ones found recently. These strains are constantly changing their antigen coats so vaccines need to be kept up to date in order to be effective. Some older vaccine strains do have a cross reactivity effect but incorporating the precise strain circulating in new outbreaks is more successful. New vaccines will have the South Africa 03 strain incorporated but this may take a few years.

So why do we vaccinate? – Equine Influenza is rarely fatal but can cause mares to abort and the elderly or very young are the groups most at risk of serious complications. Just like in man Influenza can kill and the concerns with 'Bird Flu' are that the mutation could lead to a very virulent strain that kills a much larger number of people. As yet a type of very virulent Equine Influenza leading to high mortality has not occurred. Horses infected with Equine Flu become depressed with a rise in body temperature, reduced food intake and a frequent dry cough. Later a mucopurulent nasal discharge appears. The virus rapidly spreads through a stable yard over a few days. Most other Equine viruses spread much more slowly. In the past, widespread equine influenza epidemics have affected so many horses that the industry ground to a halt until the disease had passed. This resulted in major economic losses for many areas of the equine world and certainly a loss of enjoyment for the rider as some horses need a long convalescence.

In the UK since the racing industry started compulsory vaccination in the 1970's closely followed by other equine groups we have not had a major problem. In 2003 there was a local epidemic in Newmarket affecting many vaccinated horses. Subsequent laboratory work showed the virus not only had changed slightly but had also increased it's virulence which together allowed it to override the immunity of the vaccinated horses. Immunity should be viewed as a dam with infection as the water behind it. If infection levels rise then any immunity can be overcome!

Vaccine manufacturers are regularly monitoring new strains and incorporating them into their vaccines just like the human influenza vaccine changes in response to new strains. Vaccines are not 100% effective but do keep our horses protected as best we can. I remember an outbreak in 1989 where only 3 of 22 horses were vaccinated and they were a month away from needing their annual boosters. These 3 horses were the only ones not to cough!

Tetanus – treatment of a horse with Tetanus is rarely successful, emotionally draining and very expensive. Prevention with vaccination is very effective and good value. It should be mandatory for every horse.

Equine Herpes – Broodmares are vaccinated in the 5th,7th and 9th month of pregnancy to minimise the risks of Herpes abortions. Other horses can be vaccinated to control the respiratory effects of Herpes infections but need 6 monthly boosters. Although vaccination of a horse population will reduce the virus levels there is no claim against

control of Herpes encephalitis where the brain is affected causing muscle weakness with some horses being unable to stand. This syndrome is fortunately not common.
Equine Rotavirus – This disease affects young foals causing diarrhoea. Some studs advise the mare is vaccinated in late pregnancy to boost the immunity to the foal via the mare's colostrums.
Equine Viral Arteritis –Vaccination limited to breeding stallions because if they become infected they could become carriers and therefore be useless as sires in the UK.
West Nile Virus – Available from 2009. currently the disease is not in the UK. Horses travelling abroad should consider vaccination dependant upon their route and final destination.