

'It was difficult but we rose to the challenge'

Dr Richard Newton, Director of Epidemiology and Disease Surveillance at the Animal Health Trust, discusses the recent equine flu outbreak that led to British racing's six-day shutdown in February



The equine flu outbreak saw the AHT stretched to its limit. What was the biggest challenge you faced?

I think it is fair to say we were stretched. The biggest challenge for us at the Animal Health Trust was the seismic increase we saw in testing volumes – going from a normal week of activity to an unprecedented number of tests overnight. That sudden spike in volume was difficult, but we rose to the challenge and I think it is fair to say it would have stretched any laboratory service.

It quickly became clear that we would be looking at thousands of horses needing to be tested, so the priority was to get the swabs out quickly and then meet the demands of the tests to be carried out. We needed to do this in as an efficient manner as possible, whilst also being flexible to accommodate high-priority samples. Our process of using commercially-produced swabs, which are manufactured close to us here in Newmarket, the use of qPCR technology allowing us to process samples quickly, and our amazing staff and helpers all contributed to us delivering a year's worth of test results in just a few days.

It is at times like this I'm proud to be working at the Animal Health Trust. We may be a relatively small veterinary and scientific charity, but what we do makes a difference in the UK and ultimately across the globe.

In the end racing was cancelled for six days. How did you make the decision that the sport would be able to resume after that time?

Racing is a highly connected sport, taking place on 60 racecourses and involving horses based all over the country. Bearing in mind that from just five race meetings over three days in February, hundreds of trainers and potentially 10,000 horses could have

been linked to equine influenza, it was extremely important to understand the scale of the issue. The decision to stop racing was taken to enable the BHA to take stock, limit any potential further spread of the disease and really understand how large an issue the sport was facing.

As a member of the BHA Veterinary Committee, we met every night during this period to discuss the situation as it was unfolding. It was only after gathering all the facts over the weekend of February 9-10 that the committee made its recommendations and the BHA took the decision late on the Monday evening to resume on Wednesday, February 13.

There were opposing voices on both sides of the debate – some calling for no cancellation at all, others saying it was foolhardy to start again so quickly. Did you see that public conversation as a good or bad thing?

I can see why it generated so much debate, but personally I don't believe it was helpful at the time. There was a view from some people that this was just a normal situation, but it was far from that.

The interest from the media was good and helped us to relay the key messages to prevent further spread



The huge number of equine flu nasal swabs stretched the AHT to the limit

to a much wider horse-owning population.

The outbreak brought the issue of disease prevention and control into the spotlight. What lessons should the industry take on board to improve safety and move things forward?

I think the equine industry needs to now begin to think much more widely than just racing. There is a much wider thoroughbred community out there, for example pre-training yards, transportation, sales rings, etc where the mixing of a large number of horses takes place every day. It is those networks that we now need to help better understand how good biosecurity practices, vaccination, etc, can help control outbreaks like this occurring in the future.

Is there more the industry should be doing to limit the chances of another outbreak occurring, concerning equine flu or any other disease? Put more money into finding new, improved vaccines, perhaps?

Unfortunately, it isn't as easy as just finding a new, improved vaccine. There are a number of variables at play here. A vaccine today can have a particular vital strain in it, but tomorrow that virus changes ever so slightly and at some point down the line the vaccine will become out of date and stop working so well. It is, however, difficult to predict when and to what extent the vaccines will stop being effective. That is why continual surveillance of equine influenza, especially in vaccinated populations such as racehorses, is so critical, so the earliest warning of a problem with vaccine failure can be picked up.

Going forward, looking at our practical experience and mathematical modelling studies (i.e. the advice is based on firm scientific evidence), I believe the industry needs to consider vaccinating more frequently than



Laboratory analysis and disease surveillance – assisted by funding from the Levy Board – enables the AHT to help all UK equines



every 12 months in order to remain best protected against a virus that has shown it can overcome vaccination. Of course, there needs to be a degree of flexibility built into this, but it could help limit an outbreak like this in future.

Will Brexit make it harder to stop infectious disease entering the British horse population?

I doubt it. In fact, it could make it easier to control disease if there are greater restrictions on the free movement of horses and the UK decided to introduce its own disease prevention rules.

What advice would you give to breeders and mare owners in light of recent events?

Although we saw a peak of flu outbreaks in February, it is likely that because there are still lots of horses that are not vaccinated against the disease that the current cases of flu will continue for many more months, albeit at a lower level.

Therefore my advice to breeders and mare owners is to remain vigilant and not be lulled into a false sense of security. Be constantly aware of the clinical signs of equine influenza – fever, cough, lethargy, etc, and boost your horse's vaccination if it was given more than six months ago, and, importantly, isolate new arrivals on your premises. Practising good biosecurity should be a given in preventing the impacts of infectious diseases.

The Animal Health Trust has an excellent website at equiflunet.org.uk providing advice for vets and horse owners, and also detailing latest outbreaks. If you are on Twitter, you can follow @equiflunet to receive news about outbreaks direct into your feed.

What was different about this series of outbreaks? And what has the Animal Health Trust learnt that will aid the thoroughbred community in the future?

This is a strain of flu not commonly seen in the UK and Europe in recent years. All samples sent to the Animal Health Trust for diagnosis are also subjected to vigorous analysis by our research team, ensuring evidence on how the virus is affecting the horse population is collected. This information is then used to inform the Expert Surveillance Panel when it comes to looking at what flu strains should be included in vaccines going forward.

This is one reason why sending samples to the Animal Health Trust for analysis is superior to a number of horse-side testing options available. Only through comprehensive analysis in a laboratory can new knowledge be gained on how this endemic disease continues to change and mutate, and

this, in time, helps the entire UK horse population.

Did we see the best of British racing during the crisis – the AHT, BHA and Levy Board working together to get the show back on the road as soon as possible?

I believe so. The support we received from the BHA and the significant financial contribution made by the Horserace Betting Levy Board over many years towards influenza surveillance not only saved racing, including some major fixtures such as the Cheltenham Festival, but also had benefits for other equestrian disciplines too.

The racing industry had the vision nearly 40 years ago to set up this surveillance scheme after outbreaks affected racing, and although it isn't needed like this every year – thankfully – when it is called upon, it very much comes into its own.



Fundraising, such as via a charity raceday at the July Course, is vital to the AHT