



19 November 2008

## **FREQUENTLY ASKED QUESTIONS ABOUT EQUINE INFLUENZA AND PROTEQFLU**

### **1. What is equine influenza (EI)?**

Equine influenza is a highly contagious airborne respiratory virus which affects horses and other equine species – it does not affect humans.

The equine influenza virus attacks the horse's respiratory tract and can make horses very sick and susceptible to secondary infections.

It has a very high morbidity with almost all horses exposed to the virus likely to become infected, particularly in naïve horse populations like New Zealand, which has never had an outbreak of equine influenza.

### **2. How does equine influenza spread?**

The equine influenza virus is highly contagious. It is easily spread from direct and indirect horse contact such as:

- shared paddocks, feeders, water and bedding straw
- infected equipment – thermometers, bits & bridles
- microscopic secretions carried on humans hair, clothes or skin (farriers, horses' dentists, track work riders, stable hands, etc).

### **3. What is ProteqFlu?**

ProteqFlu is a genetically-modified equine influenza vaccine approved for use in the EU, Canada and the United States. It was approved by the European Medicines Evaluation Agency (EMA) in March 2003. Following five years of usage, the EMA reassessed and reauthorised ProteqFlu for ongoing use this year.

This vaccine was used to control the spread of, and eventually eradicate, the equine influenza virus in the Australian states of New South Wales and Queensland after an outbreak occurred there last year.

ProteqFlu is a recombinant vaccine utilising an altered live canary pox component. The true canary pox on which it is based does not jump species and as this vaccine is more diluted there is even less chance of it doing so. When used as a vector in the vaccine, canary pox does not do more than a single round of replication. Canary pox is widely used as a vector for immunisation against many viruses. Canary pox is endemic in New Zealand and does not affect humans, other mammals or our native birds.

#### **4. What has ProteqFlu been approved for?**

ERMA New Zealand has approved the equine influenza vaccines ProteqFlu and ProteqFlu Te for conditional use only. That means these vaccines have been approved for the export of horses who are travelling to places where the equine influenza virus is endemic and ProteqFlu is a condition of entry and for emergency use only if there was an equine influenza outbreak in this country, and then only under the direct control of MAF Biosecurity NZ.

#### **5. Where will the doses of ProteqFlu vaccines be stored in New Zealand?**

The New Zealand Racing Board and the Equine Health Association applied to register the ProteqFlu vaccine for the export of horses and emergency use only.

This means that in the event of an equine influenza outbreak in New Zealand, we will be able to order the required amounts of ProteqFlu from the supplier in Europe under the direction of MAF Biosecurity NZ. The supplier can manufacture the vaccine in large quantities very rapidly, which means it is readily available in an emergency situation.

Small amounts of ProteqFlu may be imported into New Zealand under strict security measures for export horses. Specific conditions for use of the vaccine will be determined by Agricultural Compounds and Veterinary Medicines (ACVM) Group. The vaccine will be kept at a MAF Biosecurity NZ approved facility.

#### **6. There are three equine influenza vaccines already registered for use in New Zealand – why apply to use another one?**

ProteqFlu gives a much faster onset of immunity – two weeks compared to up to eight weeks for other vaccines – and immunises against multiple strains of the equine influenza virus. The longer it takes for a vaccine to work, the more likely it is the virus will have undertaken rapid epidemic spread.

ProteqFlu is the equine influenza vaccine of choice internationally. It is approved for use in the EU, Canada and the United States. It was approved by the European Medicines Evaluation Agency (EMA) in March 2003. Following five years of usage and an environmental risk assessment, the EMA reassessed and reauthorised ProteqFlu for ongoing use this year.

ProteqFlu was registered and used to control the spread of, and eventually eradicate, the equine influenza virus in Australia after an outbreak occurred there in August 2007.

#### **7. Can the genetically modified vaccine find its way into the food chain?**

The vaccine is injected into horses so once the vaccine is used it is contained within the animal and is only viable long enough to stimulate an immune response. The genetically modified component breaks down to a protein within 48 hours of entering the animal. The ProteqFlu vaccine will not multiply or replicate in horse cells so there is no risk of it spreading.

## **8. What impact would an outbreak of equine influenza have on New Zealand?**

It became apparent during the equine influenza outbreak in Australia last year that a similar incursion in New Zealand would have a devastating effect not only on the industry itself, but also on the industry's contribution to the New Zealand economy.

An equine influenza outbreak here would mean an immediate, complete shut down of the racing industry. Based on the Australian experience, the economic impact of an equine influenza outbreak in New Zealand has been estimated as \$38 million on the New Zealand Racing Board's earnings for every three months the racing industry is shut down. Further to this, about \$22 million would not be paid out by the Codes via the clubs in stakes during this period.

In addition, the social and community impacts will be widespread. Many people in the industry would effectively be out of work. There would be no spend to any associated community businesses through race meetings such as food, beverage and fashion retailers. Racecourses would be shut down to other community users. And it would mean all other equestrian activities such as showjumping, pony club and the horse trekking tourism businesses would be shut down.

## **9. What is the racing industry's contribution to the New Zealand economy?**

In 2004, the New Zealand Racing Board commissioned an independent, international specialised research company to undertake a size and scope study of the New Zealand racing industry. This study found the New Zealand industry contributed \$1.4 billion, or 1.3 per cent of New Zealand's total GDP, in economic activity to New Zealand's economy at that time.

That study also estimated there were more than one million attendances at race meetings and that on-course spending exceeded \$54 million on non-wagering products such as travel, accommodation, food and beverages and fashion purchases.

## **10. How many jobs would be affected if there was an EI outbreak?**

More than 40,000 people are involved in some capacity in supporting the racing industry in New Zealand. The industry generates more than \$680 million in salaries and wages each year from more than 18,000 full-time equivalent positions.

In the last financial year, there were more than 5,700 equine races held at 600 Harness and Thoroughbred race meetings at 68 courses throughout New Zealand, being hosted by 91 racing clubs.

There are currently about 11,000 horses either racing or in training, which require the extensive infrastructure of farriers, vets, jockeys, drivers, trainers, stable hands, as well as apprentice schools, the Equine Industry Training Organisation, and shipping and transport companies across many New Zealand communities.

Ends