

# Planning for an Equine Influenza incursion



# What is a response plan?

- A response plan is a framework for operational activities carried out by IDC if an incursion was to occur it addresses some of the practical issues associated with a response
  - It is a tool box of operational activities that may be used during a response
  - It is not a commitment by MAFBNZ to respond to an incursion in a certain way
  - It does not deal with policy decisions that may be made regarding the response
  - It is a living document
  - Disease does not always behave as expected; therefore, no response plan will have all the answers
- It is not possible to have a response plan for every potential new organism that could enter the country
  - Most response plans are developed at the time of diagnosis e.g response to: *Styela clava*, *Aedes albopictus*, and *Eimeria macusaniensis*

# Why do we have a response plan for EI?

- The Investigation and diagnostic centre is responsible for initial investigation and diagnosis of exotic disease (and new and emerging disease)
- The EI response plan along with other plans are produced as part of our preparation for exotic disease incursions
- First draft of the EI response plan was produced in early 2006 and reviewed by the NZ equine health association

# Tools included in the Equine Influenza response plan are:

1. Initial investigation protocol
2. Laboratory tests and laboratory capability
3. Casing and Tracing protocol
4. Movement control
5. Surveillance
6. Initial work on vaccine availability and strategic vaccination during an incursion

# 1. Investigation protocol

- **A list of procedures to be carried out during a farm visit**
  - Including forms to fill in and samples to collect
- **Data collection forms**
  - Animal clinical form,
  - Farm data collection form including tracing data
- **Sample collection**
  - Nasopharyngeal versus nasal swabs
  - Numbers of horses to test
  - Testing asymptomatic in-contacts
  - Repeat testing
    - Is it required?
    - When is the retest to be carried out?
- **Case definition**
  - “Suspect case” versus “Case” (Clinical, serological, PCR, ELISA, Virus isolation)

## 2. Movement control

- Key to EI control/eradication
- Movement standstill North/South Island/s affecting all horses
  - Period of movement control will be dependant on disease transmission rate at the time

# 3. Movement permitting

- Based on the controlled area legal notice
- Conveyers broken up into risk categories (high, medium and low)
- Permitting conditions are based on risk group and origin and destination of the good to be permitted and direction of movement

## 4. Surveillance

- An infected zone is defined around each infected property
  - Size of the infected zone will depend on risk
    - Density of horses in the region
    - Presence of horse thoroughfares etc
  - Surveillance will be a mixture of active (patrol visits by veterinarians) and passive (daily monitoring of temperatures and clinical signs by owners)

# 5. Vaccination

- Generally speaking vaccination is not advocated for the purposes of eradication, rather for control
- Vaccination during a response may interfere with attempts to eradicate EI
  - Likely to be delays from isolation of virus and typing of EI strain, sourcing vaccine to production of immunity in horses
    - Because EI is extremely infectious disease transmission needs to be stopped in the short term, immunity from Vaccination will not develop quickly enough do this.
  - Partially immune horses may shed virus without displaying clinical signs

## 5. Vaccination cont...

The decision to vaccinate during a response will be influenced by:

1. Initial surveillance providing information on the number and spatial distribution of affected horse properties
2. The number and spatial distribution of horses likely to have been exposed
3. The virus subtype and antigenic lineage dictating effectiveness of NZ registered EI vaccines
4. The success of movement controls

# Summary of EI

- Eradication may be possible if detected and reported early
- Movement controls will be the key to successful eradication
- Vaccination is of benefit for control if disease becomes endemic



**Thank you**