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The control of equine influenza and exotic pathogens

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Exotic disease control

- If disease is notifiable, Defra responsibility
- Genuine partnership developing
 - between Defra and Equine Industry
 - in planning for exotic disease incursion
 - focussed on African horse sickness (AHS)
- Equine industry members being invited to work with Defra
 - Equine experts group
- If disease is not notifiable, then up to industry

AHS Working Party

- Representatives from across equine industry
- Organised between Paul Jepson (Horse Trust) and Defra
- Has worked towards production of revised contingency plan
 - Ensured good level of buy in from many in equine industry

Equine influenza – the disease

- Caused by a “standard” influenza virus
 - H3N8
 - Adapted to the horse since 1963
 - Previous H7N7 has now disappeared
 - Many outbreaks over the globe since then
- Highly contagious equine respiratory disease
- Typical features in unvaccinated animals
 - Harsh, dry cough (“hacking”)
 - High temperature, off food, depression
 - Frequent secondary bacterial invaders
- Signs moderated in previously infected horses
 - Can be difficult to spot
- Virus evolves as influenza does in humans
 - Vaccines go out of date

Equine influenza - control

- Equine influenza
 - Non-notifiable disease in UK
 - Endemic and controlled by vaccination
 - Vaccination compulsory in racehorses and some sports disciplines
- Diagnosis undertaken at Animal Health Trust in Newmarket
 - International Reference Laboratory for Equine Influenza
- On international scale, excellent level of surveillance
 - Coverage only patchy still in real terms
- Ongoing support for surveillance from equine industry
 - Horserace Betting Levy Board
 - Racehorse Owners
 - Thoroughbred Breeders
- Supplemented commercially



Equine influenza vaccines

- Need to keep virus strains in vaccines up to date
 - Research in this area led by AHT for years
- Strain recommendations made annually by OIE
 - World Organisation for Animal Health
- Important that vaccines **WORK** as we compel many to use them
 - They must be safe as well
- We must use vaccines that are manufactured
 - market small
- Vaccines must prevent virus transmission
 - as well as disease
 - Australian quarantine stables

Communication needs for disease control & prevention

- Information needed to
 - promote prevention
 - aid control
- AHT, Defra and BEVA ongoing sources of information
 - Quarterly reporting scheme
 - national focus, international information
 - web & email reports
- Various schemes during disease outbreaks
 - Style etc will depend on responsibilities for control

Good control depends on:

- Good international surveillance and communications
 - New diseases unlikely to crop up first in UK
 - But may get diagnosed in UK first!
 - Industry needs pre-warning
- Good laboratory surveillance
 - On parts of both Defra and Industry
 - Many novel outbreaks will get diagnosed first by observant pathologists

Why do we need to bother?

- We demand almost free international movement of our horses for breeding and competition
 - With movement comes substantial risks
- Increased globalisation
 - Increased occurrence of infectious diseases
 - All species
- Recent international disease outbreaks
 - West Nile, Bluetongue, African Swine Fever, African horse sickness, foot and mouth disease, avian influenza.....
- UK well served, but not by complacency