

## FEEVA: Equine Zoonoses

- How many horses, owners, etc. in Europe?
  - European Horse Network
    - Horse numbers
      - Estimated over 6 million horses in Europe<sup>1</sup>
      - Some regional economic clusters: Basse-Normandie in France – 10% of the whole French horse population and 20% of the foals; similarly Newmarket and Lambourn in the UK and the Curragh, Co Kildare in Ireland
    - People involved
      - Horse industries provide around 400,000 jobs.
      - The number of horse riders is growing at about 5% per year.
  - Great Britain
    - Horse numbers
      - There are over 15,000 racehorses in training
      - Estimated 1 million horses and ponies
    - People involved
      - Racing provides 20,000 direct full time jobs<sup>2</sup>.
      - The British Horse Industry Federation estimates that there are 4.3 million riders in Great Britain, with 2 million of these riding at least once a month<sup>2</sup>.
      - There are an estimated 550,000 horse owners or primary carers. 65% of owners own one horse, 15% own 2, 12% own 3-5 4% own 6-10 and less than 2% own >20 horses.
      - There are an estimated 19,000 businesses active in the equestrian sector, incl riding schools, farriers, livery yards and trainers, providing over 28,000 full time jobs.
  - Ireland
    - Horse numbers
      - Estimated 110,000 sport horses in Ireland. 2007 figures<sup>3</sup>
      - 27,500 sport horse broodmares
      - 34,233 mares, stallions, foals and horses in training; 2010 figures<sup>4</sup>
      - An unknown quantity of unregistered horses<sup>5</sup>
    - People involved
      - 53,000 people regularly involved in the sport horse industry;
      - Total employment in TB industry c. 17000 FTEs<sup>4</sup>
  - European TB breeders Association 2009 figures
    - Horse numbers
      - 47,303 mares, 2,350 stallions, 26,581 foals
    - People involved
      - 20,000 people employed in TB breeding
      - 150,000 people involved in racing and breeding, racing and related sectors
      - France, GB, Ireland (and recently Turkey) top numbers of stallions, mares and foals
  - Also draft horses, wild pony breeds, donkeys, zebras, etc.: little information on these
- Horse movement
  - In 2008, 14,386 horse movements took place from North and South America, Africa and Asia to Europe (TRACES data 2008)<sup>6</sup>
  - 99,087 slaughter horses moved into and moved between EU States in 2005

- What are the equine zoonotic diseases
  - Acariasis
  - Anthrax
  - Brucella abortus
  - Borna disease?
  - Campylobacteriosis
  - Chagas (Trypanosomiasis-American)
  - Chlamydiosis (Mammalian)
  - Clostridium difficile
  - Cryptococcosis
  - Cryptosporidiosis
  - Dermatophytosis
  - Eastern Equine Encephalomyelitis
  - Echinococcosis
  - Ehrlichiosis
  - Equine Encephalitis – PM exams and handling infected CSF pose a risk
  - Giardia intestinalis – asymptomatic shedding in adult horses
  - Glanders - Burkholderia malle
  - Hendra
  - Halicephalobus gingivalis (Micronema delectrix)
  - Japanese Encephalitis
  - Leptospirosis
  - Louping Ill
  - Lyme Disease
  - Melioidosis i
  - MRSA
  - Nipah
  - Rabies
  - Rhodococcus equi
  - Salmonella (Nontyphoidal); S enterica sp enterica; S typhimurium DT 104
  - Sarcocystosis
  - Sporotrichosis
  - Streptococcosis
  - Venezuelan Equine Encephalomyelitis
  - Vesicular Stomatitis
  - West Nile Virus – PM exams and handling infected CSF pose a risk
  - Western Equine Encephalomyelitis
  
- What are FEEVA doing?
  - The importance of disease control for the welfare and economic viability of the European horse industry is recognised by FEEVA. In 2008 FEEVA representatives were invited to contribute to a questionnaire to establish some baseline data about disease surveillance and contingency planning across Europe with a view of sharing best practice and to facilitate development of shared resources across Europe. Austria, Belgium, Denmark, France, Germany, Hungary, Ireland, Latvia, Netherlands, Spain and the UK contributed information ([www.FEEVA.org](http://www.FEEVA.org))

In summary, disease surveillance is passive in all countries and is geared around OIE List A diseases. With the exception of Austria, governmental responsibility does not extend to endemic diseases, although there is active serological surveillance for EIA in Latvia and a pilot EIA surveillance scheme,

based on testing of dead horses, was planned for 2009 by Germany. France and the UK have industry-led schemes for passive surveillance of endemic diseases, monitored via clinical sample submissions to participating laboratories (UK and France) and from data contributed by equine practitioners (France). The UK continues a syndromic disease surveillance scheme in the horse owner population. Five countries have generic equine exotic contingency plans in place. With the exception of EIA and AHS, there are no disease-specific contingency plans in place in any countries and there is variable stakeholder consultation/involvement by government departments responsible for equine disease surveillance and control: in some countries there is active stakeholder consultation (e.g. Belgium, Denmark and France) whilst in others there has been none to date (e.g. Germany and Spain). Several equine veterinary associations have been involved in raising practitioner preparedness for exotic disease incursion, with particular efforts made in France and the Netherlands. All contributors felt that there was variable, probably rather low, awareness of equine exotic diseases amongst the horse-owning public, with the exception of AHS, although there are a number of public information web resources available across Europe.

The FEEVA Board wishes to take this initiative forward by encouraging national policy makers to make harmonized risk assessments and contingency plans for equine emerging diseases, perhaps using African Horse Sickness as a starting point and by taking a lead on raising the awareness and preparedness of equine practitioners for equine exotic diseases Europe-wide

- Equine Disease Surveillance/Notification in Europe
  - BEVA/Blue Cross: National Census days: based on owner reporting of syndromes (such as cough, nasal discharge); involves c. 10,000 owners currently
  - French Government network of sentinel practices scattered across France; group of trained practitioners that contribute disease information as a field force for the Animal Health Office; but not every sick animal sees a vet!
  - Promed <http://www.promedmail.org>
  - OIE [www.oie.int](http://www.oie.int)
  - DEFRA/AHT/BEVA Equine Quarterly Disease Surveillance Reports [http://www.aht.org.uk/cms-display/disease\\_surveillance.html](http://www.aht.org.uk/cms-display/disease_surveillance.html)
  - Gluck Equine Research Centre Equine Disease Quarterly [http://www.ca.uky.edu/gluck/q\\_jan12.asp](http://www.ca.uky.edu/gluck/q_jan12.asp)
  - JS Weese's blog: [www.equidblog.com](http://www.equidblog.com)

## References

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8. Centre for Food Security and Public Health. Iowa State: [www.cfsph.iastate.edu](http://www.cfsph.iastate.edu)
9. Equine Species Working Group: Reviewing the Role of the National Animal Identification System (NAIS) within the Equine Industry [www.equinespeciesworkinggroup.com](http://www.equinespeciesworkinggroup.com)