

The United Kingdom vs. Uruguay, what they did different

	UK	Uruguay
Time to diagnosis	Severely delayed	Minimal delay
Species affected	1° Sheep	1° Cattle
Control strategy	Mass depopulation	Rapidly switched to vaccination
Biosecurity	Poor initially	Better initially



Uruguay 2001 outbreak response, points of interest

- Only one dairy premises depopulated (only dry cows) of 265 infected
- Vaccination program implemented rapidly; 4d
- If infected, premises was vaccinated once clinical signs resolved
- All milk went to commercial processing (condensed milk processing)
 - Milk from + farms was collected on same routes
 - Milk from + farms when to condensed milk plants
- Biosecurity on dairies should have been better implemented and enforced
 - Dz spread via shared farm equipment and milk tankers



Vaccination Strategy Considerations

- Vaccination is only one aspect of an overall control strategy
 - Movement restrictions, biosecurity, culling, surveillance will also be in effect
 - Vaccination impacts trade status
 - Vaccination may not be desired in certain situations
 - If vaccination is desired, rapid access and delivery of large numbers of doses is necessary for maximal benefit
 - Epidemiological factors will influence the selection of a vaccination strategy
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Vaccination Strategy Considerations

- Which classes of animals should be vaccinated?
 - What species and production types are involved in the outbreak?
 - What species are in the region?
 - What is the disposition of the vaccinated animals?
 - Euthanasia and disposal
 - Slaughter and enter the food chain
 - Live out their normal productive lives
 - In what geographic area should the vaccine be administered?
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Vaccination Strategy Considerations

- What influences the decision to use FMD vaccine as a control measure?
 - Species involved in outbreak
 - Population density and stock in surrounding area
 - Perceived rate of disease spread
 - Likely extent of disease spread
 - Available resources for stamping-out, indemnity and disposal
 - Assessment of economic impacts of competing control strategies
 - Domestic acceptance of products from FMD vaccinated animals
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Vaccination Strategy Considerations

- What influences the decision to use FMD vaccine as a control measure?
 - Public reaction to mass-depopulation and disposal
 - Suitable vaccine, vaccination delivery, animal identification and permitting resources
 - Involvement of rare, valuable, endangered or high-value genetic stock
 - Necessary diagnostic laboratory resources for post-vaccination testing
 - An understanding of trading partner acceptance of proposed zoning or control strategies
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Prioritization for vaccine use will be necessary

- At present vaccine availability is highly unlikely to meet desired demands
 - Contingency planning should take limited vaccine resources into consideration
 - Prioritization for limited resources should be discussed in advance with all stakeholders
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Vaccine Sourcing

- North American FMD Vaccine Bank (NAFMDVB)
 - Shared by US, Canada and Mexico
 - Antigen bank, requires formulation into vaccine
 - DIVA compatible, suitable for VTL strategies
 - Emergency vaccine, high potency
 - Commercially Available Vaccines
 - UDSA, NVS pursuing “just-in-time” contracts
 - Some South American products have been evaluated at PIADC
 - DIVA compatible, lower potency products
 - Commercial vaccine has been used successfully in the face of an outbreak
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Vaccination Delivery

- In addition to proper administration, vaccination requires animal identification, record keeping and permitted movement
 - Vaccination administration options include;
 - Use of government vaccination teams
 - Utilization of “federalized” private veterinarians and on-farm labor under government supervision/validation
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