Biosecurity at major equestrian competitions: London 2012
Olympic and Paralympic Equestrian Games

• horses usually fly long haul to compete
  – worldwide movement
  – complex logistics
  – quarantine and testing
  – vaccination
  – health risks
  – exotic & endemic disease
London 2012 was unique

- almost all horses made short journeys by lorry from within Europe
- few horses flew long haul
- horses moved under standard animal health certificates and TRACES scheme
Greenwich Park

- a small, highly sensitive site
  - UNESCO World Heritage Site
  - Grade 1 listed landscape
  - Site of Special Scientific Interest
  - Site of Metropolitan Importance for Conservation
  - multiple endangered species of bats, birds and invertebrates; important collection of ancient trees

- inhabited since the Iron Age, rich Roman archeology, Anglo-Saxon barrows (burial mounds)
- Royal Park (and deer park) since 1427
- site of the Royal Observatory since 1675
Old Royal Naval College and the Queen’s House
Work begins on the 22,000 seat stadium and arena
Goals of Olympic biosecurity

• *Biosecurity*: principles, actions and precautions that protect the health of competition horses

• goals were to
  – prevent disease entry into the venue
  – prevent disease spread inside the venue
  – safeguard competition
  – safeguard UK PLC
Approach to biosecurity for 2012

• integrated planning for endemic and exotic disease: risk based and proportionate approach
• Equine Diseases Working Group (LOCOG veterinary services, Peden Bloodstock and Defra/AHVLA teams)
  – seven meetings held (1st meeting held November 2010)
  – Operation Herekles October 2011
• role of the Equine Disease Working Group
  – generate equine diseases risk register
  – devise countermeasures and contingency plans
  – produce standard operating procedures
## Exotic disease risk assessments

<table>
<thead>
<tr>
<th>Disease</th>
<th>Risk Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equine infectious anaemia</td>
<td><strong>Amber</strong>. EIA present Europe</td>
</tr>
<tr>
<td>African Horse Sickness</td>
<td><strong>Amber</strong>. Impact of AHS anywhere in Europe high</td>
</tr>
<tr>
<td>Glanders</td>
<td><strong>Green</strong></td>
</tr>
<tr>
<td>West Nile Virus</td>
<td><strong>Green</strong></td>
</tr>
<tr>
<td>Equine Viral Arteritis</td>
<td><strong>Green</strong></td>
</tr>
<tr>
<td>Vesicular stomatitis</td>
<td><strong>Green</strong></td>
</tr>
<tr>
<td>Piroplasmosis</td>
<td><strong>Green</strong>. Reportable in UK but no official action taken</td>
</tr>
<tr>
<td>Foot and Mouth Disease</td>
<td><strong>Green</strong>. Impact mitigated by licensed movements</td>
</tr>
</tbody>
</table>
### Endemic disease risk assessments

<table>
<thead>
<tr>
<th>Disease</th>
<th>Risk Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colitis &amp; salmonellosis</td>
<td><strong>Amber</strong></td>
<td>Increased risk in stressed horses (transport etc)</td>
</tr>
<tr>
<td>Equine Herpesvirus Myeloencephalopathy</td>
<td><strong>Amber</strong></td>
<td>Reactivation of latent virus likely in stressed horses</td>
</tr>
<tr>
<td>Equine Influenza</td>
<td><strong>Amber</strong></td>
<td>Vaccination reduces risk but breakdowns occur. Disease under-reported?</td>
</tr>
<tr>
<td>Equine strangles</td>
<td><strong>Green</strong></td>
<td>Very low prevalence in Olympic horses</td>
</tr>
<tr>
<td>Shipping fever</td>
<td><strong>Green</strong></td>
<td>Low prevalence expected because few horses fly long haul</td>
</tr>
<tr>
<td>Ringworm</td>
<td><strong>Green</strong></td>
<td></td>
</tr>
</tbody>
</table>
A few biosecurity surprises!
2012 in numbers

• 225 Olympic horses
• 78 Paralympic horses
• 45 Modern Pentathlon horses
• 3 horses flew long haul
  – USA and Canada via New York
  – further 9 flew in & were based temporarily in UK before competition
• 3,000 Games Makers
• 160 Technical Officials
• 45 Vet Services Team members
• total cost £62m
Overall risk assessment

- overall disease risk from competition horses assessed as very low
  - high health
  - known movement
  - known contacts
  - closely monitored
  - vaccinated
  - high standards of veterinary care
  - high standards of preventive medicine
Precautionary measures

• International and country-level disease surveillance (www.oie.org & www.defra.gov.uk)
  – Defra’s Global Animal Health team
• Information from point of embarkation and movements before embarkation
  – Peden Bloodstock and the ESF Arrivals Form
• Equine Staging Facility
  – key measure to safeguard Greenwich venue
• Venue isolation stables
  – 1 kilometre separation from venue stables
• Royal Veterinary College isolation facility
  – 30 kilometre separation from venue stables
Health checks: entry control point

Equine Staging Facility

Personal arrival slots

Health papers
Accreditation
ESF Arrivals Form

Onward movement
to Greenwich Park

Vehicle, equipment & personnel security screen

Horse ID, vaccination and health check
Biosecurity zoning

• **Green zone:** Venue main stabling
  – access controlled via accreditation
  – hand washing, avoid other horse & horse-horse contact, no equipment sharing, good stable hygiene

• **Amber zone:** ESF and venue vet clinic
  – restricted access (essential personnel only)
  – additional hygiene requirements (PPE, boot dips, C&D)

• **Red zone:** Isolation stables
  – restricted access (trained essential personnel only)
  – strict additional hygiene and biosecurity requirements (recording entry, PPE, directional flow of people and waste, stringent C&D protocols)
Green zone precautions

• practical biosecurity
• hygiene measures for personnel
• stable design and waste management
• stable cleaning and disinfection
EIV in France May-June 2012

Due to the outbreak of EIV in Calvados (14), Sanitary measures are in progress. An epidemiological assessment of the situation in the premises of Calvados (14) and been confirmed by Frank Duncombe. All these outbreaks are in progress.

A first symptomatic appeared.
Acknowledgements

- LOCOG
- Peden Bloodstock
- Defra
- Royal Veterinary College