Foot and Mouth Disease in the UK (Surrey)

Fred Landeg
Deputy Chief Veterinary Officer

SCoFCAH 18 September 2007
PLEASE NOTE
These slides represent the position in the UK on 17 September 2007 before the confirmation of IP5 on the 18 September 2007
Agenda

• Summary of initial incident (2 cases)
• Infected Premises 3 and 4
• Laboratory diagnosis
• Protection zone
• Epidemiology
You are here: Homepage > Animal health & welfare > Foot and Mouth Disease

Foot and Mouth Disease

On 12 September Foot and Mouth Disease was confirmed at a farm in Surrey. A single Protection Zone has been put in place around the land of this farm, with a Surveillance Zone of 30 kilometres radius beyond that. Cattle on the affected farm have been culled, together with animals on an adjacent farm, where disease was confirmed by laboratory testing on the 14th September.

Initial sequencing of the virus showed this to be type 01 BFS. Laboratory results on the 15th September confirmed that the strain found at the latest infected premises is the same as that in the August outbreak, namely 01 BFS 67.

On the afternoon of Saturday 16th, the decision was taken to slaughter on suspicion pigs on a farm in close proximity to the two infected Premises in Surrey.

A national movement ban - affecting cattle, sheep, pigs and other ruminants - was imposed throughout England, with parallel arrangements in Scotland and Wales. No movements are allowed, except under licence. As from midnight Saturday 16th September, further movements of animals susceptible to Foot and Mouth Disease direct to slaughter are permitted, under strict biosecurity conditions, from outside the Surveillance Zone in England.

All farms - particularly those in the Protection and Surveillance Zones - must implement increased biosecurity. Further details are in News Releases/Information Bulletins listed on our latest situation page.

If you suspect signs of any notifiable disease, you must immediately notify a Defra Divisional Veterinary Manager. If you need further information or advice not covered by these pages please contact the Defra Helpline on 08459 33 55 77 which is currently operating between 9am to 10pm Monday to Friday and 9am to 5pm Saturday and Sunday.

External links
- Surrey County Council

http://www.defra.gov.uk/footandmouth
Initial incident 2007

- 3 Aug: IP1 (3 locations)
- 6 Aug: IP2 (3 locations)
- 3 contact herds culled
- 24 Aug: PZs lifted
- 8 Sep: SZ lifted
- Origin: contamination from Pirbright site
Infected Premises 3

- Confirmed 12 Sep 2007
- 281 cattle
- 8 pigs
- 8 locations
- Clinical findings
- 2 locations positive in lab
- Culling of initially affected group completed 13 Sep
- Culling completed 16 Sep
Infected Premises 4

- Confirmed 15 Sep
- 54 cattle (location B)
- 743 pigs (location A)
- Clinical findings in cattle only
- Laboratory – cattle positive, pigs negative
- Culling completed 16 Sep
Slaughter on Suspicion

• Near to IP 3
• 24 pigs
• Culling completed 15 Sep
• Laboratory tests negative
# Infection Timeline

| Day | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|

**Source window for IP4**

IP4 most likely source window 20/08 to 01/09

**Day 0 IP4**

IP4 days

**Spread window for IP4**

IP4 most likely spread window 09/09 to 16/09

**Source window for IP5B**

*IP5B most likely source window 26/09 to 06/09*

**Day 0 IP5B**

*IP5B Day 0*

**Spread window for IP5B**

*IP5B most likely spread window 06/09 to 14/09*

**Source window for IP5C**

IP5C source window 26/08 to 07/09

**Day 0 IP5C**

IP5C Day 0

**Spread window for IP5C**

IP5C most likely spread window 08/08 to 16/09

* 28 out of 29 cattle tested and found to be negative on serology. Therefore, expert opinion confirms that lesions ages must be five days or less.
Movement Restrictions

• 12 Sep - Immediate GB-wide movement ban
• Export certificates withdrawn
• Movements to slaughter now permitted
• Local welfare movements under licence
Foot and Mouth Disease: Interactive map

Click on the map to:
- Zoom in
- Display local Animal Health Divisional Office information

Restrictions:
- Foot and Mouth Protection Zone
- Foot and Mouth Surveillance Zone
- Former Foot and Mouth Surveillance Zone

Larger Map

Any general enquiries regarding Foot and Mouth Disease should be made to the Defra Helpline: 08458 335677. For active or suspicious Foot and Mouth related matters please contact your local AHDO.

Please note that scheduled maintenance will take place sometime after 17:00 for up to 45 minutes this evening. The map will be unavailable at this time.
Foot and Mouth Disease: Interactive map

Click on the map to:
- Zoom in
- Display local Animal Health Divisional Office information

Restrictions

- Foot and Mouth Protection Zone
- Foot and Mouth Surveillance Zone
- Former Foot and Mouth Surveillance Zone

Larger Map

Any general queries regarding Foot and Mouth Disease should be made to the Defra Helpdesk: 08453 306677. For active or suspicious Foot and Mouth related matters please contact your local AHDO.

Please note that scheduled maintenance will take place sometime after 17:00 for up to 45 minutes this evening. The map will be unavailable at this time.
Laboratory Diagnosis

- Rapid confirmation with results from lateral flow device in laboratory
- O1 BFS 1860/67UK
- Similar to that found on IP1 and IP2
Lateral-flow devices for the detection of FMDV Antigen

Data from Nigel Ferris
PZ Census

- Data from NEEG as at 12:30 16 Sep
- Cattle & pig holdings - 33
- Holdings with only sheep & goats – 24
- Mixed – 14

<table>
<thead>
<tr>
<th></th>
<th>Sheep</th>
<th>Goats</th>
<th>Cattle</th>
<th>Pigs</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>798</td>
<td>45</td>
<td>1861</td>
<td>726</td>
<td>1</td>
</tr>
</tbody>
</table>
Protection zone

• Data as at 16 Sep
• 71 holdings with susceptible livestock (out of 256)
• Two dairy herds
• No markets, staging posts or assembly centres
• All holdings with stock have received at least one clinical inspection
• All small ruminant flocks sampled
Epidemiology – spread from IPs

• No live animal spread tracings from IP3 or IP4 identified.

• Tracings in relation to personnel, manure etc
  – 9 have been identified for IP3
  – Included within this are the carcases (currently under detention) from cattle moved from IP3 to local abattoir.
  – 8 have been identified for IP4
Protection Zone tracings

- Information on spread tracings has been obtained from all premises with susceptible livestock in the PZ.
- Particular attention has been paid to premises lying with 1 km zones around each of the premises (3B, 3C and 4B) on which virus has been present.
- CTS & AMLS data has so far identified 2 animal spread tracings, one of which was direct to a local abattoir.
Surveillance Zone

- 681 sq km$^2$ (PZ/SZ combined)
- 842 premises have been identified so far.
- No markets, staging posts or assembly centres
FMD Report Cases

• Data correct as of 12:00 - 17 Sep
• Total of 107 3 Aug – 17 Sep
• 3 under investigation
Conclusions

• Outbreak still localised in an area with low livestock density and few movements
• Source of infection has been linked to initial incident through virology
• No report live animals moved off the infected fragments (under investigation)
• Unlikely that contaminated meat, milk or other products are in circulation