Foot and Mouth Disease in the UK (Surrey)

SCoFCAH 19 October 2007
Agenda

• Information as at 17:00 17 Oct 2007
• History of 8 IPs and epidemiology
• Additional measures
• Surveillance
• Domestic movement controls
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 10 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 O1 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 O1 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 8am to 10pm Monday to Friday and 9am to 5pm Saturday and Sunday.

External links
- Surrey County Council
August cluster

- 3 Aug: IP1 (3 locations)
- 6 Aug: IP2 (3 locations)
- Virus only found at 1 location in each case
- 3 contact herds culled
- 24 Aug: PZs lifted
- 8 Sep: SZ lifted
- Origin: contamination from Pirbright site
- Virus: O1 BFS
September Cluster Confirmation dates

• IP3, 12 Sep
• IP4, 13 Sep
• IP5, 17 Sep
• IP6, 21 Sep
• IP7, 24 Sep
• IP8, 30 Sep
**Infection Timeline – September Cases**

<table>
<thead>
<tr>
<th>Day 0</th>
<th>IP4B</th>
<th>IP5</th>
<th>IP4B</th>
<th>IP3</th>
<th>IP4</th>
<th>IP5</th>
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</table>

**Source window for IP4B**
- 06/08 to 18/08

**Spread window for IP4B**
- 03/09 to 15/09

**Source window for IP3B**
- 26/08 to 07/09

**Spread window for IP3B**
- 08/09 to 16/09

**Source window for IP6B**
- 03/09 to 15/09

**Spread window for IP6B**
- 18/09 to 25/09

**Source window for IP7**
- 25/09 to 01/10

**Spread window for IP7**
- 18/09 to 25/09

**Source window for IP8B**
- 25/09 to 01/10

**Spread window for IP8B**
- 30/08 to 15/09

**Note:**
- On IP3B, 28 out of 29 cattle found to be negative on serology. Therefore, expert opinion confirms that lesions ages must be five days or less.
- Expert opinion on IP7 confirms age of lesions at 5 days.
- IP8 date of 1st lesions (Wednesday 26 September 2007) awaiting final confirmation from IAH Pirbright staff.

**KEY**
- Range of uncertainty in age of lesions
- Most likely source window
- Range of uncertainty in spread window
- Most likely spread window

**PS = Pirbright site**
Clinical disease on each IP

![Graph showing the distribution of Day 0 lesions on all IPs with specific dates and numbers of animals with Day 0 lesions for each IP. Example IPs include IP1, IP2, IP5 Sheep, IP5 Cattle, IP4B, IP3B, IP3C, IP7, IP6B, and IP8.]
Infected Premises 5

• Detected 16 September. No acute signs.
• 17 out of 22 cattle with 4-5 week old lesions. All seropositive, virus negative.
• 15 out of 16 sheep seropositive; 10 with old lesions.
• 2 pigs – no lesions; seronegative, virus negative.
• Confirmed 17 September. Single location.
Links between IPs

- **IP1**: Infectious from 22 Jul to 09 Aug
- **IP2**: Infectious from 27 Jul to 09 Aug
- **IP3B**: Infectious from 06 Sep to 14 Sep
- **IP4B**: Infectious from 02 Sep* to 15 Sep
- **IP5**: Infectious from 19 Aug* to 21 Sep
- **IP6B**: Infectious from 15 Sep to 23 Sep
- **IP7**: Infectious from 18 Sep to 25 Sep
- **IP8B**: Infectious from 25 Sep to 1 Oct

*Note: IP1 and IP3B have notes indicating possible dates for infection.
Additional Culling

• 160 cattle + 1 goat on 4 holdings (5 locations) within 3km of IP8
• Likely to be exposed to infection and incubating disease
• Laboratory tests negative
Reinforced biosecurity

Foot and Mouth Disease
Your role in stamping it out

Foot and Mouth Disease is not harmful to human health but can be very easily spread. We need your help to prevent it spreading around our county. This leaflet contains useful, practical information for people who live, work or are visiting the area shown on the accompanying map, and what you can do to help stamp it out. This message comes from Surrey Trading Standards, NFU, Defra, Animal Health and Surrey Police.

About Foot and Mouth Disease

Foot and Mouth is a highly infectious disease affecting cattle, pigs, sheep, goats and camels (which includes camels, alpacas and llamas). These are known as the susceptible animals. Animals can be infected and be shedding virus before they show signs of disease so anything that has been in contact with animals, their products or the land they have been on can add to possible spread.

The impact of Foot and Mouth Disease is devastating for farmers and their livestock. That’s why restrictions are in force. Movement of susceptible animals is banned and livestock keepers have increased their biosecurity to prevent the virus spreading. Some public footpaths are also closed.

The situation now

The disease is contained within the Protection Zone but some new cases have occurred in the northern-most part of this zone. Our normal disease control measures aim to identify disease early, and to cull any infected animals as soon as possible.

At this time your area is on the front line in the fight to control and eradicate the disease and we need your help to reduce the risk of spreading the virus.

What next?

If Foot and Mouth Disease spreads, serious economic losses are likely to follow and large numbers of animals may suffer. However, we do have an opportunity to avoid this if we take the right action now.

What the law requires you to do:

- You must not use footpaths which have been closed or remove any of the closure notices.
- You must not move susceptible animals (pigs, goats, sheep, cattle, camels and, when on livestock premises, horses or livestock products such as milk or manure) without a specific licence.
- In the Protection Zone, horses must not leave or be taken to premises where susceptible animals are kept.
- Horses must not leave the Protection Zone, even to see a vet.
- Horse keepers must not organise or take part in hunting a drag or other trial or point-to-point meetings in this area.
- In the Protection Zone you must not hold any gathering of animals (even horses).

Livestock keepers

General public
## Census in PZ and SZ

<table>
<thead>
<tr>
<th>Zone</th>
<th>No of holdings with susceptible species</th>
<th>Number of animals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sheep</td>
<td>Goats</td>
</tr>
<tr>
<td>Protection</td>
<td>88</td>
<td>4322</td>
</tr>
<tr>
<td>Surveillance</td>
<td>286</td>
<td>6891</td>
</tr>
</tbody>
</table>

Source: NEEG, 17 October 2007 (Note: these figures may be updated as work in the areas progresses)
Enhanced Surveillance Area 1: cattle to be blood tested once

Enhanced Surveillance Area 2: cattle to be blood tested once

Enhanced Surveillance Area 3A: cattle to be blood tested once

Enhanced Surveillance Area 3b: cattle to be blood tested once

Intensive Patrol Area: blood test cattle every 2 days; clinically inspect cattle every day.

Enhanced Surveillance Area 4: cattle, sheep and goats to be blood tested once
## Enhanced Surveillance

<table>
<thead>
<tr>
<th>Enhanced Surveillance Area</th>
<th>% Visits completed</th>
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<tbody>
<tr>
<td>ESA 1</td>
<td>100%</td>
</tr>
<tr>
<td>ESA 2</td>
<td>100%</td>
</tr>
<tr>
<td>ESA 3a</td>
<td>100%</td>
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<tr>
<td>ESA3b</td>
<td>97%</td>
</tr>
<tr>
<td>ESA 4</td>
<td>100%</td>
</tr>
</tbody>
</table>
Tracings

Assessment of the risk of infection having been spread from the affected area in Surrey has been carried out by looking at the historical pattern of movements of susceptible species out of the area during July, August and September 2006.

All holdings in the PZ and SZ are contacted for details of livestock movements. Analysis of these data showed that low number of moves of susceptible stock occurred from the area and that the moves took place over very short distances. This informed a veterinary risk assessment on boundaries of the current FMD risk area.

All known susceptible live animal movements to date have been traced. If live animals were moved other than to slaughter, the recipient holdings were restricted and animals subjected to testing. No positive animals were detected.

The most recent changes to the PZ and SZ resulted in further premises which have been identified and restricted, while inspection and sampling is being carried out.
Report cases of Suspect FMD

As of 12:00, 18 October

- Confirmed: 8
- Negated: 197
- Under investigation: 1

Total: 208
Suspect Case Reports 2007
Figure: The number of report cases over time

NB: Of the 8 confirmed cases, 7 were report cases and one (IP5) was detected by sero-surveillance and was slaughtered on suspicion.
Vehicle movements from Pirbright
Abattoir surveillance

Intensified AME & PME (August-September)

- 347,656 cattle
- 2,495,320 sheep
- 1,336,396 pigs
- 8,162 deer
- 862 goats
Clinical Inspections at welfare visits (as at 11 October)

- 283 groups of animals on-farm
- 235 groups of animals at markets
Pre-movement licensing inspections of pigs

- 945 Certificates
- 1,887,456 animals
Developments this week

17 October
• PZ surveillance completed and lifted
• Restricted zone reduced to ‘8 counties’
Summary

- 8 IPs, 2 clusters in Surrey. Very low risk that infection has spread outside this area.
- Unlikely that contaminated meat or other products are in circulation.
- Intensive surveillance well beyond minimum requirements of Directive.
- Over 12 000 surveillance samples tested with negative results (except sheep on IP5).
- Tracings from IPs, PZs, SZs negative.
- Nationwide monitoring through report cases, abattoirs, welfare and licensing inspections.