

Britain: Foot and mouth disease strikes again

Barry Mason
18 September 2007

Two cases of foot and mouth disease (FMD) were confirmed at the end of last week on two farms near the town of Egham in Surrey which lies close to London. The disease affects cloven hoofed animals including cows, pigs and sheep. A total of 940 cattle and pigs at the farms have so far been culled.

The two confirmed cases came just days after restrictions had been lifted following two previous outbreaks of FMD and the British government had declared an all-clear. Previous cases of the disease, at the beginning of August, had occurred within a few miles of the government laboratories at the Institute of Animal Health (IAH), Pirbright in Surrey.

Recently published reports confirmed that Pirbright was the source of this last outbreak, and imply that the government were ultimately responsible for allowing a lax biosecurity regime to exist at the site for the last three years at least.

Tests on the virus involved in the new cases of FMD show it is the same strain as the one that escaped the Pirbright site. The two farms at the centre of the new outbreak lie 10 miles from the government site. It is not clear at the moment how the two recent infections broke out as they occurred after the normally accepted incubation period following the first cases.

While agriculture makes up only a small part of the British economy, farmers are politically vocal and will demand compensation for culled animals and lost trade. Closing access to country areas also hits tourism, now the third largest economic sector after finance and pharmaceuticals.

The issue is therefore regarded as serious for newly appointed Prime Minister Gordon Brown, especially as the Labour government seriously mishandled the major outbreak in 2001. Its slowness to respond then resulted in it being necessary to cull over 6 million farm animals with a total cost estimated at around £8 billion and with many small farms forced to close down. Another

outbreak of the same disease—and more over one that can be traced to a government controlled research facility—is damaging.

Two reports on the recent outbreak confirm that the strain of FMD virus found at the affected farms in August is not currently in circulation in the wild. The reports, one produced by the government Health and Safety Executive and the other by Brian Spratt, Professor of epidemiology at Imperial College London, identify the virus as the one that was responsible for an outbreak in Britain in 1967. The virus was currently being used at the Pirbright research site.

The Pirbright site is licensed by the government to handle category four pathogens under the Specified Animals Pathogens Order (SAPO) 1998. Category four is the highest level under the act. It is the same level of biosecurity that is applied at the British government germ warfare research facility at Porton Down. For a breakdown of biosecurity to occur at a category four site could hardly be more serious.

Two organisations share the Pirbright site, the government-run Institute of Animal Health (IAH) with 140 staff and Merial Animal Health Ltd with around 80 staff. Merial is part of a global pharmaceutical company, with its headquarters in France. Its main operation at Pirbright is the volume production of veterinary vaccines.

Within the Pirbright site IAH and Merial are in separate facilities. Liquid effluent from each facility enters a storage tank where it is treated with citric acid to attempt to kill any live virus. This effluent then enters the drainage system and goes into a second common tank where it is treated with caustic soda to ensure any virus that escaped the first treatment is killed. Then after being stored in holding tanks for 24 hours it is pumped into the public sewage system.

The HSE report concluded: “It is likely that the live virus ... entered the effluent drainage system from the

Merial facilities during the period covered by our investigation.” It further concludes that because of the poor state of the drainage system, the live FMD virus was able to penetrate the immediate area around it. The report states: “This ... is likely to have been either through overflowing of (the) manhole ... or general leakage ... or both.”

The ground at this time was subject to standing water as a result of prolonged heavy rain. The report notes: “Weaknesses were identified in the containment standard of the effluent drains across the ... site ... displaced joints, cracks debris build-up and tree root ingress.” The state of the manhole covers was also criticised.

The site is owned by the IAH, and is under the auspices of the government Department for Environment, Food and Rural Affairs (DEFRA), which is headed by Environment Minister Hilary Benn. What came to light as the reports were published was that the state of the drainage system at Pirbright had been known about for four years. Channel 4 News was able to obtain a copy of a letter dated July 2004 from Merial to DEFRA outlining the problems with the drains.

Benn was forced to accept government responsibility, admitting that there is a longstanding dispute between Merial and IAH over who should meet the cost of repairs to the drains.

The HSE report further showed how the FMD virus was able to move from the soil around the pipes and get beyond the site boundary, concluding it was by contractors’ lorries. The report says, “We conclude that is likely that soil and/or materials contaminated with live FMD (virus) ... was removed from the Pirbright site between 20 and 25 July 2007 ... it is likely that vehicles contaminated with this soil passed down Westwood Lane close to the affected farm.”

During the period covered by the investigation there were contactors on site both constructing new roadways within the site and doing preparation work for the laying of a new drainage system. The work included excavation around the drainage pipe leaving the Merial treatment sump. There was no permit-to-work system for undertaking digging around the discharge pipe. Around a 1,000 lorries came and left the site over the two-week period up to July 26 and yet there was no evidence of wheel washes or other cleaning methods being applied. The investigators were unable to trace all

the lorries that had entered the site because many of the entries in the gatehouse log were illegible.

The state of the drainage system was responsible for the FMD virus leakage, but the investigators also uncovered other areas of concern. One was the canteen used by IAH staff that is run by an external contractor. There is a two-hatch system so that food can be passed through by kitchen staff to the restricted area of the laboratory and another hatch to pass crockery, waste food, etc., back to the kitchen area. The report notes, “This system is very unusual in high containment facilities and is accepted by both DEFRA and IAH management as not being ideal.”

The fabric of the main IAH building was described as “poor, with visible cracks in the walls and ceilings, and leak points around some windows.” There was also criticism of the ventilation system. Laboratories working with pathogenic organisms have a system of maintaining a negative air pressure within rooms compared to that outside to prevent airborne organisms being sucked out into the atmosphere. The HEA investigation showed “some individual laboratories could become positively pressurised ... and there was leakage of air between laboratories through unsealed pipe ducting.”

While Foot and Mouth disease is not a serious danger to human beings, the outbreak has important implications. The level of biosecurity at Pirbright was clearly inadequate. Many animal diseases are dangerous to humans and the escape of another pathogen could have serious health implications. Pirbright has the same category four status as Porton Down where pathogens for germ war are studied and there is no guarantee that biosecurity is any better there.



To contact the WSWP and the
Socialist Equality Party visit:

wsws.org/contact