Foot and Mouth Disease: Commission adopts urgent protection measures after case in wild boar in Bulgaria

The European Commission adopted last night [6 Jan 2011] urgent protection measures after a wild boar, which was shot by hunters at the end of 2010 in Bulgaria, tested positive to foot and mouth disease (FMD). The Commission's decision aims to reinforce control measures for FMD already taken by the competent Bulgarian authorities.

In particular, the commission's decision defines the high risk area (the province of Burgas) and low risk areas (the surrounding provinces of Yambol, Sliven, Shumen and Varna). The dispatch of live susceptible animals (e.g. pigs, cattle, sheep, etc.) from both the high and low risk areas is prohibited.

The decision also provides for the rules applicable to the trade of safe products from the high and low-risk areas that either had been produced before the restrictions (from raw materials originating outside the restricted areas) or that had undergone treatment, which is effective in inactivating the FMD virus.

The Bulgarian authorities had informed the European Commission on Wednesday [5 Jan 2011] about the FMD case. Hunters shot 3 wild boars at Bulgaria's Makevtci area in the Burgas region on 30 Dec 2010. The area is located 2 km from the border with Turkey. One of the boars displayed feet lesions. Preliminary laboratory tests for the detection of the FMD viral antigen gave positive results, which indicate a recent infection. Samples have been sent to the EU Reference Laboratory for FMD for further confirmation.

The competent authorities also informed the commission about putting in place measures provided for in Council Directive 2003/85/EC of 29 Sep 2003 on community measures for the control of FMD.

The measures provided in the directive include epidemiological investigation, suspension of hunting and a ban in feeding wild animals, placing under official surveillance holdings keeping animals of susceptible species, inspection by an official veterinarian of all wild animals shot or found dead. They also include surveillance programmes and prevention measures applicable to the holdings keeping animals of susceptible species and, if necessary, in their surroundings, including the transport and movement of animals of susceptible species within, from, and to the area, etc.

This issue will be discussed with all the member states at next week's meeting of the Standing Committee on the Food Chain and Animal Health (SCFCAH) in Brussels.

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Foot and Mouth Disease in Wild Boar in Bulgaria, January 2011 - Preliminary Outbreak Assessment

1. Disease Report

Bulgaria has informed the European Commission of an outbreak of foot and mouth disease (FMD) in 3 wild boar in the Burgas region (European Commission, 2011; see map). The location of the boar is just 2 km from the Turkish border. They were shot during the regular hunting season, but foot lesions on one of the boar prompted testing for FMD, which detected strain O. Further characterisation is being undertaken at IAH, Pirbright, the FAO World Reference Laboratory for FMD (WRLFMD). Disease control measures are in place.

2. Situation Assessment

In the last 9 to 10 months, Turkey has reported over 1100 outbreaks of FMD in all regions on the Asian (Anatolia) side of the country, many of them identified as FMD strain O. According to the FMD World Reference Laboratory, these were sequenced as FMD O ME-SA Pan Asia(ANT-10), Pan Asia(SAN-09) and Pan Asia(FAR-09) isolates with close relationship to isolates from Pakistan and Iran and with good coverage offered by the O Manisa vaccine.

The exact reason for the high increase in outbreaks in Turkey in 2010 is unknown. Vaccination was being carried out, so it could be that the vaccine is not working, due to either poor vaccine usage or poor vaccine efficacy in the small ruminant population, leading to a decrease in herd immunity and consequent increase in susceptibility. However, to date, there have been no reports of disease on the European (Thrace) side of Turkey.

Turkey, with support from the EU under EUFMD activities has worked hard to improve the situation in the Thrace region, as part of the West EurAsia FMD Control 2020 Roadmap, which aims for long term FMD control in the region and to gaining disease-free status with vaccination in the near future. To date, this appears to have been successful.

There are several possible routes of introduction of disease into the wild boar, for example:
- the disease may be present in wild boar across all the region, including EU and non-EU countries but was previously undetected;
- the wild boar were infected by contact with infected animals which were illegally transported from infected regions such as Turkey;
- the wild boar were infected by contact with infectious material (meat products, untreated dairy products, etc.) which was illegally transported from infected regions such as Turkey;
- wild boar came into contact with other infectious material, such as fomites on transport from infected regions or domestic waste products including catering waste.

Full sequencing will indicate whether the wild boar were infected with a strain similar to those in Turkey or if the disease has been introduced from further afield (suggesting movement of people and infected products), or whether the boar have come from another part of northern Europe. The natural home range of a wild boar is in the region of 10 000 hectares (100 sq/km) but they are not unknown to travel large distances (Oliver & Leus, 2008).
Interestingly, there has been renewed concern about the level of illegal immigrants crossing the border between Turkey and Greece with an average of 245 people crossing each day and prompting the Greek authorities to increase border security with a big fence. This pathway is clearly a real threat to biosecurity as the illegal immigrants may be bringing contaminated meat or dairy products with them which are scavenged by wild boar.

According to TRACES and the Bulgarian authorities, no live pigs, fresh pig meat or products of pig origin have been dispatched to the UK from the Burgas region of Bulgaria.

3. Conclusions
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We currently consider that there would be a constant low risk of the introduction of FMD into the EU from any currently affected region. This latest outbreak in wild boar would not significantly increase the risk to the UK, as the risk of wild boar reaching the UK would be considered negligible. Nevertheless, it is concerning that the disease has crossed into the EU, and determining the source is paramount, in particular whether the infection was introduced with people and, if so, if further contamination may have occurred in the region. We reiterate that it is important for all animal keepers and veterinarians, not just those specialising in pigs, to report suspect disease immediately, to maintain high levels of biosecurity to prevent access of animals to infectious material and to uphold the ban on swill feeding.

We will continue to monitor the situation.

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[References have been omitted from the above DEFRA review. For the full text, list of references and a map showing FMD outbreaks in Turkey during 2010 including their serotype, please refer to the original at the above URL.

Thrace, Turkey’s territory on the western, European side of the Bosphorus has been maintained for decades free of FMD as a buffer zone meant to prevent the introduction of the disease into southeast Europe from Asian Turkey (Anatolia), where FMD is endemic. In contrast to Europe, where FMD vaccination has been discontinued (in fact, prohibited) since 1992, Turkey's livestock is vaccinated. The current vaccination scheme is the following:

- Mass vaccination of bovine animals twice a year;
- Mass vaccination of ovine and caprine animals, once a year.

The vaccines are produced by 3 contracted vaccine producers, one of them being local.

The enhanced vaccination efforts during recent years are claimed to have improved the FMD situation in Turkey. This has been expressed by the declining number of recorded outbreaks (2006: 1557 reported outbreaks, 2007 - 809, 2008 - 253, 2009 - 214). As indicated in the above DEFRA review, the number has dramatically risen during 2010 to exceed 1100. A partial explanation of this change may be found in the following statement by Saban Aydemir, general coordinator of the Turkish Veterinary Medical Association (TVHB), in September 2010.

Noting that FMD is also seen in large farms, as well as livestock markets and villages, Aydemir said: "Most large farms hide the existence of the disease as they are trying to protect their commercial standing. Provincial Agriculture Directorate teams are aware of the existence of the disease, but they do not want to highlight the quarantine implementations" (see in archived 20100908.3226). In addition, the efficacy of the vaccine(s) used has to be assured, and vaccination coverage, particularly in small

It will be surprising if the 3 discovered cases in wild boars on Bulgaria's territory, 2 km from the Turkish border, remain solitary. They may reflect a similar situation within the wild boar population in adjacent Turkish Thrace. Surveillance in wildlife as well as enhanced alertness in livestock in Thrace is indeed paramount.

The results of the serotyping and genotyping of the strain involved are anticipated with great interest, as well as the conclusions and decisions of early next week's meeting of the Standing Committee on the Food Chain and Animal Health (SCFCAH) in Brussels. - Mod.AS]

[see also:
Foot & mouth disease - Bulgaria: (BR), wild boar, RFI 20110105.0046 2010
Foot & mouth disease - Turkey (02) 20100908.3226 Foot & mouth disease - Turkey 20100128.0305 2009
Foot & mouth disease - Turkey, Syria: susp. RFI 20091129.4081 2009
Foot & mouth disease, bovine - Turkey (Thrace) (04): OIE 20070925.3178 Foot & mouth disease, bovine - Turkey (Thrace) (02): OIE 20070413.1239 Foot & mouth disease, bovine - Turkey (Thrace) (03): OIE 20070406.1159 Foot & mouth disease, bovine - Turkey (Thrace)(02): OIE 20070301.0726 Foot & mouth disease, bovine - Turkey (Thrace): OIE 20070112.0142 2006
Foot & mouth disease - Turkey (Thrace) (04): OIE 20060718.1977 Foot & mouth disease - Turkey (Thrace)(03): OIE 20060625.1766 Foot & mouth disease - Turkey (Thrace)(02): OIE 20060304.0704 Foot & mouth disease - Turkey (Thrace) 20060207.0403 2001
Foot & mouth disease, caprine - Turkey 20010704.1282 Foot & mouth disease - Turkey (Konya) 20010303.0428 2000
Foot & mouth disease eradication plan - Turkey 20001205.2122 1999
Foot and mouth disease - Turkey 19991112.2017]