Department for Environment, Food and Rural Affairs
Animal & Plant Health Agency
Veterinary & Science Policy Advice Team - International Disease Monitoring

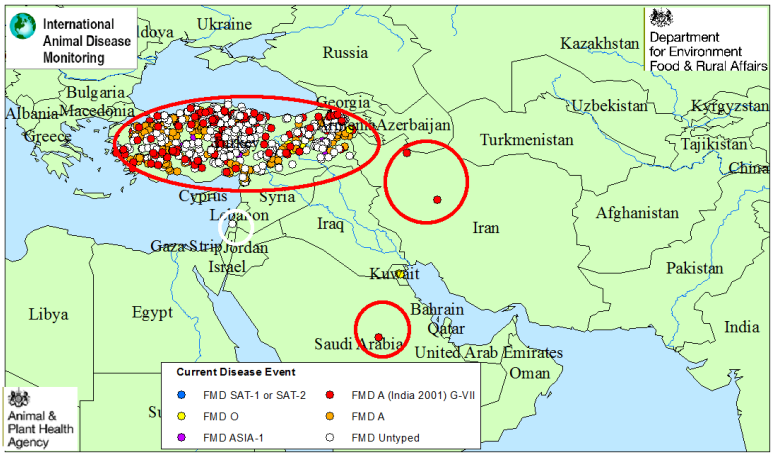
Preliminary Outbreak Assessment

Foot and Mouth Disease in the Middle East

29th March 2016 Ref: VITT/1200 FMD in Middle East

Disease Report

The Israeli Authorities have submitted samples for testing for Foot and Mouth Disease (FMD) serotype O following outbreaks in pigs which were reported in 2015 in the Hazafon region near the border with the Lebanon. The FMD World Reference Laboratory (The Pirbright Institute) has reported that the sequence analysis suggests it belongs to the FMD O/ME-SA/Panasia lineage and is closely related to the viruses found in the Far East in the last year (FMD World Reference Laboratory, 2016). During the outbreak last year, a further outbreak was reported in cattle also in Hazafon province. Additional specimens collected from FMD cases in sheep in Nablus (Palestinian Autonomous Territories) were submitted to Pirbright at the same time. FMD viruses recovered from these samples were very closely related to the Israeli samples indicative of an intimate epidemiological connection between these field cases of FMD.



Recent Foot and Mouth Disease outbreaks (FMD O & A) January 2014 - March 2016
Highlights - new strain of FMD A (India 2001) and FMD O (ME-SA/Panasia)

In addition, Turkish Authorities continue to report large numbers of outbreaks of FMD A Asia/GVII which has recently spread into the region (ADNS, 2016). This same virus has also been reported in Saudi Arabia, Iran, Iraq and Armenia (where vaccination is taking place). These recent outbreaks involving two serotypes (O and A) are indicative of the unexpected long distance movement of disease into the countries neighbouring the EU.

Situation Assessment

FMD is considered endemic in many Middle Eastern countries. There is a high ruminant livestock density area that stretches from southern Asia to the Mediterranean basin where there are extensive pastoral and nomadic livestock populations at risk of production diseases present in endemic states. It is believed that disease spread in this area goes frequently unchecked and small ruminant herding act as a pathway for pathogens to

spread from East to West (Slingenberg, 2004). The increase in intensive livestock production in some countries in the Middle East means that disease epidemiology can be complex. Ruminant farming is a key industry in many countries in this area and the large scale movements of people and livestock could be linked to the spread of these new strains of FMD.

There is no legal trade from North Africa or the Middle East to the EU in FMD-susceptible live animals or untreated (fresh or frozen) products of animal origin from FMD-susceptible livestock but exports in the other direction out of the EU are allowed. The EU currently has good vaccine matching capability in case of incursions to these current strains.

Illegal trade of untreated products of animal origin from North Africa / Middle East into Southern Europe or beyond is difficult to quantify but given the proximity to Europe and close connections to these regions with large movements of immigrant workers, tourists and at present, refugees, vigilance along all the neighbouring EU countries should be heightened at present. Illegal trade in live animals of FMD susceptible species from the region into the EU is less likely due to the logistics, but it cannot entirely be ruled out. Fomite transmission from regions with high levels of infection may be possible on trucks or people who have visited livestock in the region and therefore maintaining biosecurity for returning vehicles and workers visiting livestock premises is paramount.

Conclusion

These reports of new incursion into the region are indicative of spread, presumably through transhumance (herding animals) or people moving with contaminated products resulting in disease incursions. If poor levels of vaccination and/or the protection that provides are contributing to the spread, this is of concern for the whole region.

Although we do not currently consider there to be an increase in risk to the EU from legal trade as a result of these outbreaks, there remains an overall low risk of introduction of disease from any affected region in the world, nevertheless the pathways for disease incursion from the Middle East and North Africa currently merit enhanced vigilance.

We will continue to monitor the situation and would like to remind livestock keepers of the importance of maintaining strict on-farm biosecurity, compliance with the swill feeding ban and reporting all suspicions of notifiable disease promptly.

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Authors

Dr Helen Roberts

Dr Don King (The Pirbright Institute)

Sam Wright

Jonathan Smith

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