Preliminary Outbreak Assessment

Foot and Mouth Disease in North Africa and the Middle East

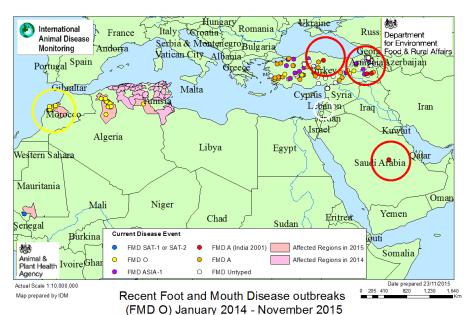
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Ref: VITT/1200 FMD in North Africa / Middle East

Disease Report

The Moroccan Authorities have reported 6 outbreaks of Foot and Mouth Disease (FMD) serotype O in cattle and sheep in Centre West region along the coast (OIE, 2015a; see map). Disease control measures are in place. The World Reference Laboratory has reported that the sequence analysis suggests these belong to the FMD O/Asia India 2001 lineage (FAO, 2015).

In addition, both Saudi Arabia and Turkey have recently reported outbreaks of a new strain



Highlights - new strain of FMD A (India 2001) & FMD O (India 2001)

of FMD A in cattle and sheep, closely related to the FMD A/Asia India 2001 lineage circulating on the Indian subcontinent (OIE, 2015b; OIE 2015c) This progress of spread of this strain was being closely monitored by the OIE/FMD network since 2013 (FAO, 2015). The results of sequencing from official reports of FMD (serotype pending) on an isolated pig farm in

Northern Israel (OIE, 2015d) and unofficial reports of FMD in sheep in Palestine may also be of interest in providing a bigger picture of the level of regional spread.

Situation Assessment

Given the situation in North Africa and Middle East in general (large movements of people, multiple strains of FMD circulating), it was quite likely that the same strain of FMD O (FMD O/ME-SA Ind-2001d lineage), circulating in Algeria, Tunisia and closely related to FMD isolated from outbreaks in Libya and the Middle East could occur in Morocco. However,

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the latest information from the laboratory and reported by EUFMD about this strain is that it represents another new incursion, rather than spread from Algeria.

This is the first report of FMD since 1999 in Morocco. Formerly the country was considered FMD free, but since FMD spread from Libya into Tunisia and Algeria (also FMD free with vaccination) in 2013-4, Morocco had recognised the risk and been delivering a vaccination booster campaign in cattle. The picture of FMD in the North Africa and Middle East is complex, with several strains circulating, including for example O/EA-3 (Sudan like), SAT2/VII/Ghb and A/Iran-05 in Egypt, and A/Asia/Iran-05 (HER-10 and SIS-10), O/ME-SA/Pan-Asia-2, O/ME-SA/Ind2001 and Asia-1/Sindh-08 in Turkey. What is not clear is how well available vaccines will protect animals against these strains; given that Turkey reports a new vaccine is being developed, one presumes vaccine matching with current vaccines is not high.

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 the other way are possible. However equidae are approved for import into the EU from several countries in the region and the European Commission has issued an update to Implementing Decision 2014/689/EU on "...measures to prevent the introduction of FMD into the Union..." requiring the cleansing and disinfection of all livestock vehicles returning to the EU as well as horse transport.

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 or tourists, 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

Taken altogether, these reports of two new strains in this area are indicative of the spread throughout the region, presumably through transhumance (herding animals) or people moving with products resulting in recent incursions into these countries. 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 Middle East and North Africa currently merit enhanced vigilance.

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The risk from illegal imports is difficult to quantify but would be valid for any currently affected region in the world, including North Africa and the Middle East.

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.

Authors

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References

- FAO (2015) Foot and Mouth disease situation, Monthly Report September 2015.

 http://www.fao.org/fileadmin/user_upload/eufmd/docs/FMD_monthly_reports/2015/September2015.pdf
- OIE (2015a) Immediate notification report Ref OIE 19007; Date 02/11/2015 http://www.oie.int/wahis_2/temp/reports/en_imm_0000019007_20151102_122521.pdf
- OIE (2015b) Immediate notification report Ref OIE 19092; Date 16/11/2015 http://www.oie.int/wahis_2/temp/reports/en_imm_0000019092_20151116_185523.pdf
- OIE (2015c) Immediate notification report Ref OIE 18889; Date 19/10/2015

 http://www.oie.int/wahis_2/temp/reports/en_imm_0000018889_20151019_132059.pdf
- OIE(2015d) Immediate notification report Ref OIE 19139; Date 22/11/2015

 http://www.oie.int/wahis-2/temp/reports/en-imm-0000019139-20151123-140425.pdf



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