

INTERNATIONAL ANIMAL HEALTH DIVISION



International Animal Disease Monitoring Team

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FOOT AND MOUTH DISEASE IN ARGENTINA (FMD FREE ZONE WITH VACCINATION)

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Table of Contents

1. SUMMARY	3
2. INTRODUCTION	4
3. HAZARD IDENTIFICATION	4
3.1. FMD IN ARGENTINA - OFFICIAL DISEASE REPORT	4
3.2. ARGENTINA – FMD ZONES	4
3.2.1. <i>FMD free zone without vaccination</i>	4
3.2.2. <i>FMD free zone with vaccination</i>	5
4. RISK ASSESSMENT	5
4.1. TERMS AND DEFINITIONS	5
4.2. RELEASE ASSESSMENT – LEGAL TRADE (CURRENT SITUATION).....	5
4.2.1. <i>Terms and definitions</i>	5
4.2.2. <i>FMD free zone with vaccination – Permitted imports</i>	6
4.2.3. <i>Other pathways</i>	7
4.3. COMMENTARY	7
5. CONCLUSION	8
6. REFERENCES:	8

1. Summary

The Argentinean authorities reported an outbreak of FMD in cattle at the beginning of February 2006. This outbreak occurred in the EU approved zone of Argentina where vaccination against FMD is practised.

There is a low likelihood that importations of matured and de-boned beef for human consumption could result in the introduction of the disease to the UK via legal imports. Thus, the EU (and the UK) is now considering appropriate safeguard measures. It is likely that imports from other unaffected areas within the approved export zones will continue.

The likelihood of FMD virus introduction from Argentina to the UK through potential illegal imports has not increased, especially when considered in the context of the on-going potential for the introduction of the disease from countries where FMD is present (endemic).

The IAHD will continue to monitor developments and will revise this assessment if circumstances change in the future.

2. Introduction

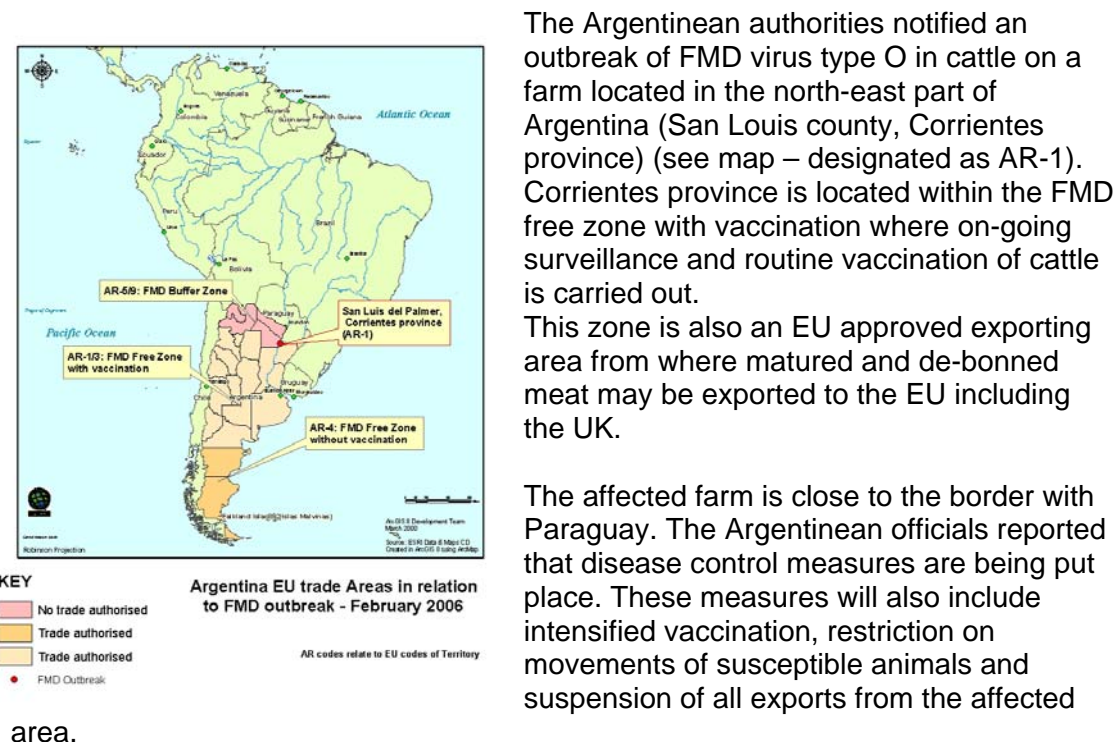
This qualitative risk assessment considers the likelihood of the introduction of foot and mouth disease (FMD) to the UK via various pathways following an outbreak in the EU exporting area of Argentina.

The map in this report was prepared from official reports. It does not necessarily reflect the true situation. Therefore it should be regarded as indicative but not as a definitive reflection of the presence and distribution of diseases in the affected country. The map was produced using ESRI Data and maps CD (2002).

Unless otherwise stated, this qualitative risk assessment summarises official information received from the World Organisation for Animal Health, Paris, France and the European Commission, Brussels, Belgium.

3. Hazard identification

3.1. FMD in Argentina - Official disease report



The Argentinean authorities notified an outbreak of FMD virus type O in cattle on a farm located in the north-east part of Argentina (San Luis county, Corrientes province) (see map – designated as AR-1). Corrientes province is located within the FMD free zone with vaccination where on-going surveillance and routine vaccination of cattle is carried out.

This zone is also an EU approved exporting area from where matured and de-boned meat may be exported to the EU including the UK.

The affected farm is close to the border with Paraguay. The Argentinean officials reported that disease control measures are being put place. These measures will also include intensified vaccination, restriction on movements of susceptible animals and suspension of all exports from the affected area.

3.2. Argentina – FMD zones

The World Organisation for Animal Health recognises two exporting zones of Argentina with respect to FMD status:

3.2.1. FMD free zone without vaccination

This zone is situated south of 42nd parallel (southern Patagonia). The EU also recognises this zone as FMD zone free without vaccination (designated as AR-4 on

the map). The EU (and the UK) permit imports of bone-in beef, sheep goats and farmed and wild ruminants and cooked meat for human consumption. Other permitted imports include milk for human consumption subjected to specified heat treatments sufficient to destroy the virus, pet food and fresh and treated hides and skins from ungulates. All these imports are subject to veterinary certification.

3.2.2. FMD free zone with vaccination

This zone is situated north of 42nd parallel. The EU also recognises this zone as FMD free zone with vaccination (designated as AR-1/3 on the map). The EU (and the UK) permit imports of matured and de-boned beef only from specified areas within this zone (designated as AR-1/3 on the map) subject to official certification. The EU does not permit these imports from FMD buffer areas (designated as AR-5/9) within this zone.

For the purpose of this qualitative risk assessment, imports of matured and de-boned meat for human consumption from the EU approved areas within the FMD free zone with vaccination are identified as a hazard for further consideration.

4. Risk assessment

4.1. Terms and definitions

For the purpose of the release assessment section (Section 4.2) of this qualitative risk assessment, the following terminology will apply (OIE, 2004):

Term	Definition
Likelihood	Probability; the state or fact of being likely
Likely	Probable; such as well might happen or be true; to be reasonably expected
High	Extending above the normal or average level
Highly	In a higher degree
Low	Less than average; coming below the normal level
Negligible	Not worth considering; insignificant
Remote	Slight, faint
Would	To express probability; past of Will: expressing a wish, ability, capacity, probability or expectation

4.2. Release assessment – Legal trade (Current situation)

4.2.1. Terms and definitions

For the purpose of the release assessment section (Section 4.2) of this qualitative risk analysis, the following definitions will apply (OIE, 2005):

Term	Definition
FMD	<i>Foot and mouth disease is an acute infectious disease, which causes fever, followed by the development of vesicles (blisters) - chiefly in the mouth and on the feet. The disease is caused by a virus of which there are seven different serotypes (O, A., C, SAT1, SAT2, SAT3, and Asia 1), each producing the same symptoms, and distinguishable only in the laboratory (Defra, 2005a).</i>
Incubation period for FMD	<i>14 days (OIE, 2005)</i>

* This risk assessment uses the OIE recommended terminology. This is important to maintain consistency in expressing estimates. Defra is aware of some concerns that have been expressed about the appropriateness of this terminology for practical purposes (ie. clarity for the purpose of understanding by wider non-technical audience). Defra will consider this issue in the near future.

NOTE: This qualitative risk assessment was undertaken to assist the process of identifying appropriate safeguard measures to prevent the introduction of FMD virus from the affected area of Argentina to the UK via legal trade among other pathways specified. Any such measures must maintain appropriate level of protection (ALOP) without unduly restricting trade.

The UK ALOP is that legal importation of live animals or their products from EU Member States or Third Countries must present a negligible likelihood that the diseases of concern will be introduced.

4.2.2. FMD free zone with vaccination – Permitted imports

This release assessment considers the trade in risk commodities between Argentina and the UK for the past month. This estimated risk period is over twice the time of the maximum incubation period for FMD as specified by the OIE (14 days).

4.2.2.1. Matured and de-boned beef

Conclusion: *There is a low likelihood that importations of matured and deboned beef for human consumption could result in the introduction of the disease to the UK via legal imports. Thus, the EU (and the UK) is now considering appropriate safeguard measures.*

Key facts:

- a) *Imports of deboned beef is subject to official certification that beef was obtained from cattle that come from an approved EU region of Argentina where FMD vaccination is practised;*
- b) *These cattle must come from holdings that are free from the disease and directly transported to slaughter;*
- c) *Cattle are subject to ante-mortem examination 24 hours before slaughter;*
- d) *Carcasses are subjected to maturation for at least 24 hours before deboning. This time period, combined with low pH that develops in meat after slaughter and deboning are considered sufficient to minimise the likelihood of the presence of viable virus in deboned meat, if present;*
- e) *All consignments of deboned beef from Argentina are subject to veterinary checks at the point of entry into the EU.*

Supporting evidence

According to EU rules, imports of matured and de-boned bovine meat for human consumption are subject to official certification. This certification must state that meat has been obtained from cattle that come from an EU approved zone where vaccination is carried out and holdings that are free of the disease. Cattle must be sent direct to slaughter. Cleaning and disinfection of transport vehicles must be carried out before slaughter. No mixing with other cattle that do not comply with EU rules is allowed during the transport.

Cattle must be slaughtered in EU approved establishments that are not subject to any restrictions. Cattle must be subjected to ante-mortem inspection for FMD which is carried out 24 hours before slaughter. Their carcasses must be matured at +2°C for 24 hours and have pH < 6.0 after maturation and before de-boning.

The European Commission is considering appropriate safeguard measures with regard to exports of matured and de-boned meat from the affected area.

TRACES (the EU electronic notification system) shows that the UK has not imported any consignments of matured and de-boned meat from the area where outbreak has been reported during the past month.

4.2.3. Other pathways

The likelihood of the introduction of FMD to the UK by illegal trade from FMD infected countries is present, but difficult to estimate. The likelihood from personal imports from Central and South America appears to be relatively low compared to other countries where FMD is present (Defra, 2005)

4.3. Commentary

FMD appears to be endemic in Bolivia, Ecuador and Venezuela. The disease occurs sporadically in Argentina, Paraguay, Uruguay, Peru, Colombia and Brazil. FMD serotypes O, A, and C are known to occur in the affected regions. The general FMD situation in South America had significantly improved by the mid 1990s. Since 2000, however, Argentina, Brazil, Paraguay and Uruguay have had new outbreaks resulting in major trading setbacks.

According to Corea Melo and Lopez (2002), the establishment of FMD-free areas may have resulted in significant changes in livestock movements in the region that could favour sporadic occurrence of outbreaks. That is, the producers in the FMD-free areas are economically advantaged compared to producers in the affected areas who can sell produce to the domestic market only. The free areas have also generated price differentials, particularly for fattening cattle and replacement stock. This, in turn, has created incentives to move livestock to these areas from economically less viable areas.

Therefore, maintaining the recognised FMD free status (without or with vaccination) will remain a constant challenge for some countries while the disease remains present in neighbouring countries or areas. This outbreak of FMD in Argentina's approved export zone is of concern as it could be a warning sign that movement controls may not be adequately implemented. Should this be the case, outbreaks

may occur in non-affected areas of the approved export zone from where importations of matured and de-boned beef continue.

5. Conclusion

The Argentinean authorities reported an outbreak of FMD in cattle at the beginning of February 2006. This outbreak occurred in the EU approved zone of Argentina where vaccination against FMD is practised. This area is close to Paraguay where vaccination is practised and the last FMD outbreak was reported in July 2003. Paraguay is recognized by the OIE as a country free from FMD where vaccination is practised.

There is a low likelihood that importations of matured and de-boned beef for human consumption could result in the introduction of the disease to the UK via legal imports. Thus, the EU (and the UK) is now considering appropriate safeguard measures. It is likely that importations from other unaffected areas within an approved export zones will continue.

The likelihood of FMD virus introduction from Argentina to the UK through potential illegal imports has not increased. This is considered in the context of the on-going potential for the introduction of the disease from countries where FMD is present (endemic).

The IAHD will continue to monitor developments and will revise this assessment if circumstances change in the future.

6. References:

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