

Emerging risk? Two introductions into Europe in 3 months

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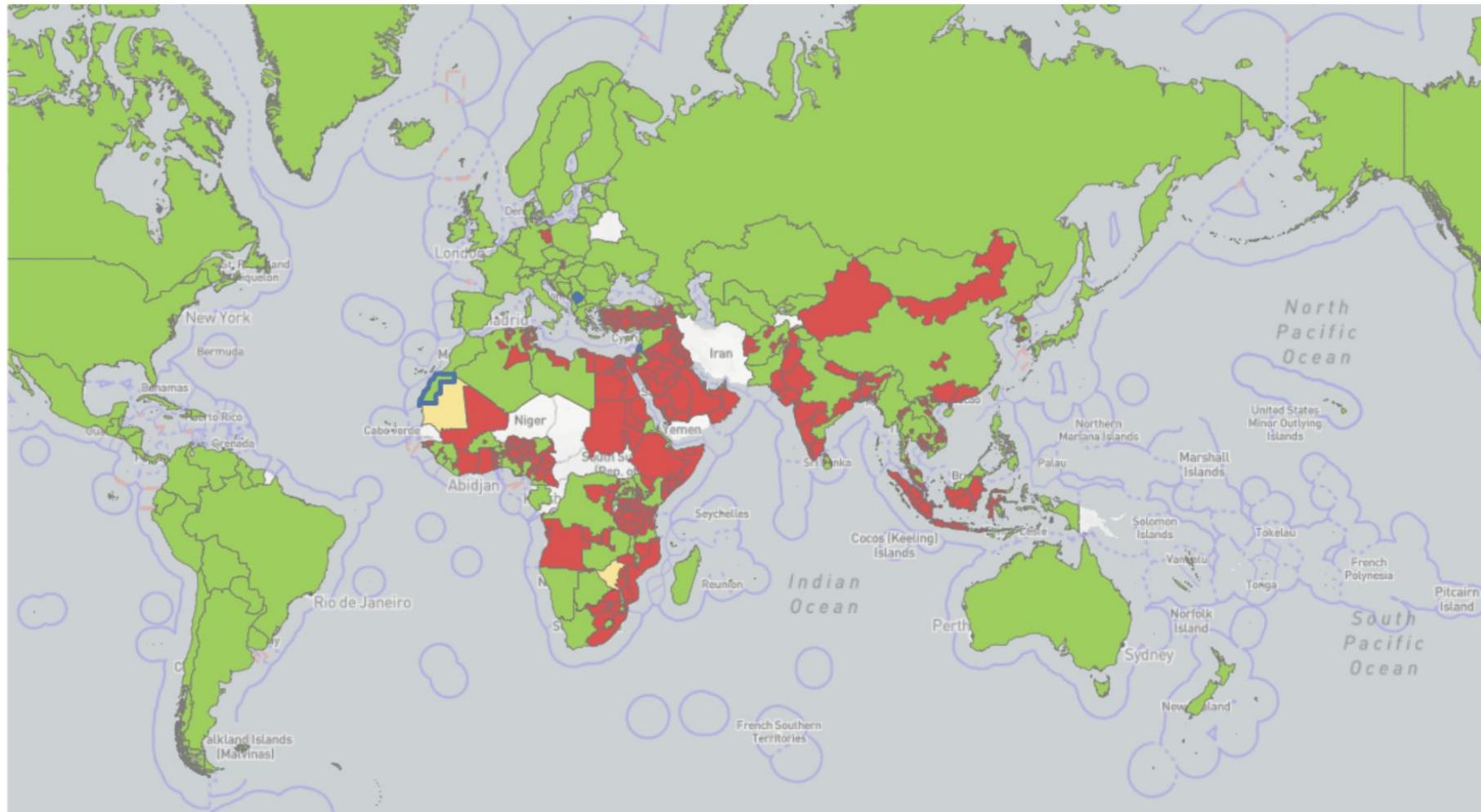
Landbrug & Fødevarer



- FMD around the world
- Known epidemiological facts
- Outbreaks in Europe the last 25 years
- Possible routes of introduction – plausible or less plausible
- ?

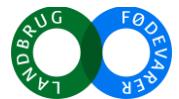


FMD around the world - 2023-2024-2025



Known epidemiological facts

- Windborne infection
 - Cattle highly susceptible
 - Pigs relatively difficult to infect through the windborne route
- Windborne spread
 - Cattle less effective
 - Pigs very effective
- Oral infection
 - Cattle requires a higher dose via the oral route
 - Pigs are easily infected by the oral route



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Outbreaks in EU in this millennium

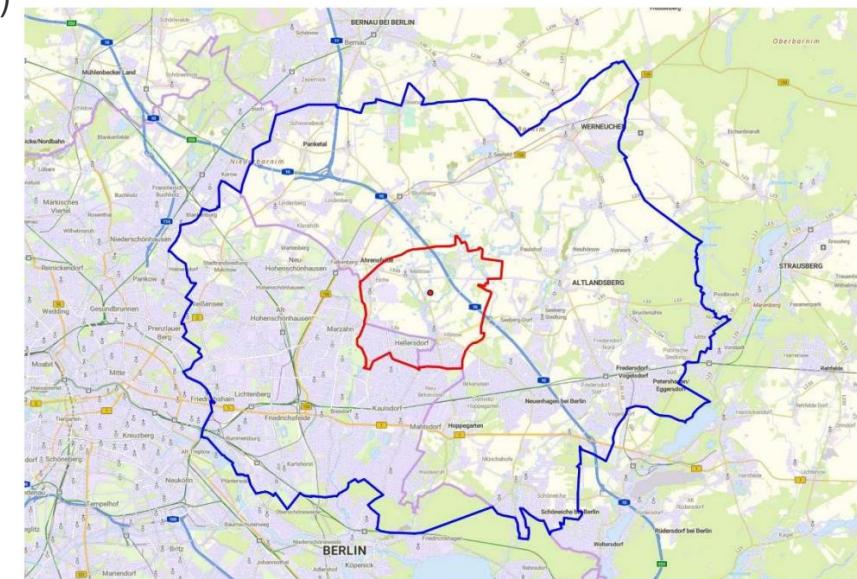
	Year	First introduction	Source
UK	2001	Pig farm	
UK	2007	Cattle	
Bulgaria	2011	Cattle	
Germany	2024 (confirmed 2025)	Water buffalo	
Hungary/Slovakia	2025	Dairy cattle	

Outbreaks in EU in this millennium

	Year	First introduction	Source
UK	2001	Pig farm	Swill feeding
UK	2007	Cattle	Probably from a laboratory
Bulgaria	2011	Cattle	Probably wild game crossing the border from Turkey
Germany	2024 (confirmed 2025)	Water buffalo	?
Hungary/Slovakia	2025	Dairy cattle	?

Germany 2024/2025

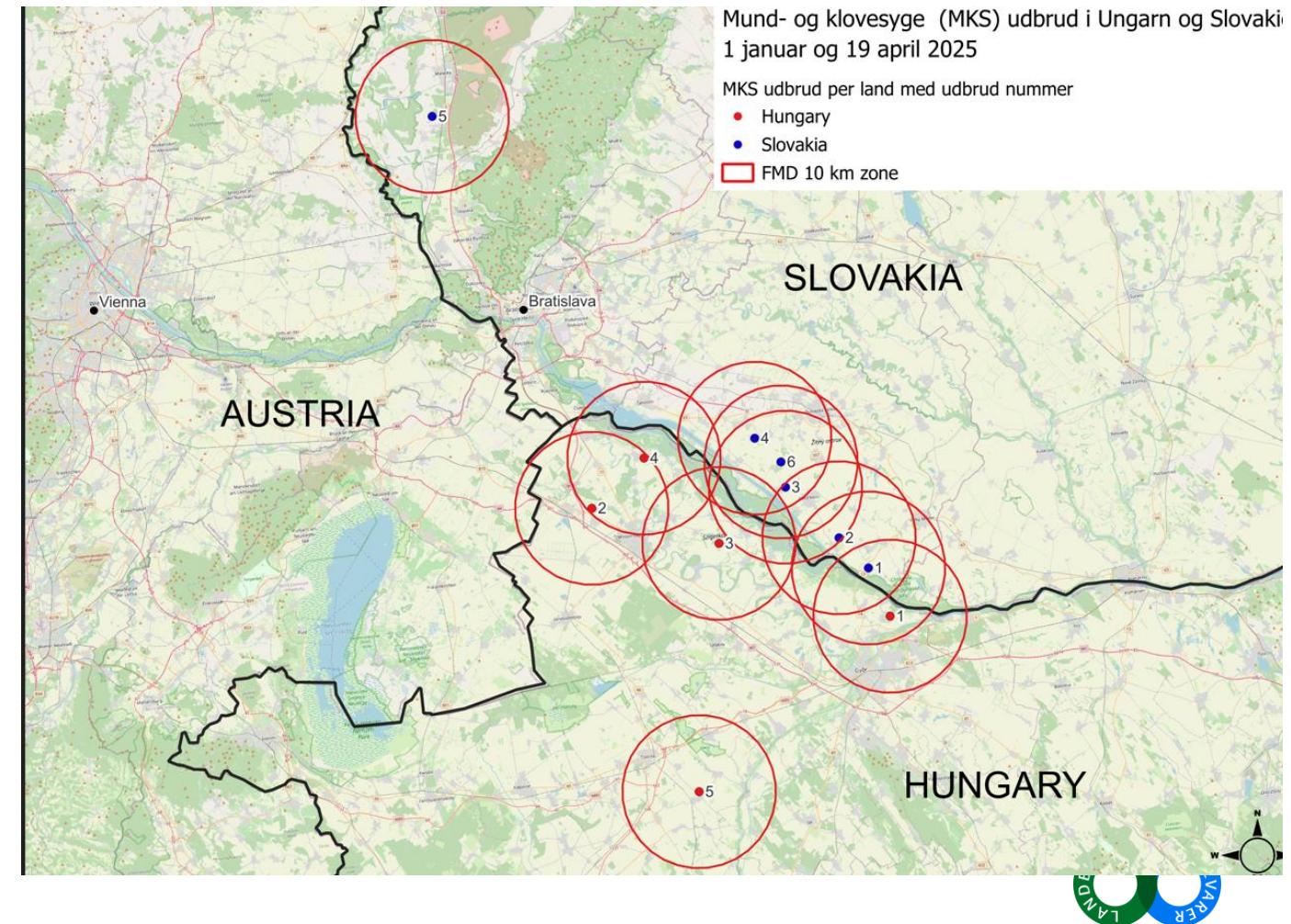
- 14 water buffalos, probably infected mid-December 2024
- Bluetongue suspected – FMD confirmed start January 2025
- Outskirts of Berlin – low farming density – popular area for the urban population and tourists
- Source unknown – virus could be of Turkish origin (SCoPAFF-meeting –presentations)



Slovakia/Hungary 2025

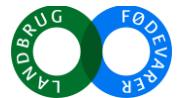
- 11 herds in the border area along the Danube
- Large to very large professional farms
- Contacts between some of the farms
- Possibility of windborne spread
- Source unknown – closest relative so far from

Pakistan, but diagnostic work is ongoing (WGS)



Germany and Hungary/Slovakia Conclusions

- Two independent introductions – not the same virus
- Source of infection unknown in Germany and Hungary/Slovakia (ref: SCoPAFF-presentations and summaries)
- Lots of rumours – but thorough investigations by the authorities and EU mission have not identified a probable or known source



Open list of possible routes of introduction discussed at various meetings

Source of introduction	Based on discussions with the official Danish expert group on FMD and international colleagues around the world
Feed	Can survive for months in meat – but introduction is into ruminants?
Food	Can survive for weeks in compound feed – soy bean meal (Dee 2018-2019)
Humans	Can survive in the nasopharynx in humans for up to 48 hours Farmhands from areas, where FMD is present (or suspected) – but transport-time from home to Hungary-Slovakia?
Semen	Not likely – would have been found in more herds – and strictly regulated
Windborne	Not likely for first introduction – highly likely for secondary spread
Deliberate introduction	What is the motive? Not easy to see, who gains from this
?	



Foot and mouth disease: Fresh cause for concern

SUMMARY

It has been 14 years since the last outbreak of foot and mouth disease (FMD) in a European Union (EU) country. However, three water buffaloes have recently tested positive for the disease in Germany. While FMD poses no risk to human health, it is a highly contagious viral disease that can affect various cloven-hoofed animals. The speed with which the disease spreads makes it essential to cull all animals hosted on the affected farm once an outbreak is detected, and to apply strict biosecurity measures. This results in significant economic losses.

As a result of the 2001 outbreak in the United Kingdom (UK), over 6 million animals were culled in one year, costing more than £3 billion (more than €6.5 billion at current prices) in public expenditure and having a huge impact on the tourism sector.

The EU has legislation in place outlining rules for the prevention and control of animal diseases such as FMD, including a notification system integrated into the World Animal Health Information System to facilitate a coordinated approach. The European Commission also cooperates with the United Nations Food and Agriculture Organization (FAO) to fight the spread of the disease.

Since 1990, the use of preventive vaccines against FMD has been prohibited in the EU, except for in certain cases and in emergencies. Although conventional FMD vaccines protect livestock from developing the disease, vaccinated animals may still become infected and carry the disease.



IN THIS BRIEFING

- Introduction
- What is foot and mouth disease?
- Reporting an outbreak in the EU
- EU legislation
- Impact on the economy
- European Commission for the Control of Foot and Mouth Disease
- European Parliament