Foot and mouth disease -Brandenburg

Anette Boklund, associate professor







FMD – in Brandenburg

Reported Friday 10. January, 2025 in the afternoon in ADIS





FMD – Brandenburg, background

- Herd with 14 water buffaloes
- Extensively managed in nature reserve close to Berlin
- All animals originates from Germany, most born in the herd
- Farms produced own feed (hay)
- Area with access to the public, often used for walking dogs
- 3 animals died
 - 2 were send to rendering (5/1) tested for BTV
 - 3rd died 6/1 send to FLI
- Min 250 km from the DK border

Water buffaloes preserving biodiversity and wetland landscape



"The grazing of the Tegeler Fliessal is not only an opportunity for the preservation of biodiversity in this valuable protected area (using comparatively few financial resources), but it also helps to raise the awareness of the population on this important issue."

Dr. Dohme Wigger

FMD – Brandenburg, background

MKS situationen i Brandenburg, Tyskland (DE)

MKS udbrud i vandbøffelbesætning

Herd with 14 w 10.01.2025

Extensively many

All animals orig

Farms producec

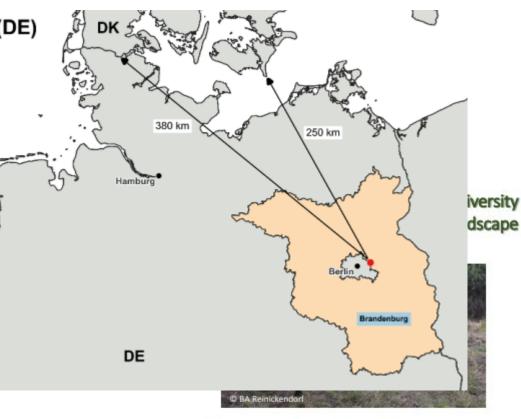
 Area with acces dogs

• 3 animals died

• 2 were send to rendering (5/1) – tested for biv

• 3rd died 6/1 - send to FLI

Min 250 km from the DK border



"The grazing of the Tegeler Fliessal is not only an opportunity for the preservation of biodiversity in this valuable protected area (using comparatively few financial resources), but it also helps to raise the awareness of the population on this important issue."

Dr. Dohme Wigger

- All animals on farm killed
 - Lesions of varying age
 - Time of introduction estimated to 15-31 December
 - based on lesions and antibodies



https://food.ec.europa.eu/document/download/870f22d4-66e3-4a22-ba14-4f796de5fe1a_en?filename=reg-com_ahw_20250117_pres_fmd.pdf

- 3 & 10 km zones established
 - All domestic farms < 1km preventively culled test neg.
 - Screening:
 - <3 km zone
 - 9 farms
 - First round (clinical exam., virological, serological)
 - All test were neg.
 - Second and third round planned
 - 3-10km zone
 - 155 farms
 - First round (clinical exam., virological, serological)
 - All tests were neg.
 - Second round planned



https://food.ec.europa.eu/document/download/870f22d4-66e3-4a22-ba14-4f796de5fe1a_en?filename=reg-com_ahw_20250117_pres_fmd.pdf

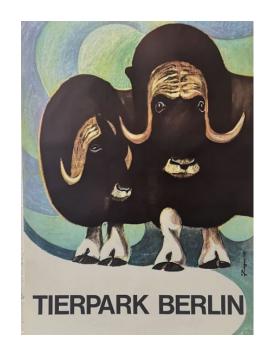
- Tracing
 - 1 farm received hay from area culled, test neg
 - Rendering truck farms on route tested
 - Vet route investigated
- Clinical suspicion 12km from farm
 - culled, test neg.



https://food.ec.europa.eu/document/download/870f22d4-66e3-4a22-ba14-4f796de5fe1a_en?filename=reg-com_ahw_20250117_pres_fmd.pdf



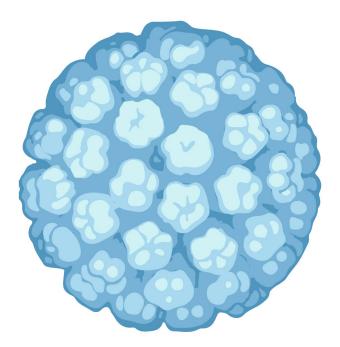
- Standstill in Brandenburg & Berlin (full area, animal movements)
 - from 10/1-18/1 in Brandenburg
 - from 10/1-27/1 in Berlin
- Restricted zones active until min. 11/2
- No cloven-hoofed animals in the "International Green week" in Berlin (17/1-26/1)
- Berlin Zoo closed from 10/1-24/1 55 animals tested neg.
- No hunting in zones
- Wild boars are tested, incl. ASF samples from December
- BTV samples tested for FMD, also from BTV-pos. animals





FMD – Brandenburg, virus

- Phylogenetic analysis showed very close relationship to virus from December, 2024, Turkey
- Isolates send to EU-REF lab
- Serotype O SA218



FMD – Brandenburg, implications for other countries

DK

- Expert group activated
- Lots of work for FVST & others
- Industry increased "black zones"
- 2 clinical suspicions
 - both dairy farms in Southern Jutland
 - test negative
- BTV-samples tested for FMD
 - Incl. BTV-pos. samples

UPDATED 10. JANUARY 2025

THE DANISH TRANSPORT

STANDARD

The DANISH Transport Standard summarizes the requirements for cleaning and disinfection of vehicles arriving from abroad; this in the effort to prevent diseases such as African Swine Fever (ASF) and Foot and mouth disease from entering Denmark.



FMD – expert group activated

- Expert group (9 pers.): Participants from
 - **FVST**
 - UCPH epidemiology
 - SSI virology, surveillance
 - Danish Agriculture & Food Council
 - SEGES, cattle
 - DDD, swine & cattle
- Additional guests (8 pers.):
 - CPH ZOO
 - Danish Agricultural Agency (SGAV)
 - Aarhus University (AU)
 - Danish Meteorological Institute (DMI)





FMD – Brandenburg, implications for other countries

Besvarelse vedr.

Risk assessment from DK-VET: <u>link</u>

HASTER: Truslen fra mund- og klovsygeeudbruddet (MKS) i Brandenburg i

<u>Probability</u>	<u>Certainty</u>
Very unlikely (0,1-1%)	High
Very unlikely (0,1-1%)	Moderate
Not likely (1-10%) to Very unlikely (0,1-1%)	Moderate
As likely as not (33-66%)	Low
Very unlikely (0,1-1%)	High
Not likley (1-10%) to Very unlikely (0,1-1%)	Low
Very unlikely (0,1-1%)	Low
Very unlikely (0,1-1%)	Moderate
	Very unlikely (0,1-1%) Very unlikely (0,1-1%) Very unlikely (0,1-1%) Very unlikely (0,1-1%) Very unlikely (0,1-1%) Not likely (1-10%) to Very unlikely (0,1-1%) As likely as not (33-66%) Very unlikely (0,1-1%) Not likley (1-10%) to Very unlikely (0,1-1%) Very unlikely (0,1-1%)

FMD – Brandenburg, implications for other countries

- Trusselsvurdering from FVST: <u>link</u>
- Overall risk: Low
- Recommendations:
 - Hunting equipment
 - Leisure equipment
 - Biosecurity incl. 48 hours quarantine after contact to cloven-hoofed animals
 - Awareness on similar clinical signs for BTV and FMD



J.nr. 2025-14-81-31987 Ref. FRAFE, JOHEL, BRB, STM

Dato: 15-01-2025

Trusselsniveau for introduktion af mund- og klovesyge (MKS) til Danmark som følge af MKS-situationen i Tyskland pr. 15. januar 2025.

Der er konstateret det første udbrud i EU i mange år af mund- og klovesyge (MKS) i en besætning med 14 vandbøfler i Tyskland beliggende i Brandenburg, landkreis Märkisch-Oderland. Udbruddet er lokaliseret ca. 250 km væk fra dansk territorium i direkte linje og ca. 380 km fra den dansk-tyske grænse.

De tyske veterinærmyndigheder har oprettet en beskyttelseszone med en radius på tre km og en overvågningszone med en radius på ti km omkring den ramte besætning. De epidemiologiske undersøgelser for at klarlægge sygdommens oprindelse og identificere mulige kontaktbesætninger pågår.

Conlusions

For now 1 outbreak!

- Keep fingers crossed! At least for another week or two.
- Is 1 FMD-pos farm realistic?
 - From modelling, we do get outputs with no spread from the first infected farm
- Does this mean we can relax?
 - NO!
 - **FMD is a RISK** this has not changed over the years!
 - Farmers and vets should keep reporting suspicions whenever relevant



Interested in more?

- EU-FMD webinars
 - Different aspects of FMD preparedness
 - 7 weeks
 - Tuesdays from 12-13



• KØBENHAVNS UNIVERSITET

FMD – Brandenburg, implications for other countries

- NL
 - 3754 calves imported from Brandenburg >1.Deember, 2024
 - 888 PCR tested, all neg.
 - 2866 ELISA-tested
 - ELISA-neg. 2837
 - ELISA-pos.
 - 12 VNT-neg.
 - 17...waiting...



Water buffalo in Denmark?

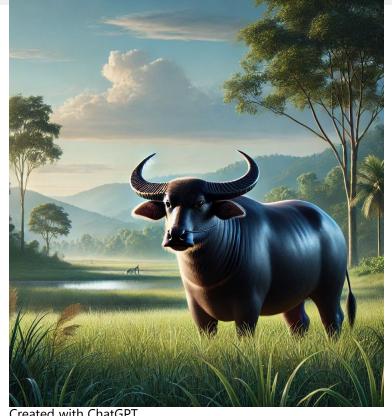
- 95 buffaloes registered in Oct, 2024
- 15 farms

- Is it important whether we have buffaloes?
- NO
 - FMD is not much different in buffaloes compared to cattle
 - Important to be aware of these "different" farm types
 - Other types of risks
 - Different management



FMD – in Brandenburg

- Information from ADIS:
- Water buffaloes (Domestic), 14 animals, 3 cases
- **Suspicion:** 9/1-2025
- **Confirmation:** 10/1-2025
- Origin of infection: Unknown
- **Control measures applied:**
 - Official destruction of animal products, Screening, Stamping out, Traceability, Disinfection, Control of wildlife reservoirs, Movement control, Official disposal of carcasses, by-products and waste, Zoning, Surveillance outside the restricted zone, Surveillance within the restricted zone
- Diagnostic tests: Real-time reverse transcription polymerase chain reaction (rRT-PCR)



Created with ChatGPT