

# Emerging Diseases and the Situation in Denmark



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## FMD in Europe – Before 2025



Bulgaria - 2011

United Kingdom - 2007

United Kingdom - 2001

Germany – 1988

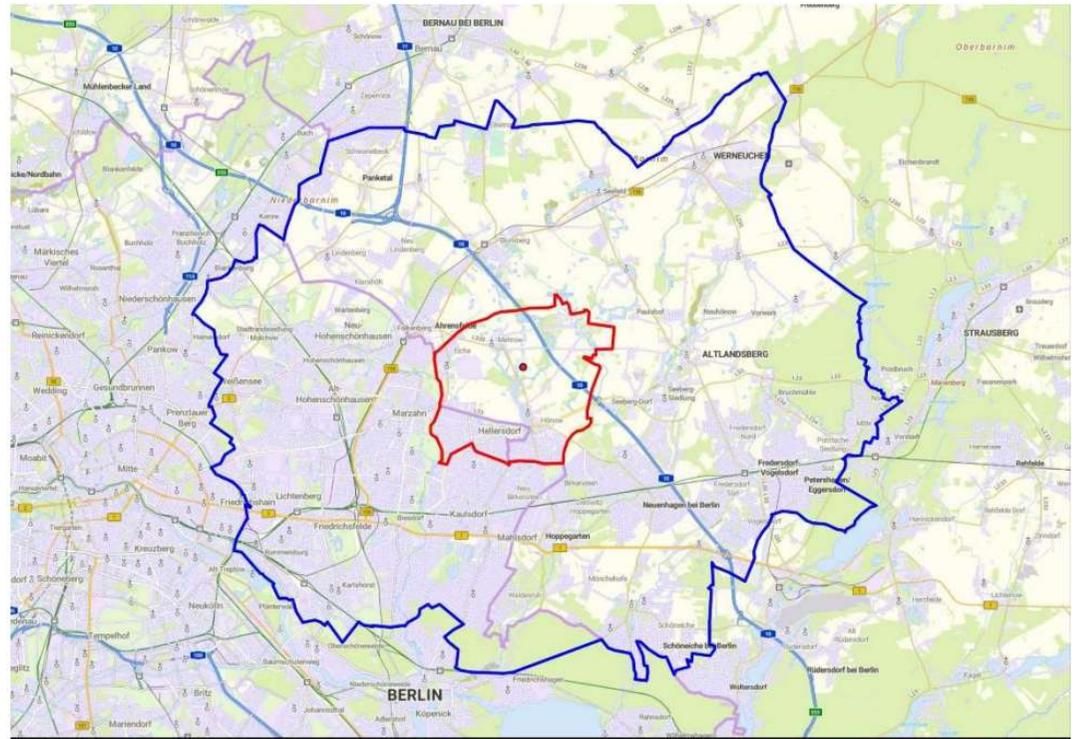
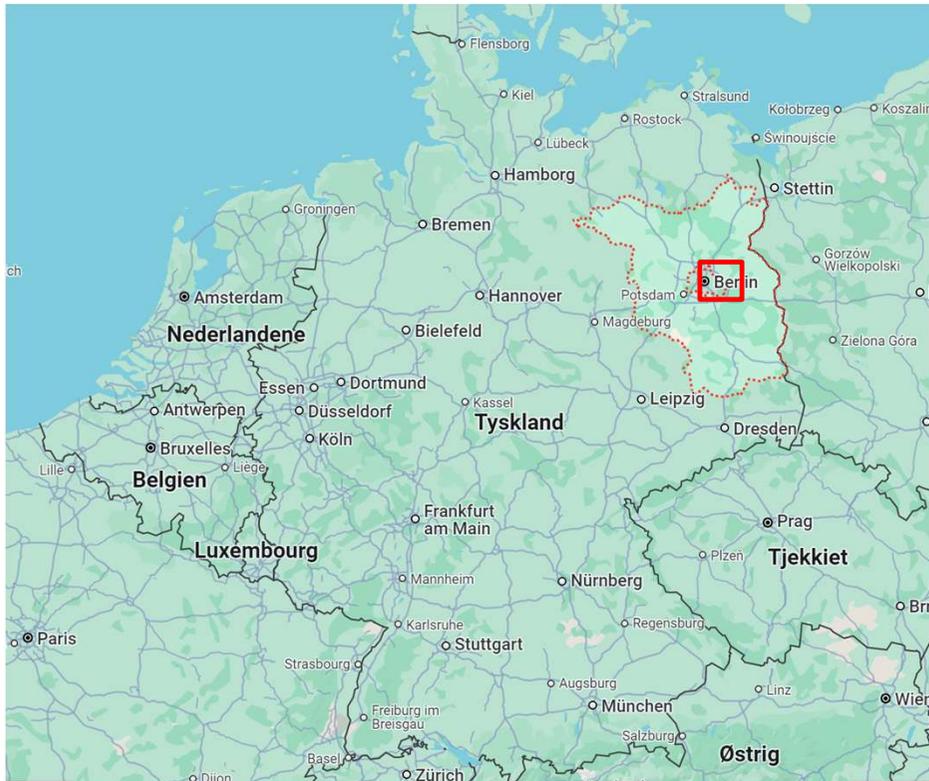
Denmark – 1983

Hungary -1972

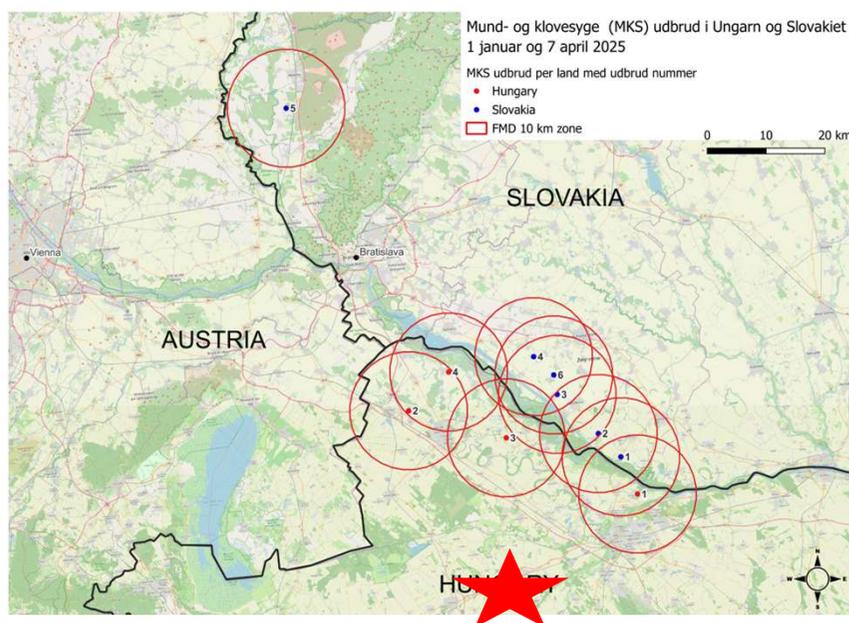
Slovakia - 1970

Picture from EUFMD

# January 2025 - FMD Outbreak Germany



## March 2025 - Hungary & Slovakia – 11 affected farms



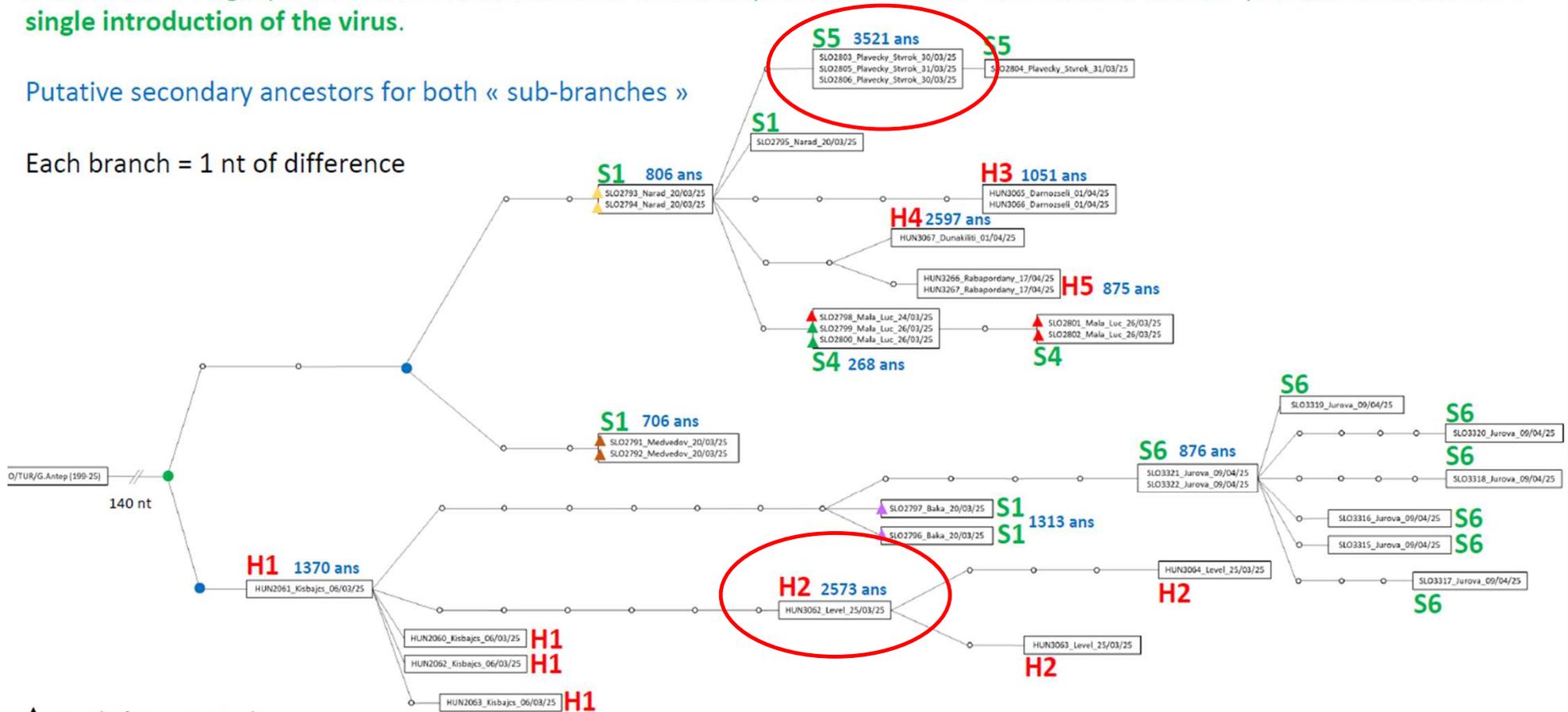
- Hungary 7 March – 1 dairy herd
- Slovakia 21 March – 3 dairy herds
- Slovakia 25 March – 1 herd
- Hungary 26 March – 1 dairy herd
- Slovakia 30 March - 1 dairy herd (FirstFarms)
- Hungary 2 April – 2 dairy herds
- Slovakia 6 April – 1 veal calf herd
- Hungary 17 April – 1 dairy herd

## TCS tree (statistical parsimony analysis) – update 07/07/2025

Presence of a single putative common ancestor for all the sequences recovered from infected animals provides evidence for a **single introduction of the virus**.

Putative secondary ancestors for both « sub-branches »

Each branch = 1 nt of difference



▲ Samples from same animals

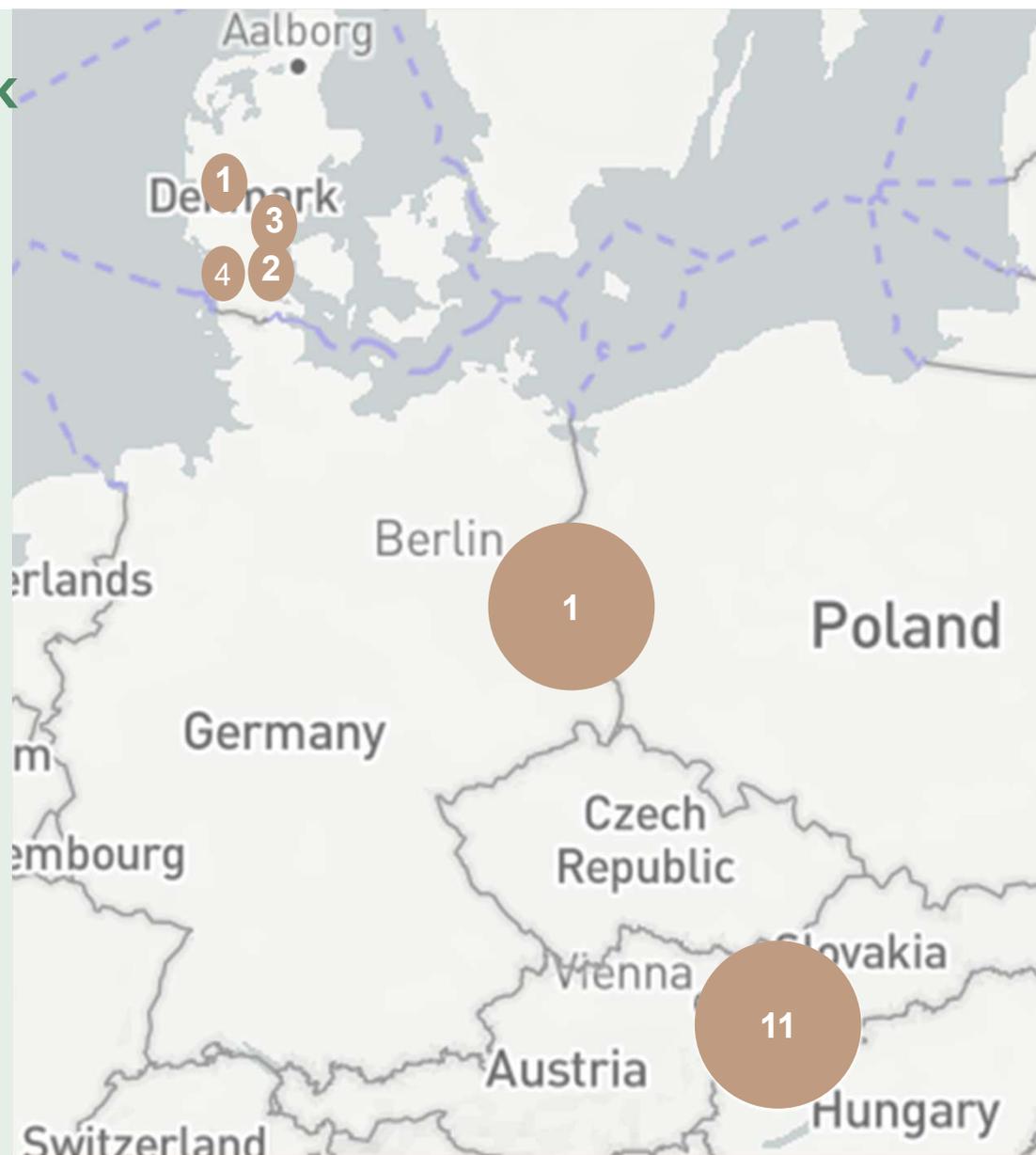
Comparison based on 8180 nt

Source: ANSES and Sciensano (7 July 2025)

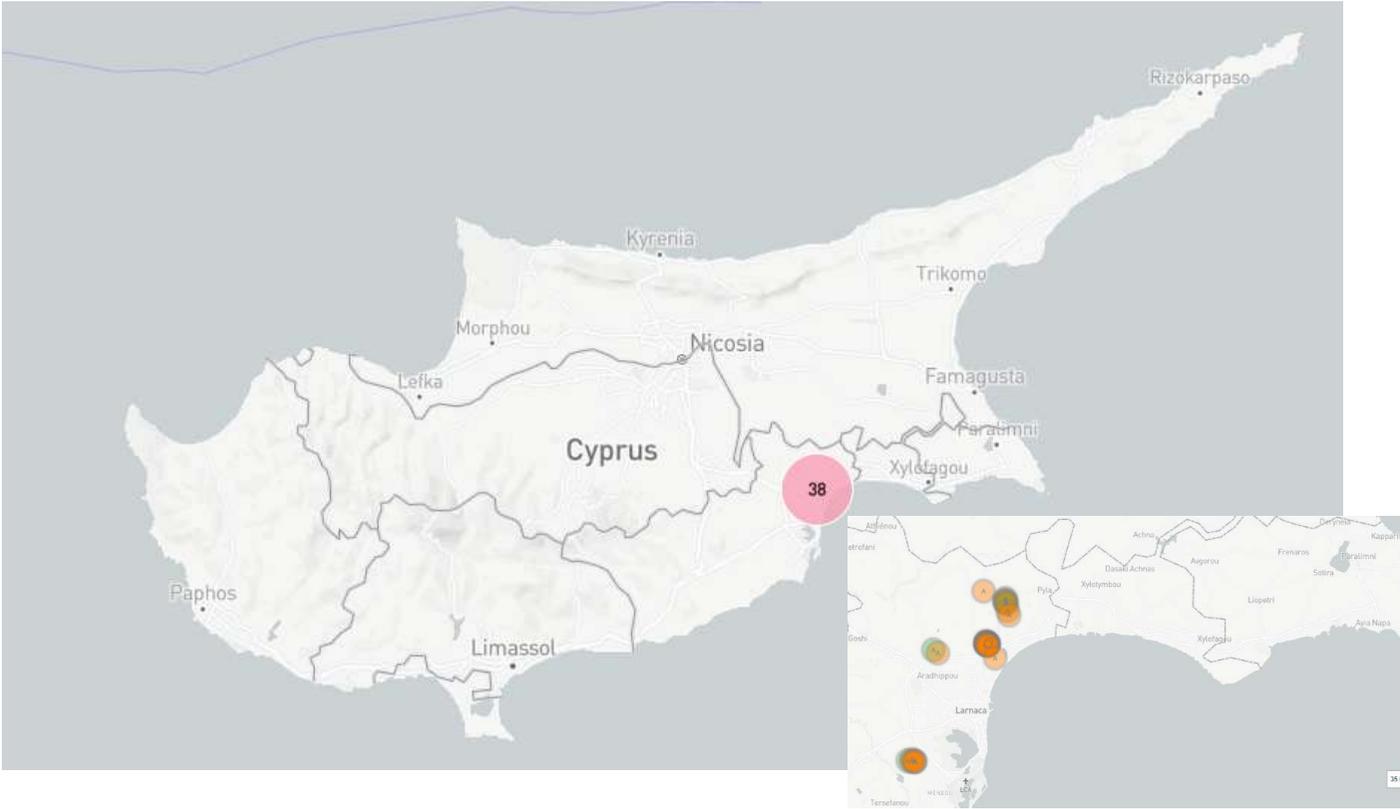
The consortium formed by ANSES (France) and Sciensano (Belgium) has been appointed as the European Union Reference Laboratory for foot-and-mouth disease.

## Suspected FMD Cases in Denmark 2025

1. Mid-January 2025
2. Late January 2025
3. Mid-March 2025
4. Late June 2025



# FMD Cyprus 2025-2026



# Precautions in Denmark

- A first outbreak in Denmark would cost approximately 8 billion DKK (1 billion EUR)
- Highly contagious – only a small infection dose is required for cattle
- Transmission occurs via animals, fomites, vehicles, clothing, footwear, airways, aerosols
- If detected on a farm, stamping-out measures are implemented to eradicate the infection

## Smittebeskyttelse i danske kvægbesætninger

For at sikre mod introduktion af alvorlige smitsomme sygdomme som mund- og klovesyge er det afgørende at opretholde god smittebeskyttelse. Introduktion af alvorlige smitsomme sygdomme til landet vil få store økonomiske konsekvenser for dansk landbrug.

Du kan være med til at begrænse risikoen ved at følge nedenstående retningslinjer:

### Karantæne fra udlandet

Ingen adgang i besætningen for personer, der inden for 48 timer har besøgt en udenlandsk besætning eller opholdt sig i områder med mund- og klovesyge.

Dette gælder også udstyr og værktøj, som skal rengøres og desinficeres før brug i besætningen.

### Skift støvler / overtrækstøj

Alle besøgende bør skifte gummistøvler og overtrækstøj før adgang til besætningen.



### Eksport af dyr

Dyr eksporteres via samlesteder eller karantæne-faciliteter. Brug udelukkende DANISH Transportstandard godkendte eksportører.

Undgå at få afhentet dyr direkte fra ejendommen af lastbiler, der kommer fra udlandet.



### Import af dyr

Ingen import af klovbærende dyr fra højrisikolande. Retningslinjer for import følger SEGES Innovations trusselvurdering:



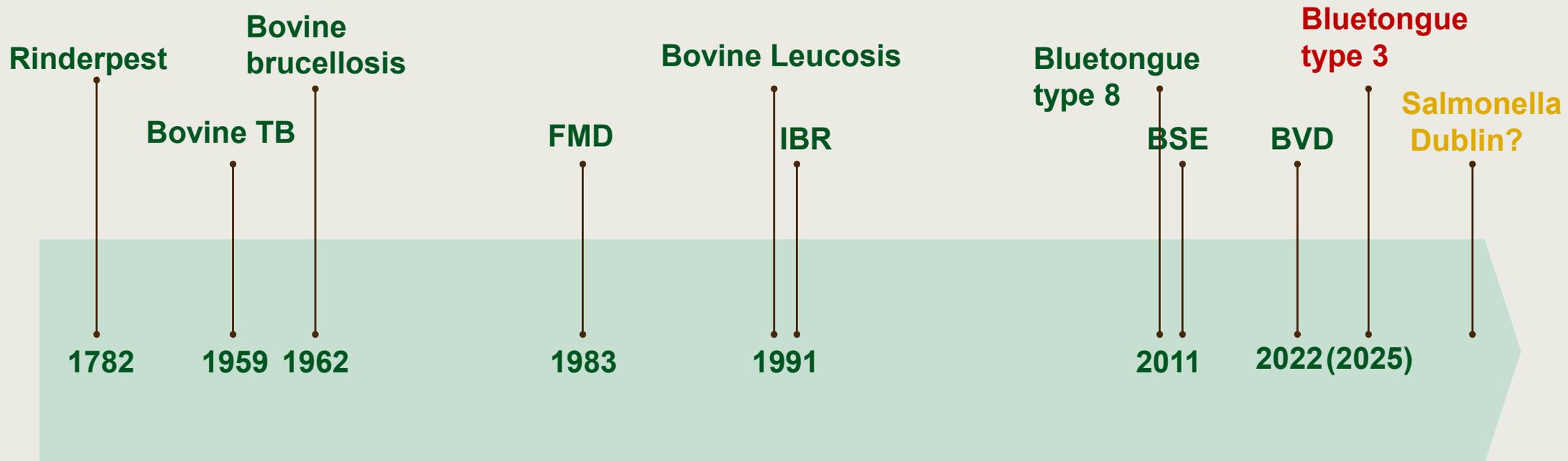
### Logbog over besøgende

Alle personer og transportere, der kommer på bedriften fra udlandet, skal registreres og underskrive bekræftelse på, at retningslinjerne for karantæne og desinfektion af udstyr er overholdt.



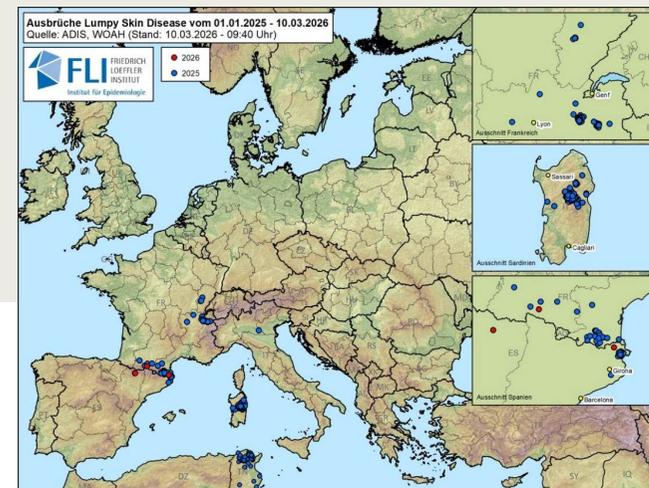
Vær ekstra opmærksom i forhold til Ungarn og Tyskland.

# Successful eradication programmes in the Danish cattle population



# Lumpy Skin Disease (LSD)

- Lumpy Skin Disease Virus is a poxvirus transmitted by blood-sucking insects and ticks
- In 2015 LSD spread across southeastern Europe, with outbreaks reported in Greece, Bulgaria, North Macedonia, Albania, Serbia, Montenegro, and Kosovo. The outbreak was controlled through extensive vaccination campaigns, and the last case in the region was recorded in 2017.
- In 2023, LDS re-emerged in North Africa, and in 2025 new outbreaks were reported in Italy, France, and Spain.



## Lumpy skin disease – Outbreaks in 2025-2026

- Italy – First outbreak on 21 June 2025 in Sardinia; 80 outbreaks reported in 2025.
- France – First outbreak on 30 June 2025; 117 outbreaks reported.
- Spain – First outbreak on 1 October 2025; 20 outbreaks reported (and 3 additional outbreaks in 2026).
- LSD had never been detected in these countries before.

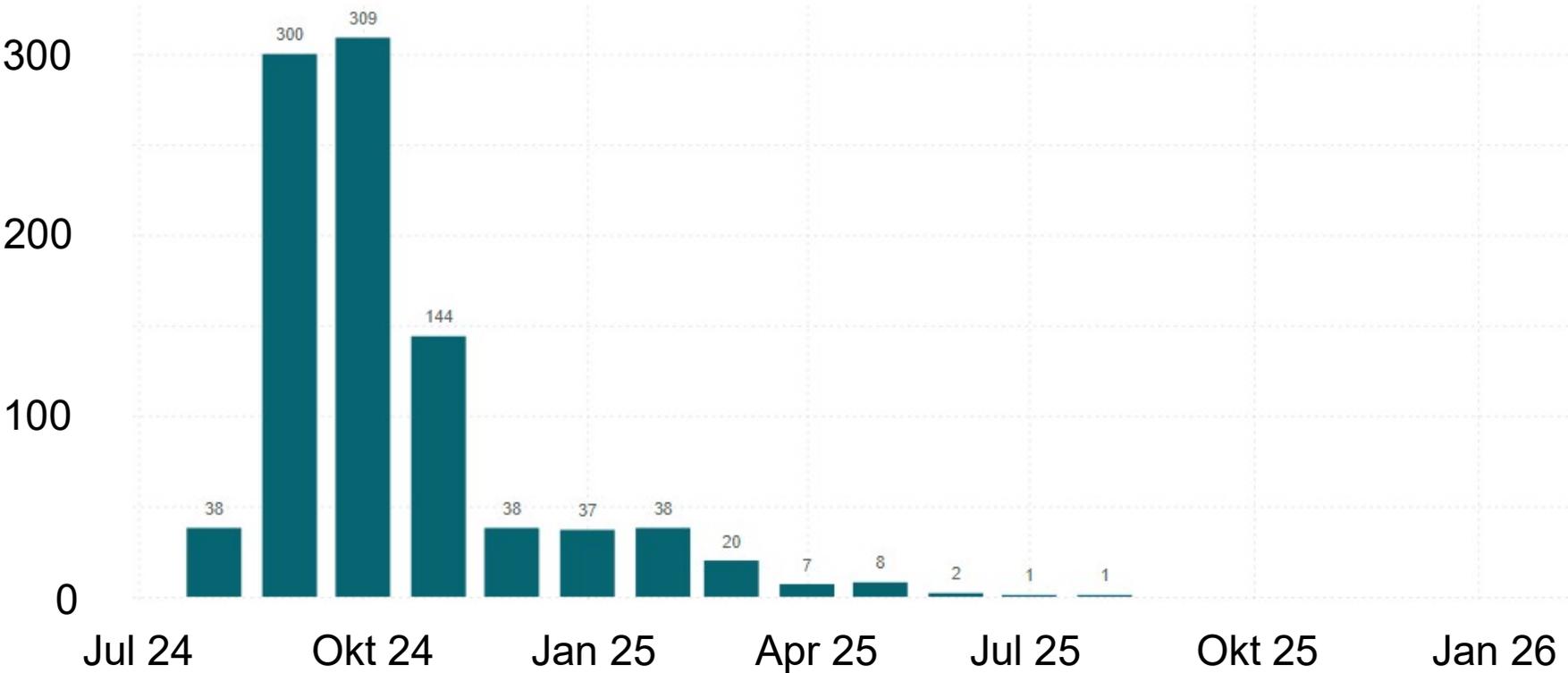
## Symptoms – drooling, fever, conjunctivitis, classic nodules, scars



<https://food.ec.europa.eu>

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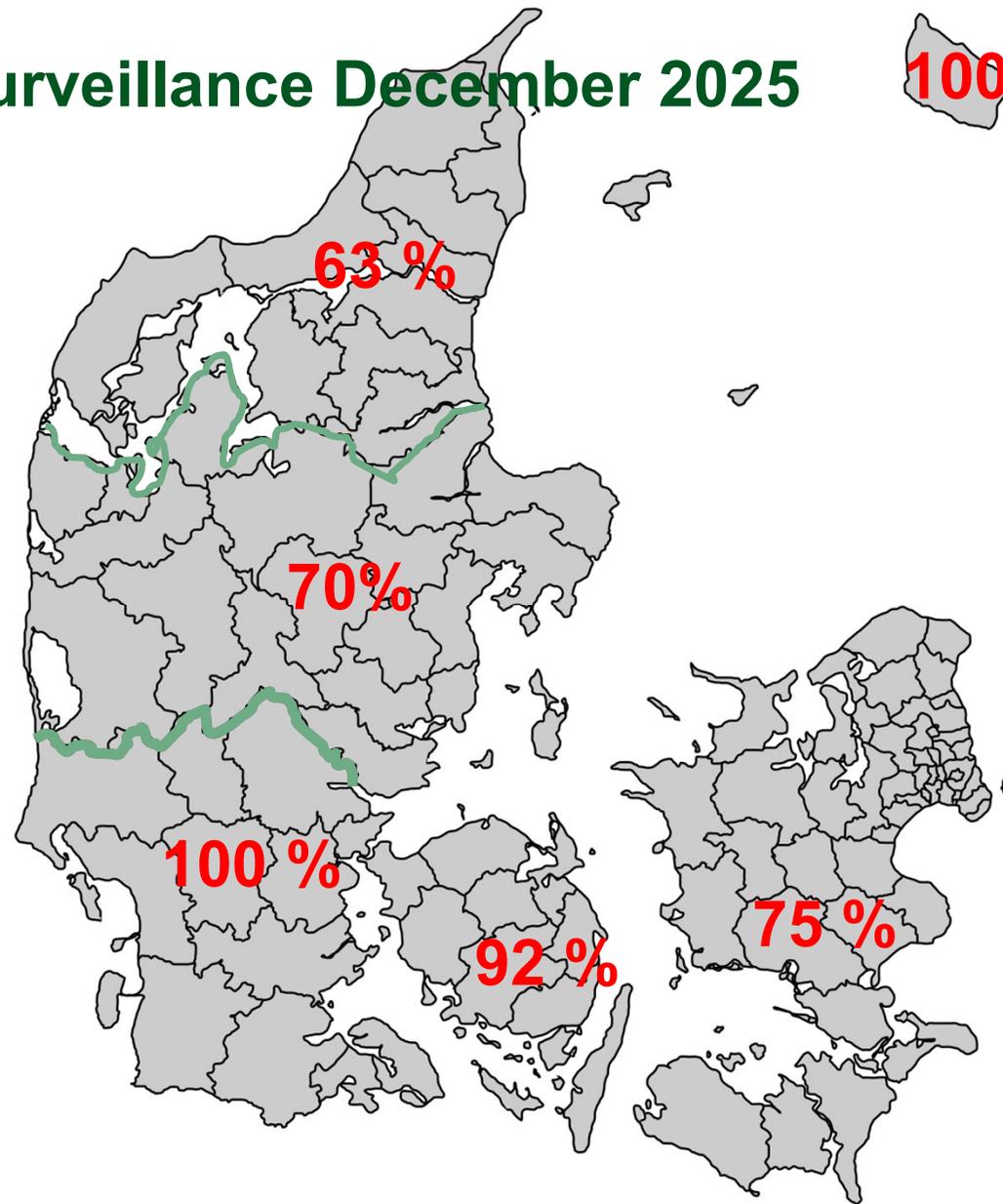
# Bluetongue Type 3 (BTV-3)

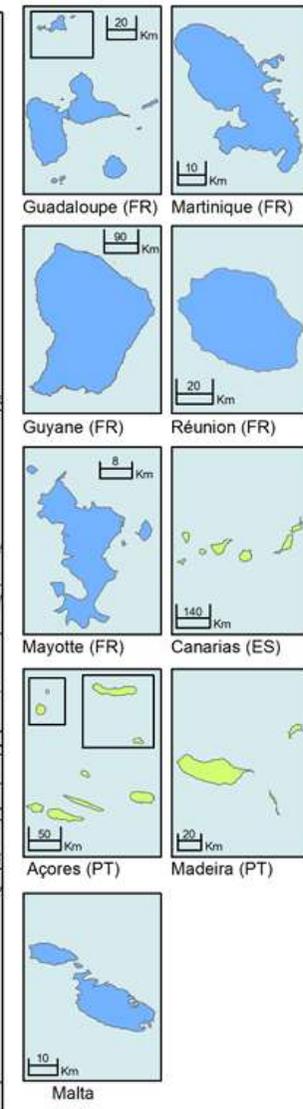
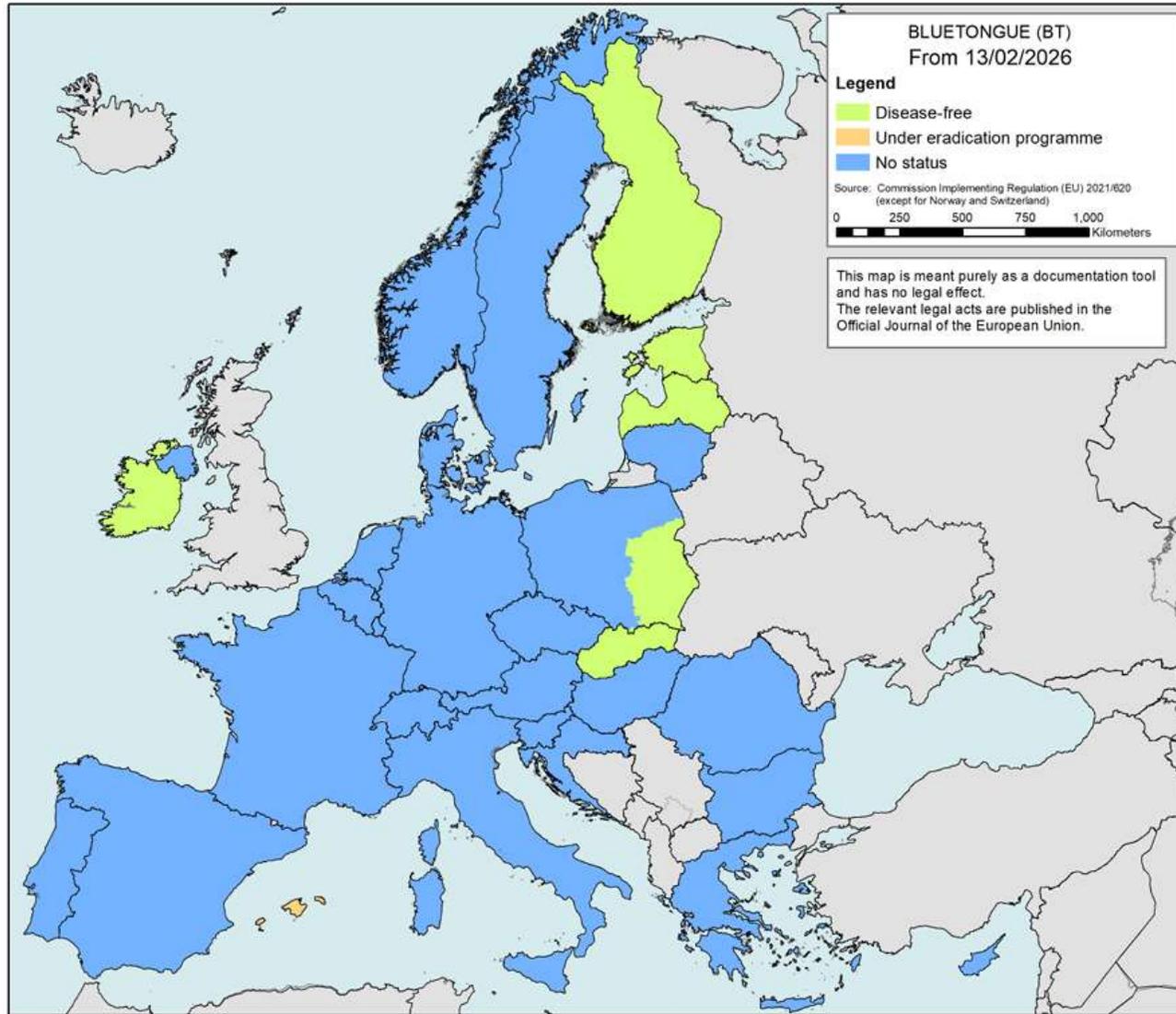


# BTV-3 Bulk Tank Milk surveillance December 2025

100 %

A total of 147 samples were analysed  
Non-negative = positive + inconclusive





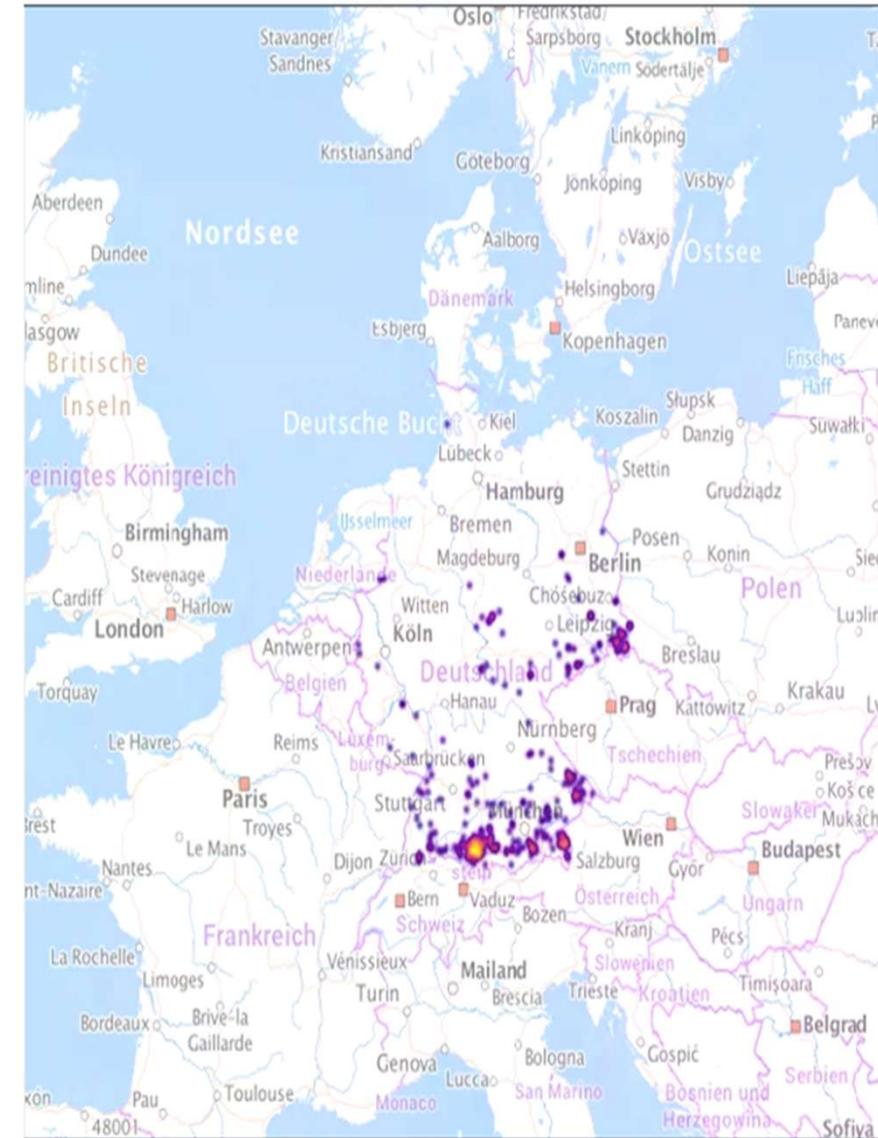
# What is Happening Nearby?

## Germany

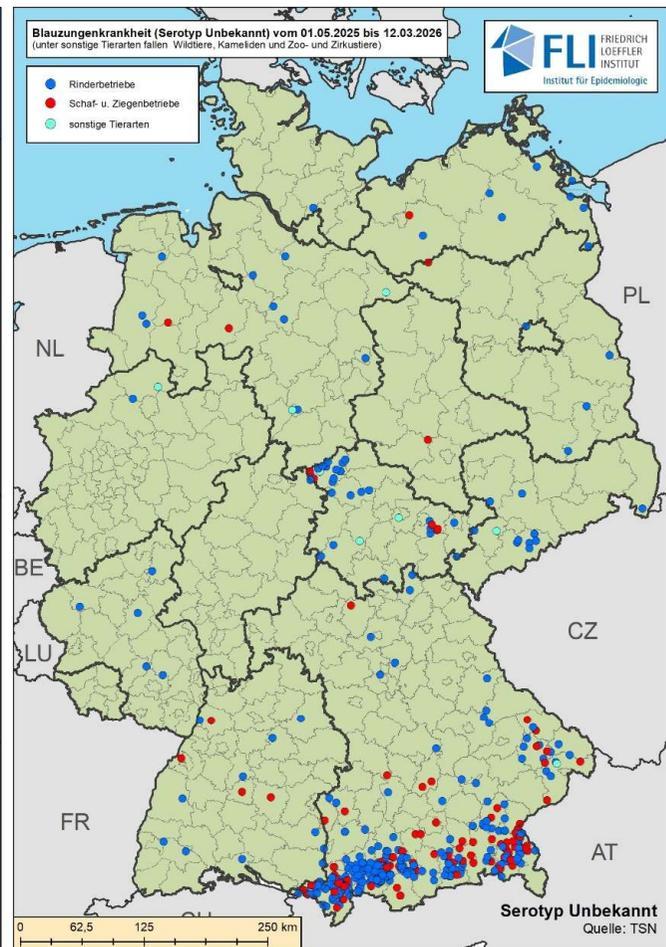
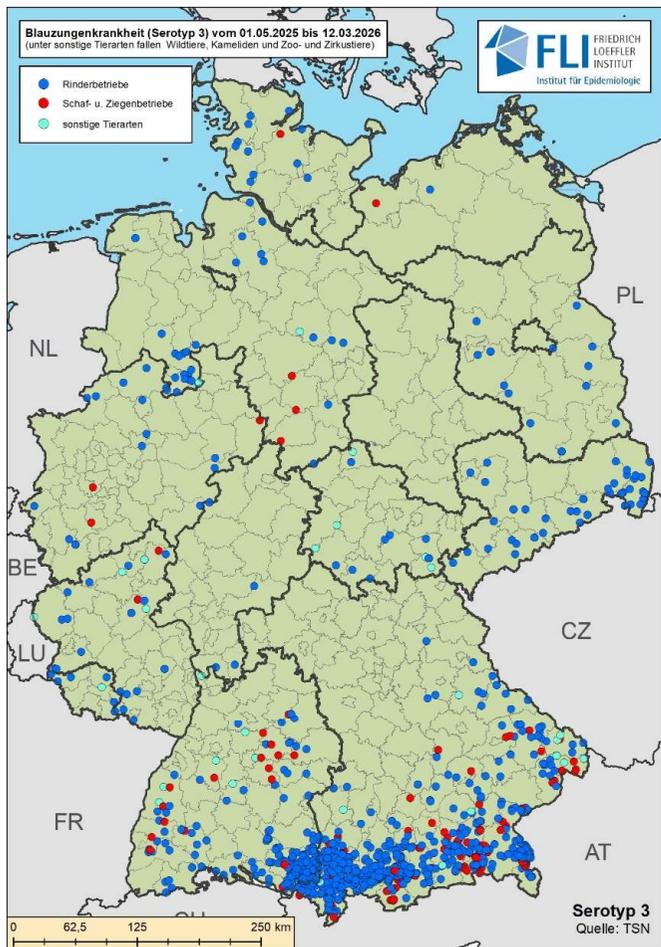
- 172 BTV cases in January
- 105 BTV cases in February
- 34 BTV cases in March
- 
- BTV-8: 14 affected herds
- One case detected in Schleswig-Holstein on 12 February

The authorities in Germany recommend vaccination

Animation des Layers "Animierte Kartendarstellung"

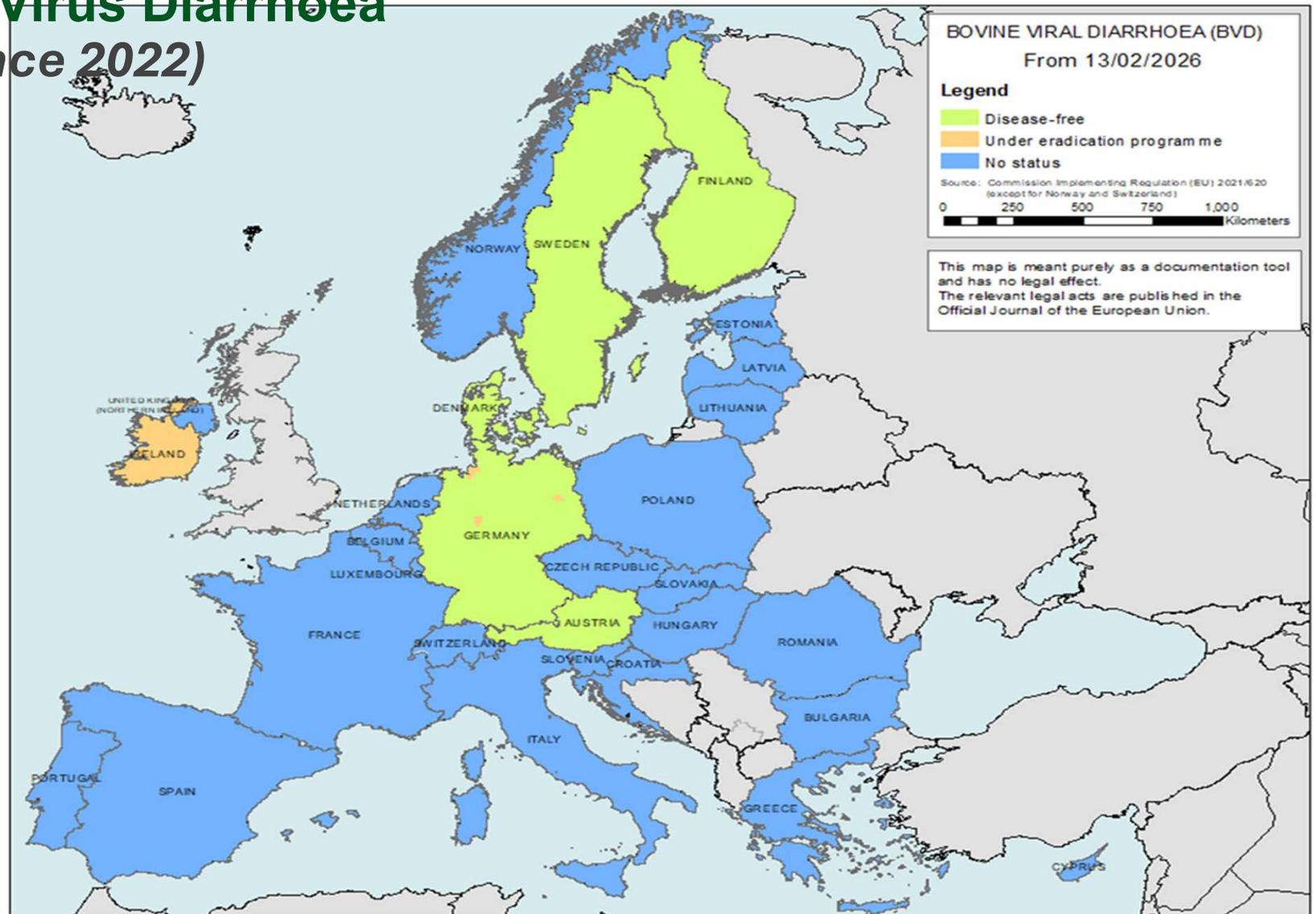


01.01.2026 - 10.03.2026



# BVD – bovine Virus Diarrhoea

*(Free status since 2022)*



# BVD - Suspected Case 2025

## November 2025

A dairy herd showed a BVD antibody reaction in bulk tank milk (BTM)

**Herd size:** approximately 200 cows

## Findings

- BVDV was not detected
- A few lactating cows and heifers tested antibody-positive

## Investigation

- Additional sampling was carried out
- Antibody-positive animals were culled: one cow aborted before culling
- Further sampling was performed to clarify the situation

## Source of Infection

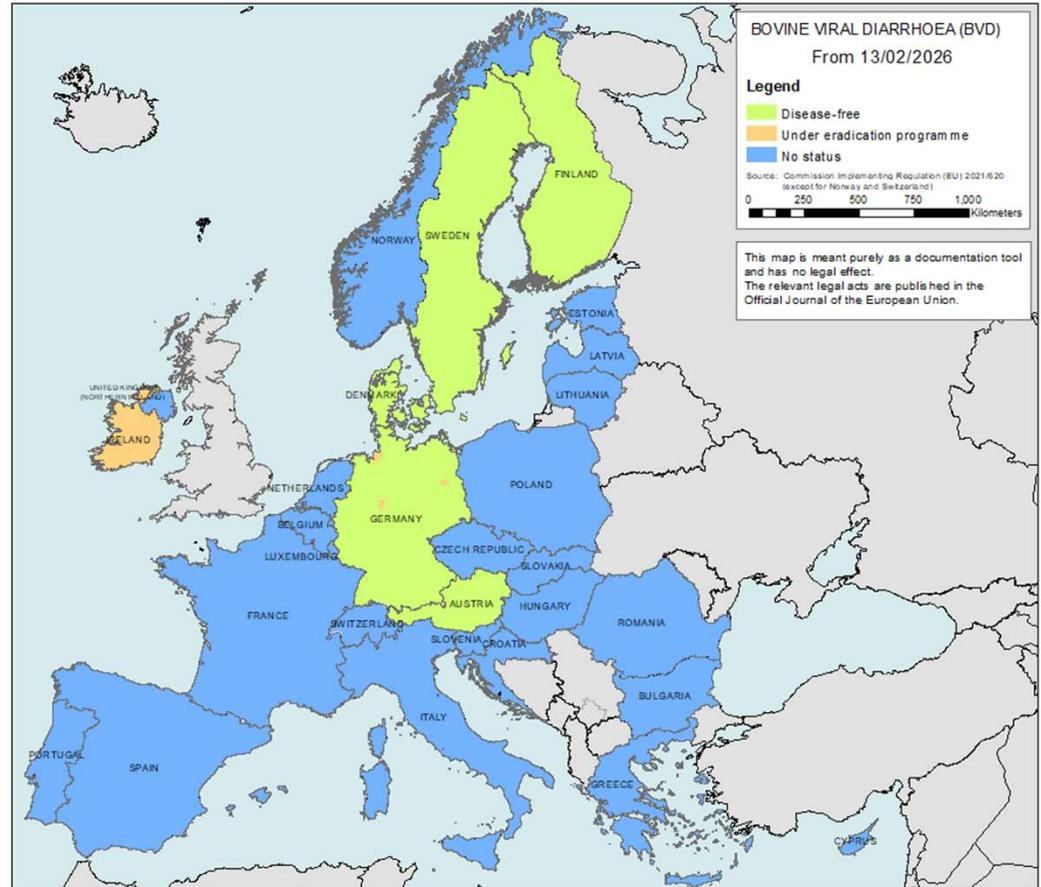
- The source has not been identified
- Potential link: contact with foreign countries



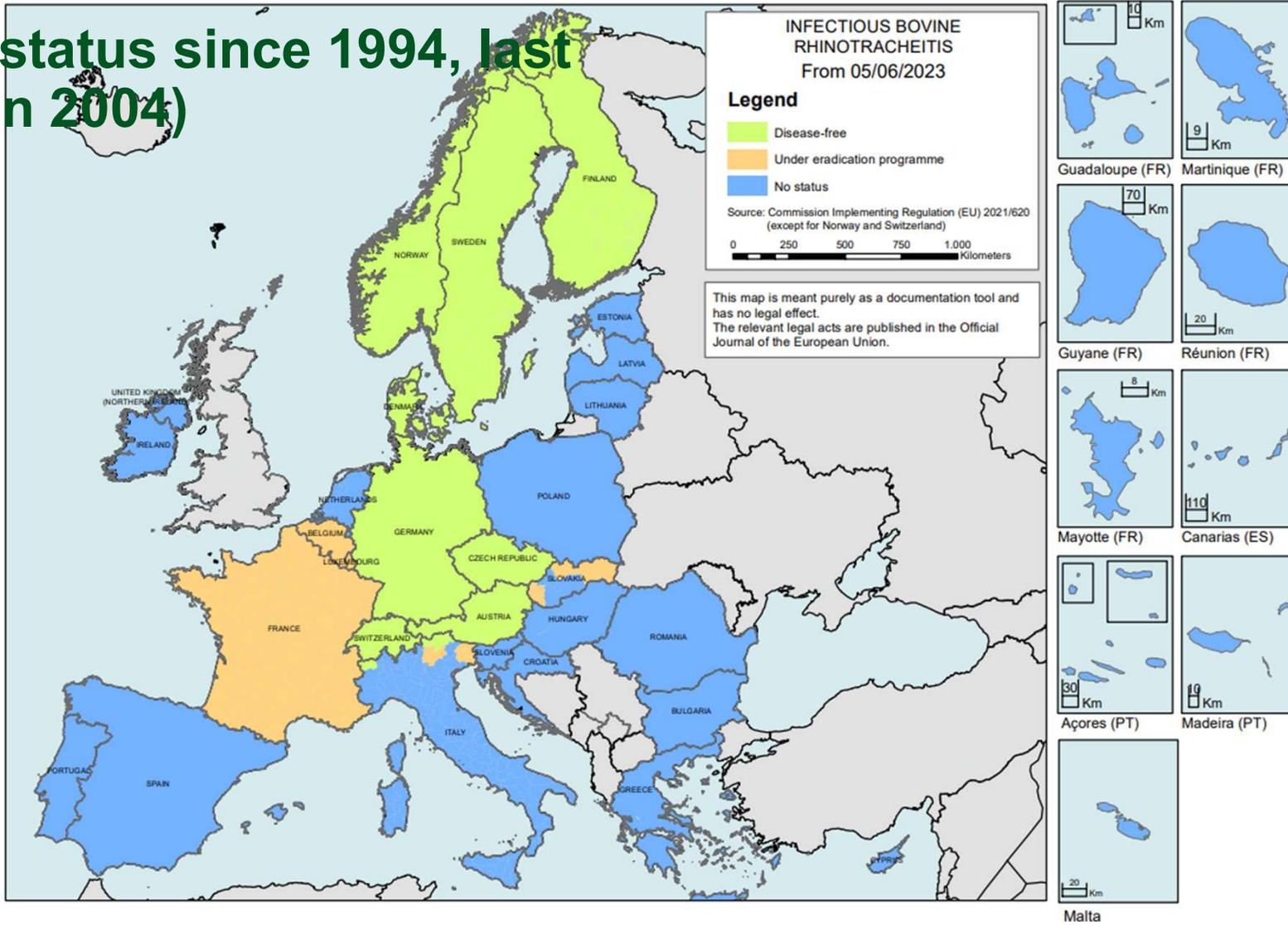
# BVD 2025

## New outbreak in Denmark

- Discovered through the national surveillance programme in **September 2025**
- Large dairy herd: 800 cow, approximately 1.350 animals in total
- The identified serotype had never previously been detected in Denmark

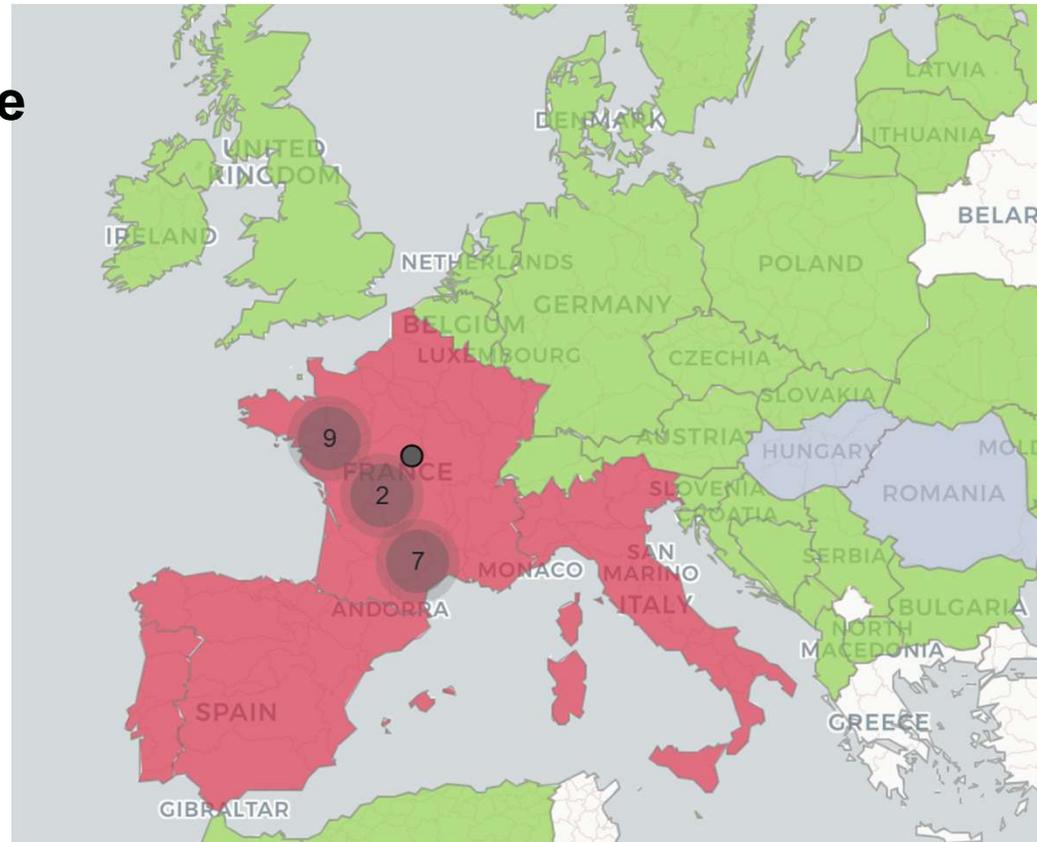


# IBR (Free status since 1994, last outbreak in 2004)

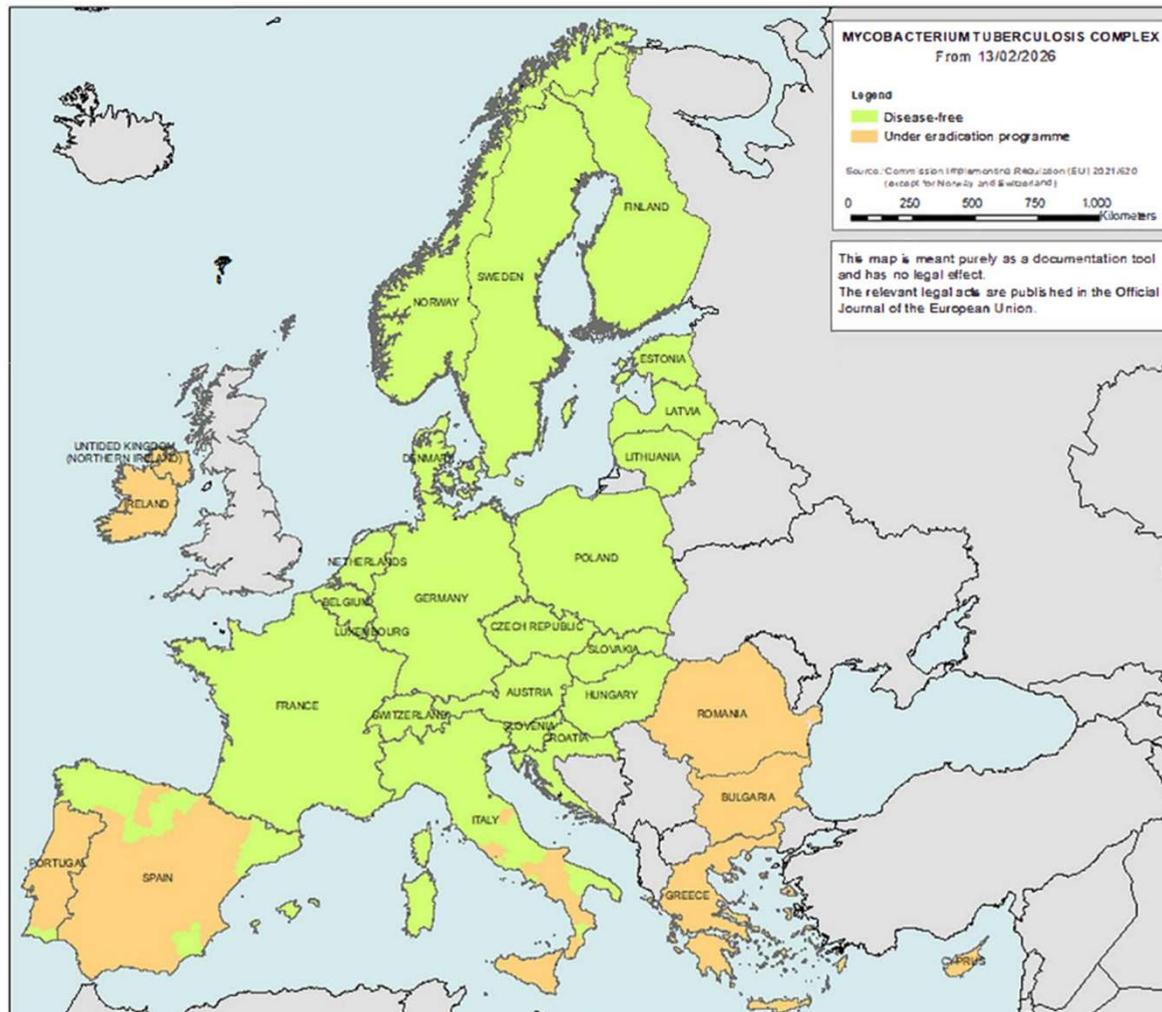


## Epizootic Haemorrhagic Disease (EHD) - (never detected in Denmark)

- Recent viral disease in Europe (since 2022)
- Affects ruminants
- Spread by biting midges
- Many symptoms overlap with bluetongue



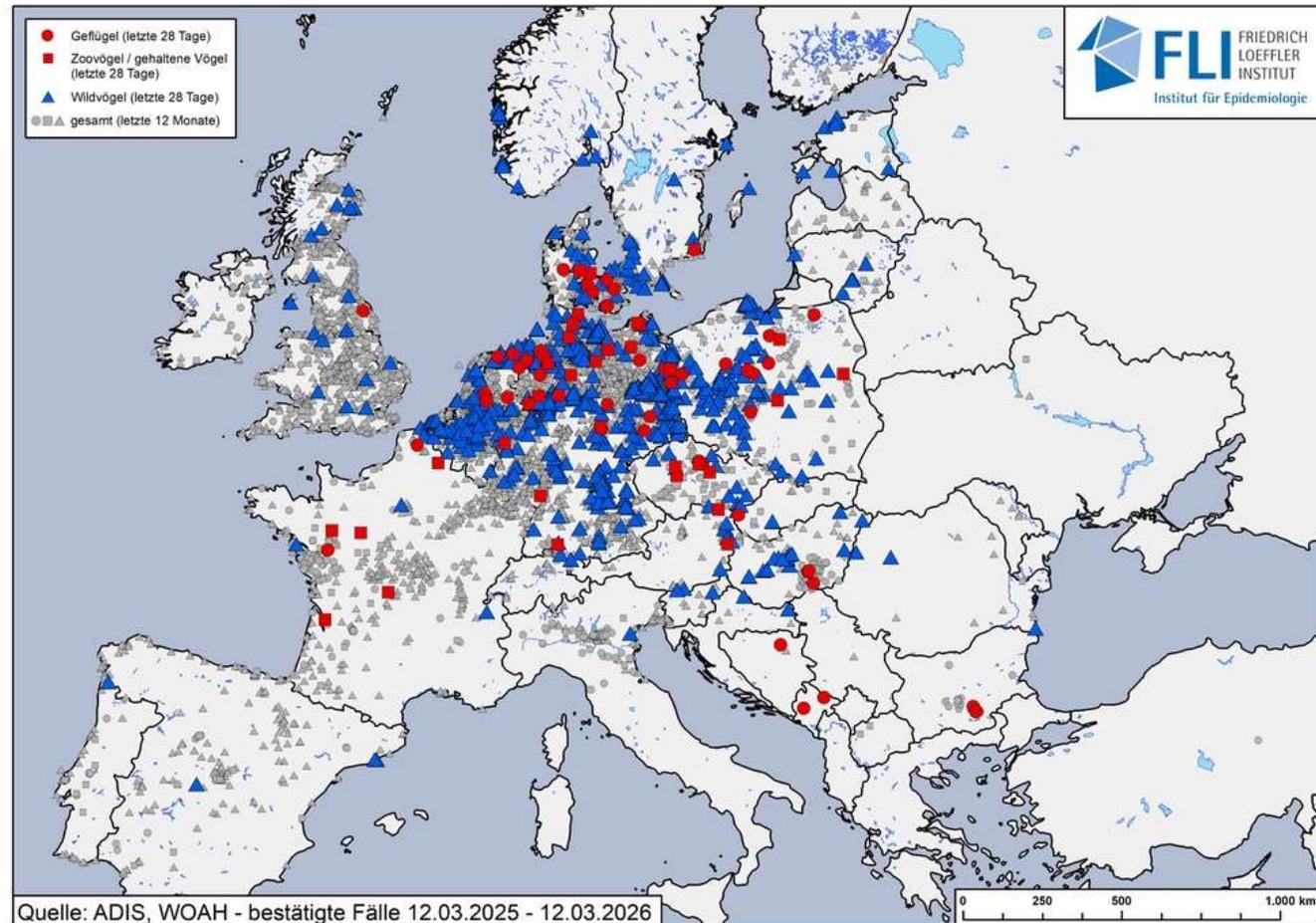
# Bovine Tuberculosis (Eradicated in Denmark in 1959)



## Avian influenza (HPAI) in cattle

- HPAI was first detected in dairy cattle in the United States in 2024, following at least two independent spillover events from infected wild birds to cattle
- The infection subsequently spread across numerous U.S. states, primarily due to movements of cattle between herds (trade)
- Several human infections linked to cattle have been reported, all with mild symptoms
- The European HPAI strains can also be transmitted to cattle!
  - (cattle infected in Holland, sheep in England)

# Avian influenza in Poultry and Wild Birds (12 March 2026)



**Red (poultry):** Last 4 weeks  
**Blue (wild birds):** Last 4 weeks  
**Grey:** Last 12 months.

# Mycoplasma: Screening of Dairy Herds – The Situation in Denmark



## Background - Why a New Bulk Tank Milk Study?

- New, more sensitive antibody test (ID Screen antibody ELISA)
- Structural changes in Danish dairy farming since the previous survey



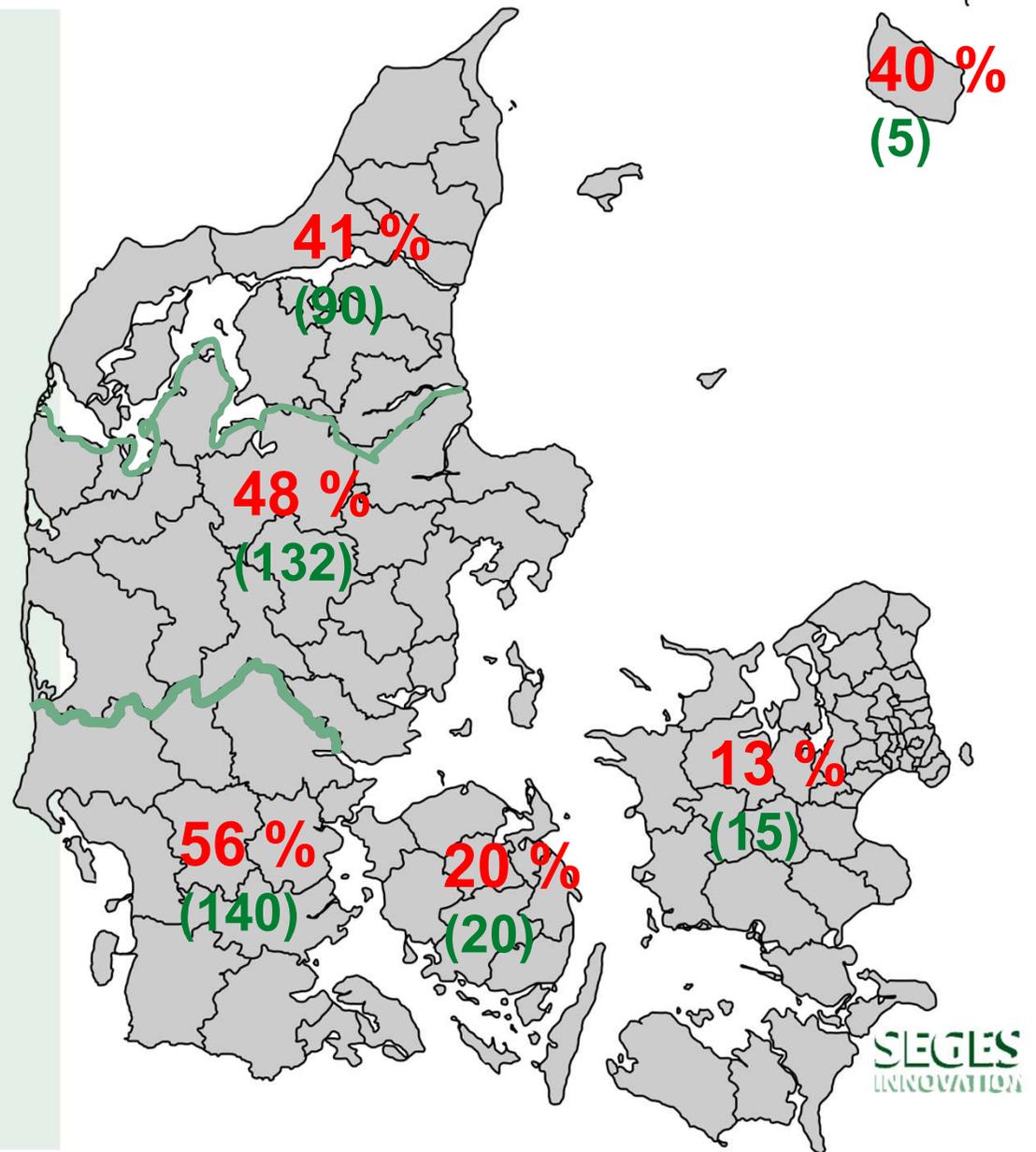
Routine PCR testing of bulk tank milk does not provide the full picture



A representative sample of bulk tank milk from 402 randomly selected dairy herds was analysed

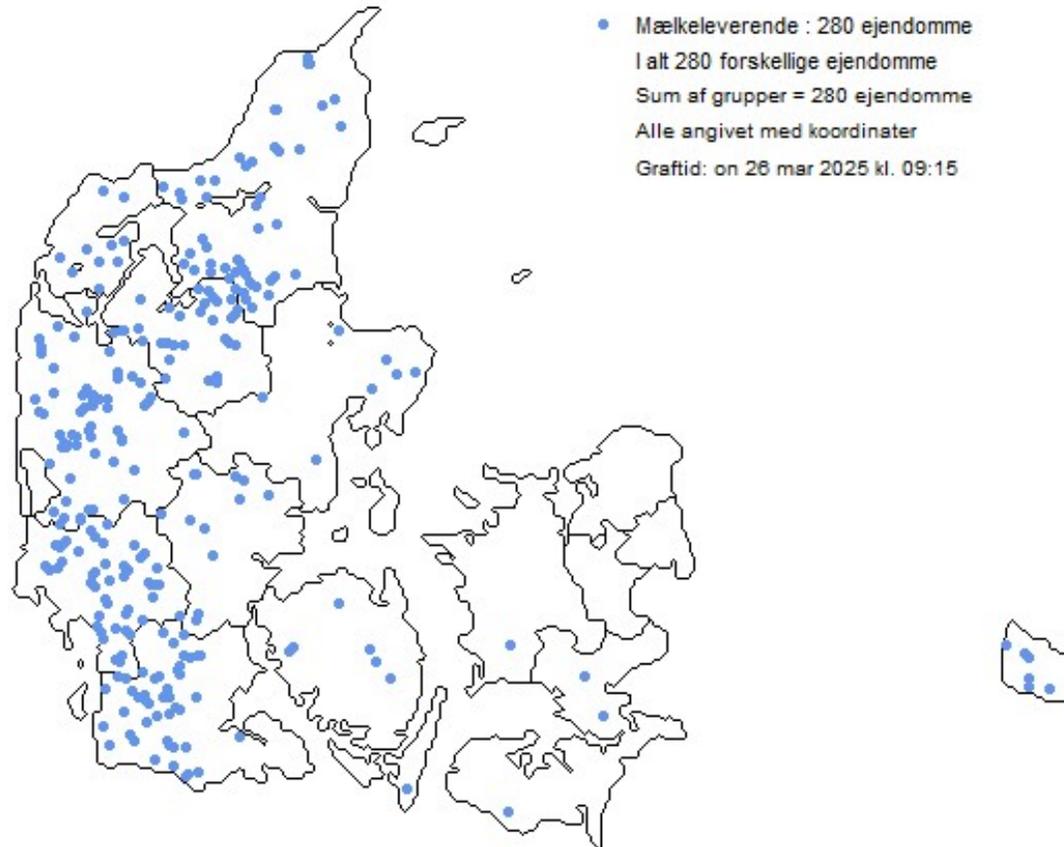
## Bulk Tank Milk - Autumn 2024

- **Percentage of positive samples per Area**
- Average 46% positive
- **Total Number of samples: 402**
- Relation Between Antibody Results and PCR
  - 4 out of 402 bulk tank milk samples were PCR-positive
  - All 4 PCR-positive herds were also antibody-positive



# B-Streptococcus

## Mælkeleverende ejendomme med B-streptokokker



13.4% of dairy herds are positive

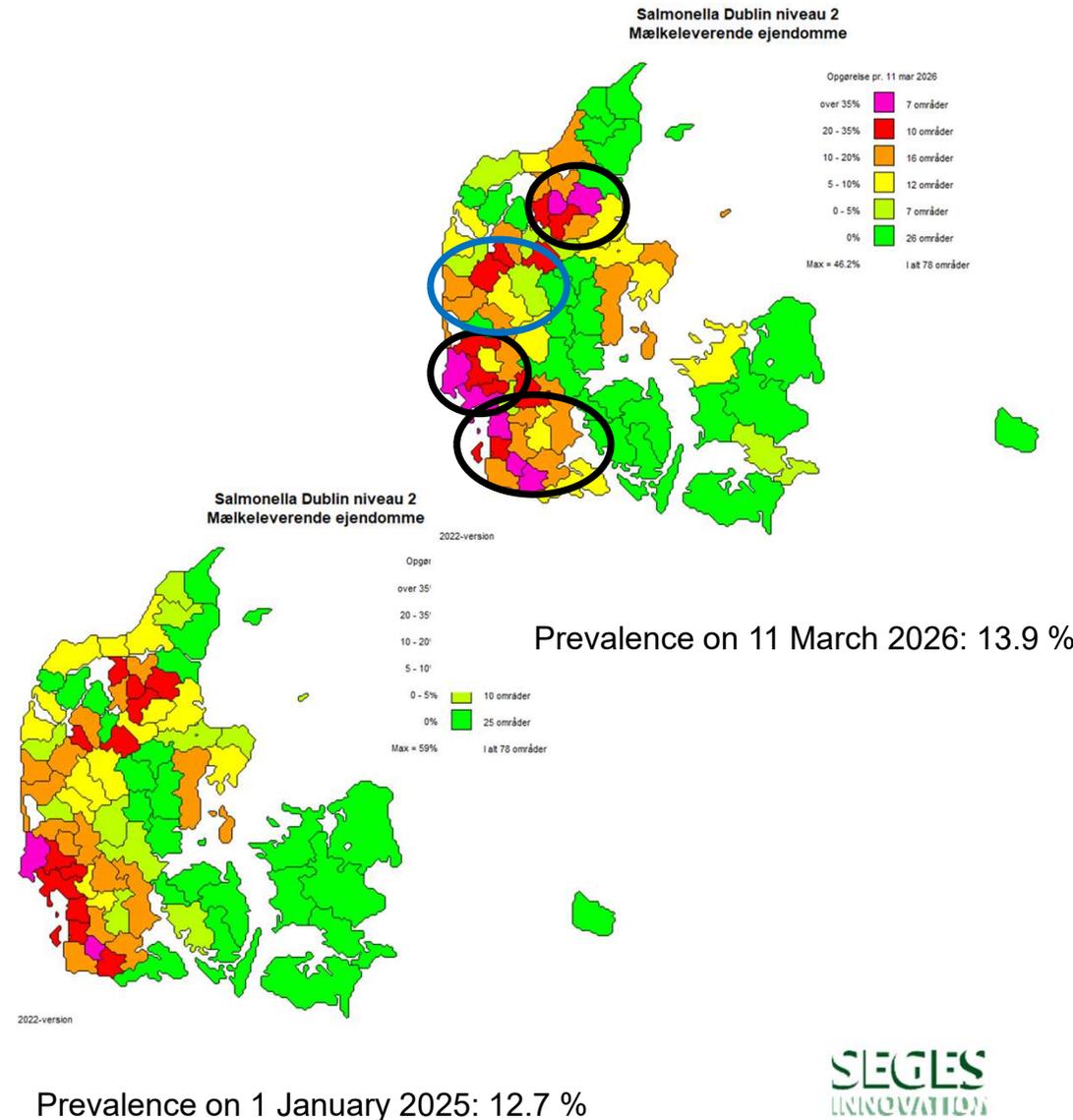
# Salmonella Dublin

- “Consistency” in prevalence
- Approximately 14% of dairy farms are in Level 2 (likely infected)
- Approximately 3% of non-dairy farms are in Level 2 (likely infected)
- Highest prevalence is seen in heifer replacement units and veal calf farms
- Salmonellosis
  - 11 herds affected in 2024, 8 herds affected in 2025



# Salmonella Dublin - Development

- Three regions have more than 20% positive herds
- Central-western Jutland has shown the largest increase compared with 2024



## Disease Surveillance and Suspected Cases – Denmark 2024-2025

	2024	2025
Suspicion of FMD	0	4
Salmonella Dublin Level 2	332	303
Salmonellosis	11	8
Suspicion of IBR	4	16
Suspicion of BVD	12	13
Suspicion of BSE	1	1
Suspicion of Enzootic Leucosis	2	3
Suspicion Bluetongue	4	0
Suspicion of Bluetongue – from 9/8 (BTV-3 outbreak)	144	0
Suspicion of Brucellosis	0	5
Suspicion of Bovine Tuberculosis	1	0
<b>Total</b>	<b>511</b>	<b>353</b>

**Thank you for your attention**

