

Austrian's experience with BTV-outbreaks

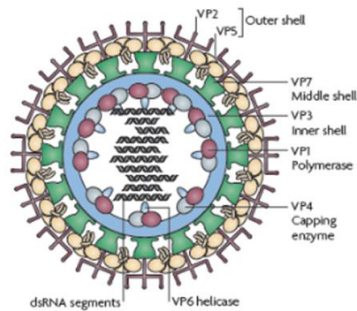
Current situation & ongoing developments



Contents

- **The bluetongue virus**
- **The epidemiological situation in Europe**
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- **Measures and approach in Austria**
- **Prevention measures**

Bluetongue transmission route



Source: Roy et al. Nat Rev Microbiol 2009



Source: www.salzburg.gv.at/imicola_hp.jpg

**24 meldepflichtige
Serotypen**



Source: www.zoologie.de



Mensch nicht empfänglich!

Size comparison of midge - mosquito

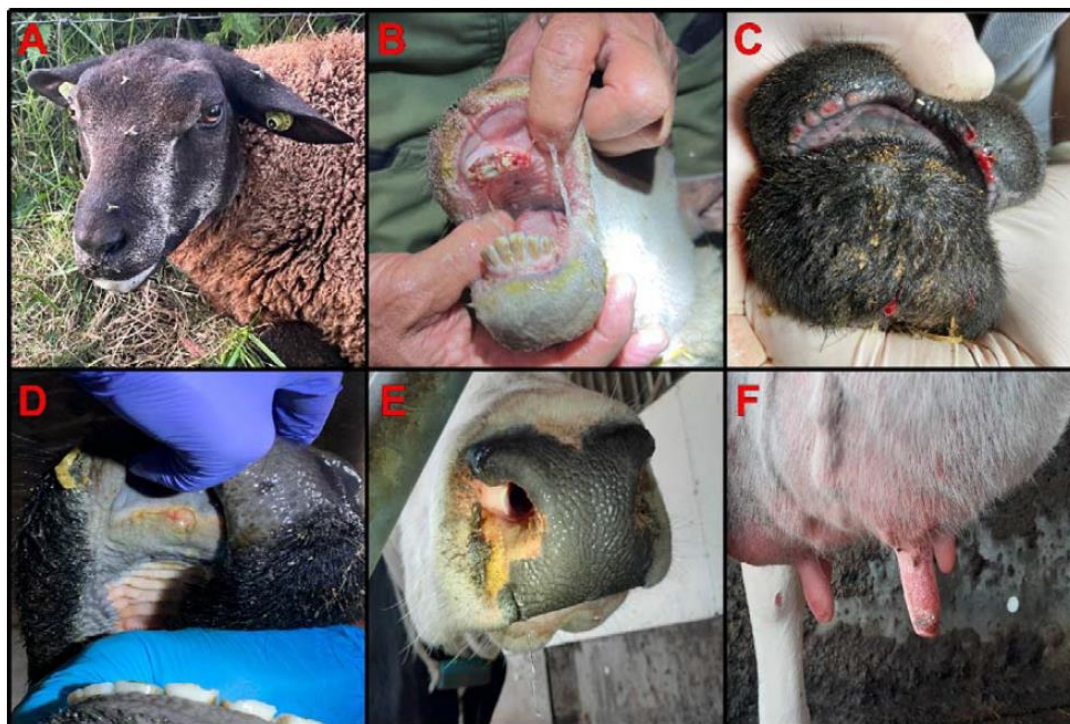


Image license:

[https://commons.wikimedia.org/wiki/File:Mosquito_\(Ochlerotatus_annulipes\)_and_Midge_\(Culicoides_impunctatus\)_biting_human_\(me\).jpg](https://commons.wikimedia.org/wiki/File:Mosquito_(Ochlerotatus_annulipes)_and_Midge_(Culicoides_impunctatus)_biting_human_(me).jpg)
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Clinical symptoms of BTV-3 infection I

Holwerda et al, bioRxiv 2024



Clinical symptoms BTV-3 infection II



Rötungen, Erosionen und Entzündung am Flotzmaul mit starkem Speichelfluss



Umfangreiche entzündliche Erosionen am Flotzmaul, streifenförmige Hautablösung am Übergang Haut und Schleimhaut

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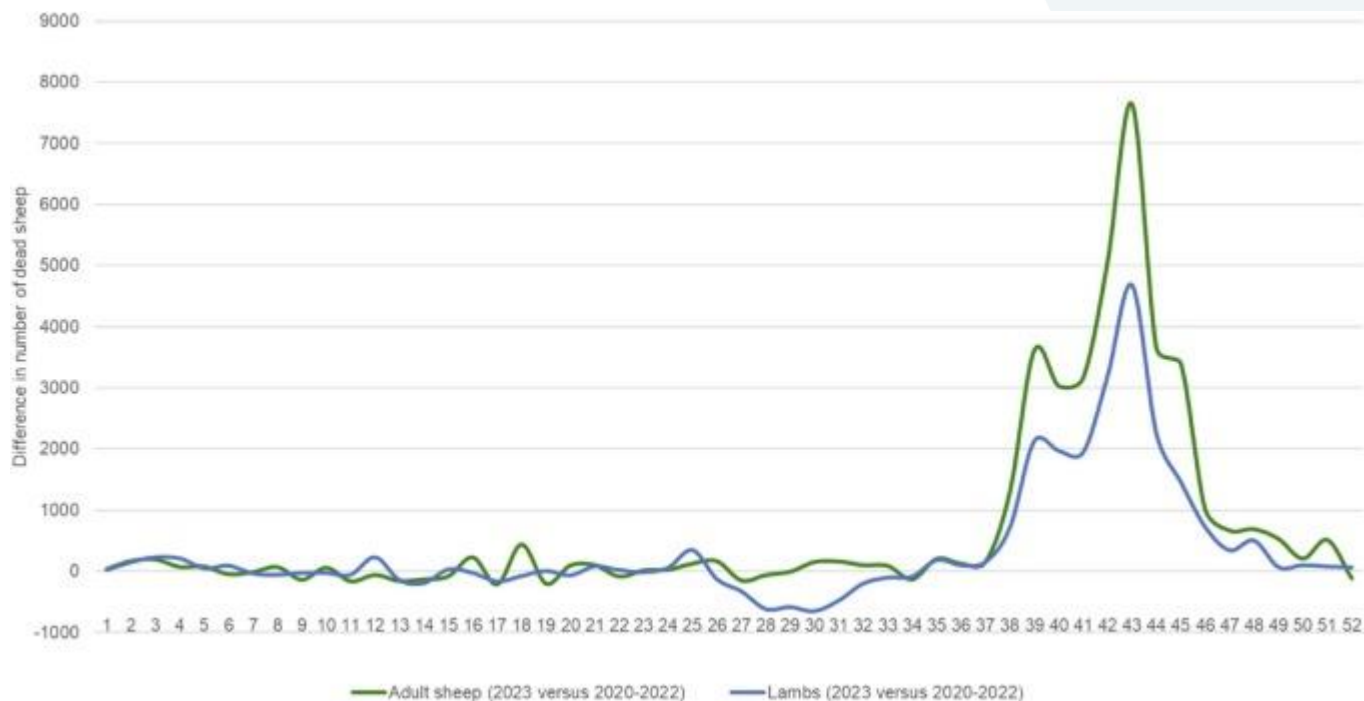
Past BT outbreaks in Austria

Serotypes BTV-8 and BTV-4

Jahr	Bundesland	Bezirk	Betriebe	Infizierte Tiere	BTV-Serotyp
2008	Oberösterreich	Schärding	5	10	BTV-8
2008	Vorarlberg	Bregenz	1	1	BTV-8
2009	Oberösterreich	Schärding	8	14	BTV-8
2009	Vorarlberg	Bregenz	1	1	BTV-8
2009	Vorarlberg	Bludenz	1	1	BTV-8
2009	Salzburg	Hallein	1	1	BTV-8
2015	Burgenland	Neusiedl/See	1	1	BTV-4
2015	Burgenland	Jennersdorf	1	1	BTV-4
2015	Steiermark	Hartberg-Fürstenfeld	1	2	BTV-4
2015	Steiermark	Südoststeiermark	1	2	BTV-4
2016	Burgenland	Jennersdorf	2	3	BTV-4
2016	Kärnten	Klagenfurt	1	1	BTV-4

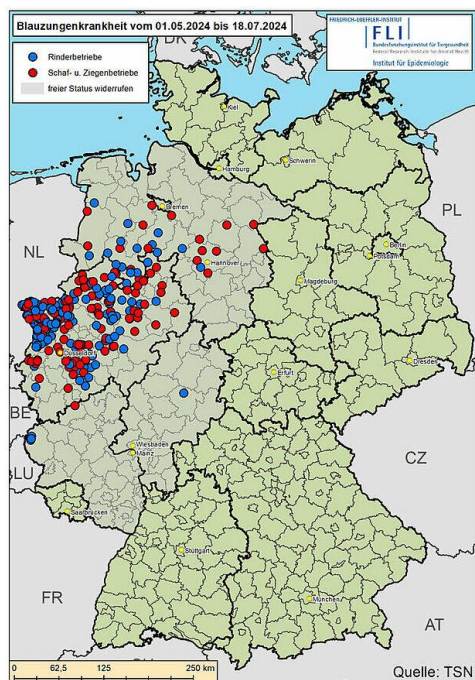
Freedom at the World Organization for Animal Health (WOAH) was regained in February 2019

Impact of bluetongue in the Netherlands - 2023

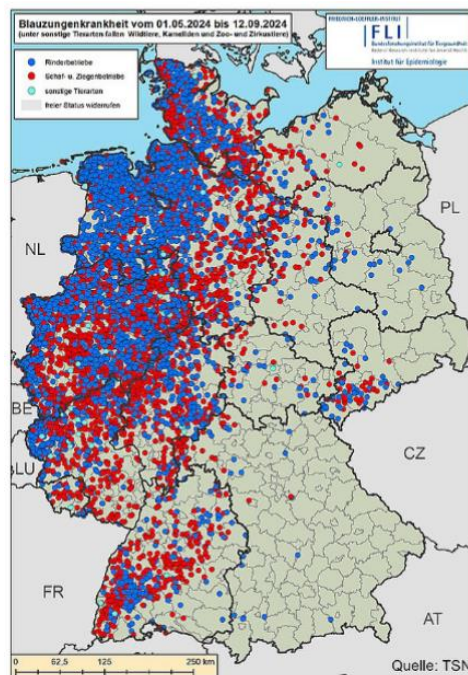


Comparison of 2020-2022 with 2023 in terms of sheep deaths (green) and lamb deaths (blue)

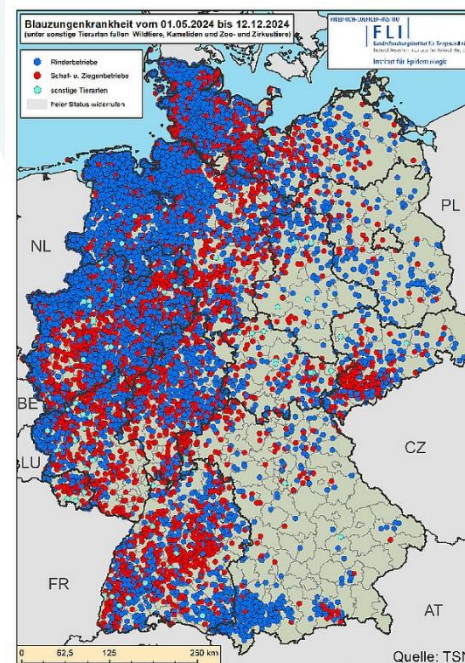
Development 2024 - Germany



July



September



December

Ausbrüche Blauzungenkrankheit im Jahr 2024

Quelle: TSN (Stand: 12.12.2024 - 14:00 Uhr)

(Angabe der Anzahl der gemeldeten Ausbrüche/Fälle vom 05.12.2024 - 10:30 Uhr in Klammern)

Land	JAN	FEB	MRZ	APR	MAI	JUN	JUL	AUG	SEP	OKT	NOV	DEZ	GESAMT
Deutschland	13 (13)	7 (7)	9 (9)	9 (9)	35 (35)	13 (13)	1.251 (1.250)	5.900 (5.883)	4.795 (4.786)	1.990 (1.989)	1.038 (1.002)	244 (59)	15.304 (15.055)

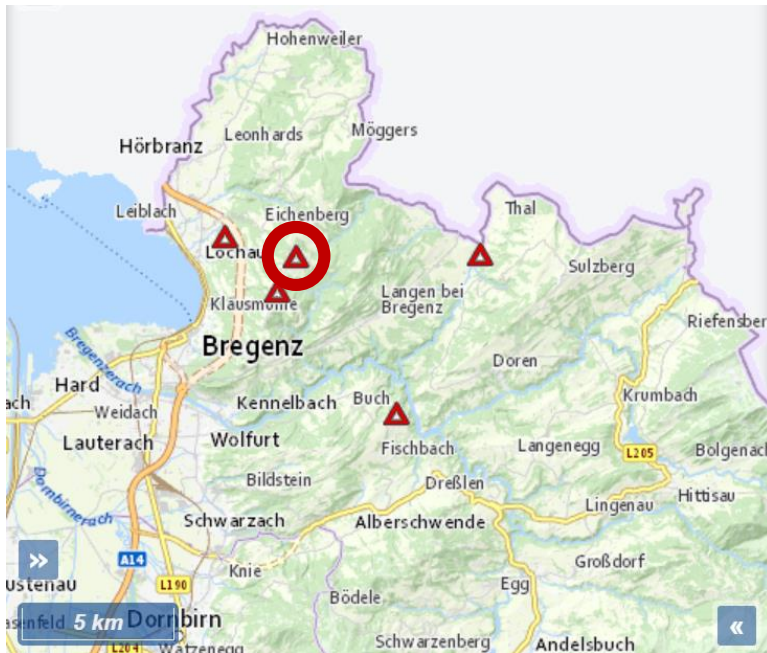
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Geographical location of BT cases in Austria

Status: 19.09.2024

BTV-3 in Vorarlberg



 Index case

BTV-4 in Styria

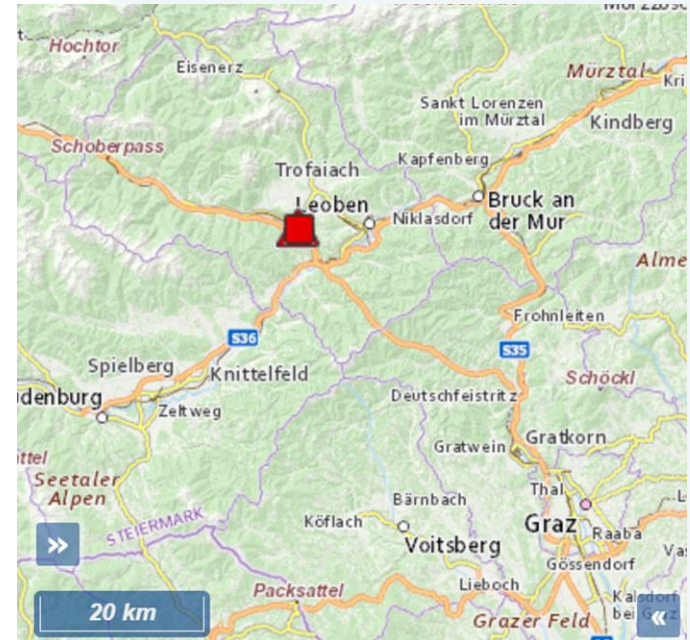
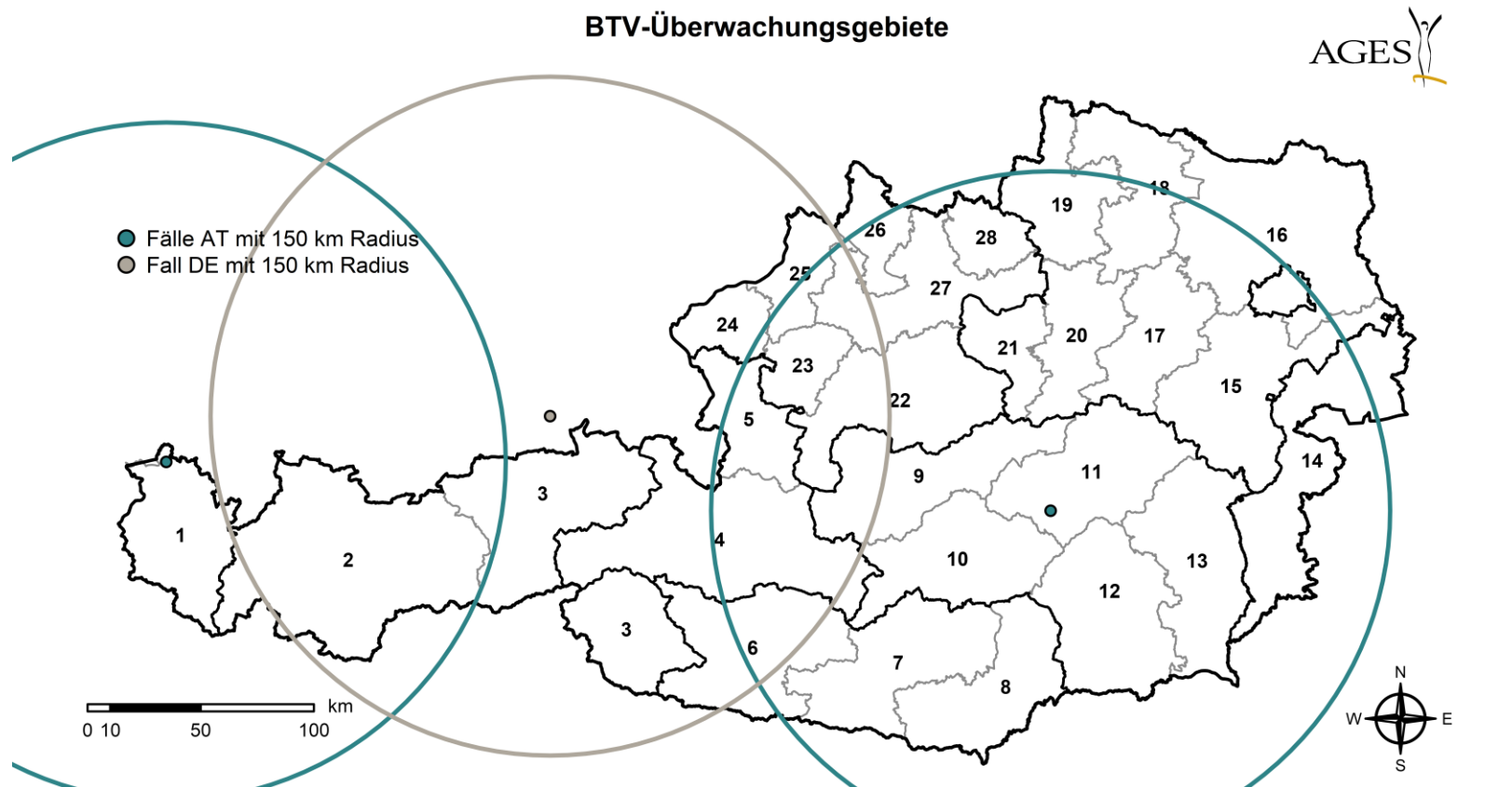


Illustration of the 150km zones around the current BTV cases in Austria and in the district of Rosenheim in Germany



Outbreaks 2024

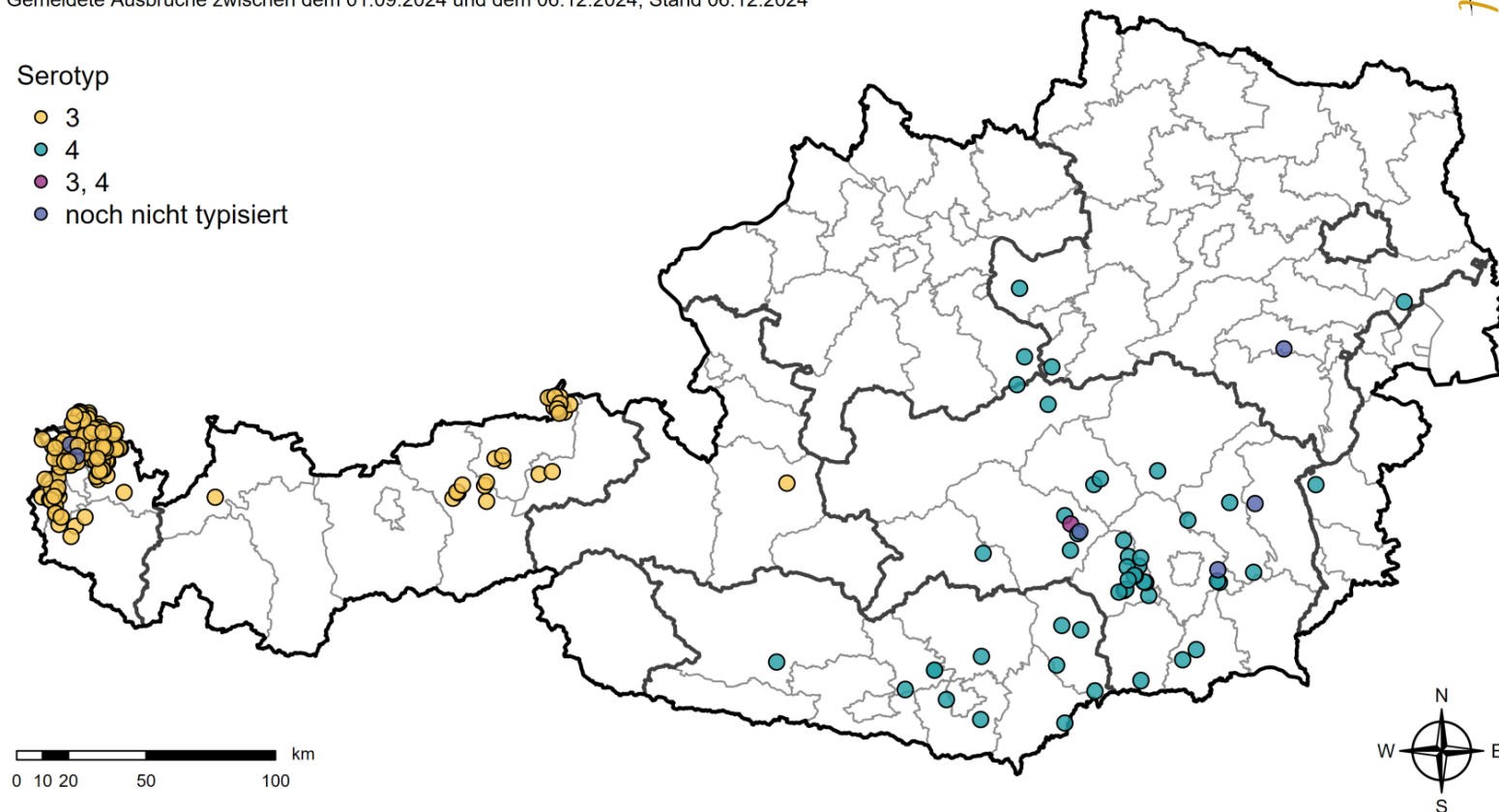
Bestätigte Ausbrüche Blauzungenkrankheit

Gemeldete Ausbrüche zwischen dem 01.09.2024 und dem 06.12.2024; Stand 06.12.2024

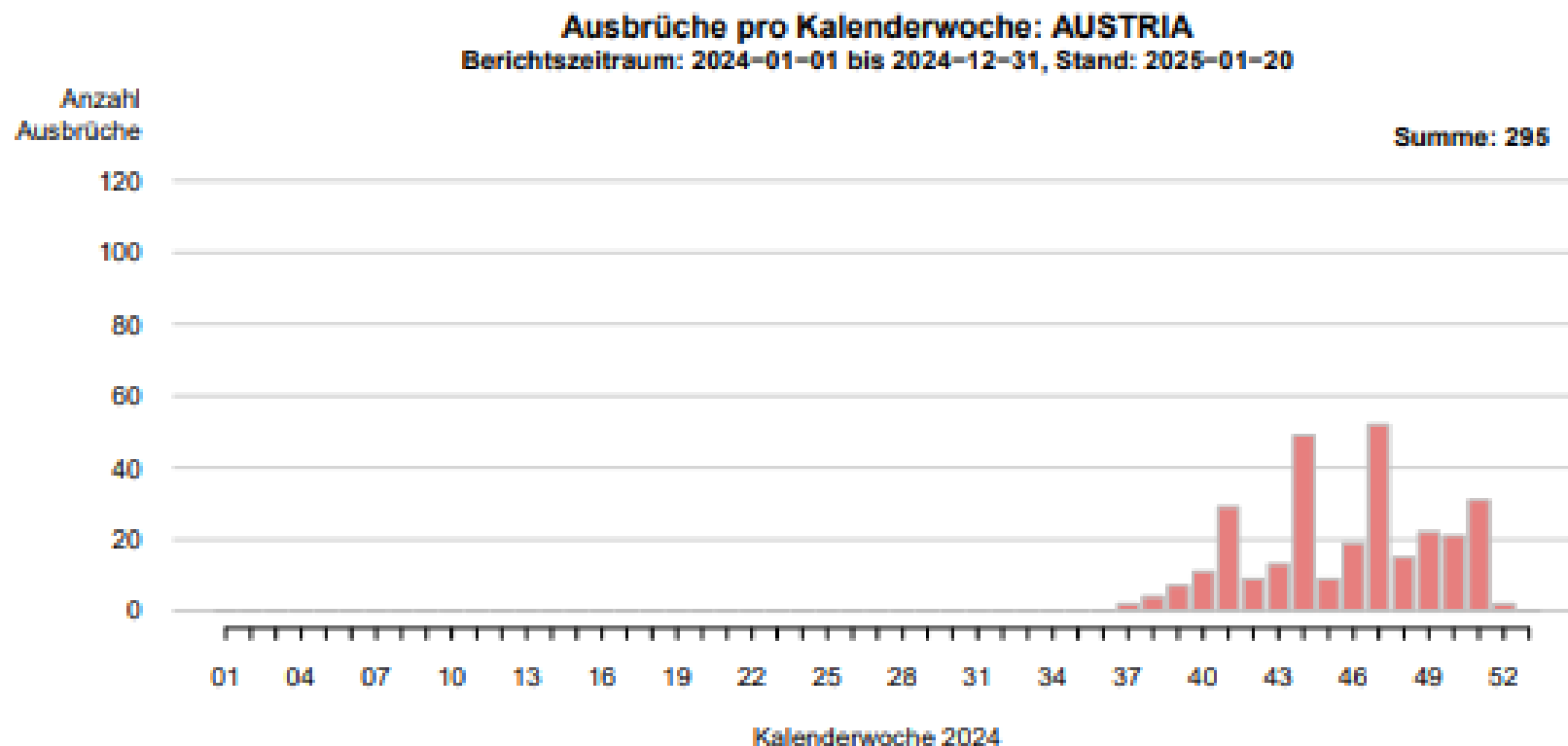


Serotyp

- 3
- 4
- 3, 4
- noch nicht typisiert



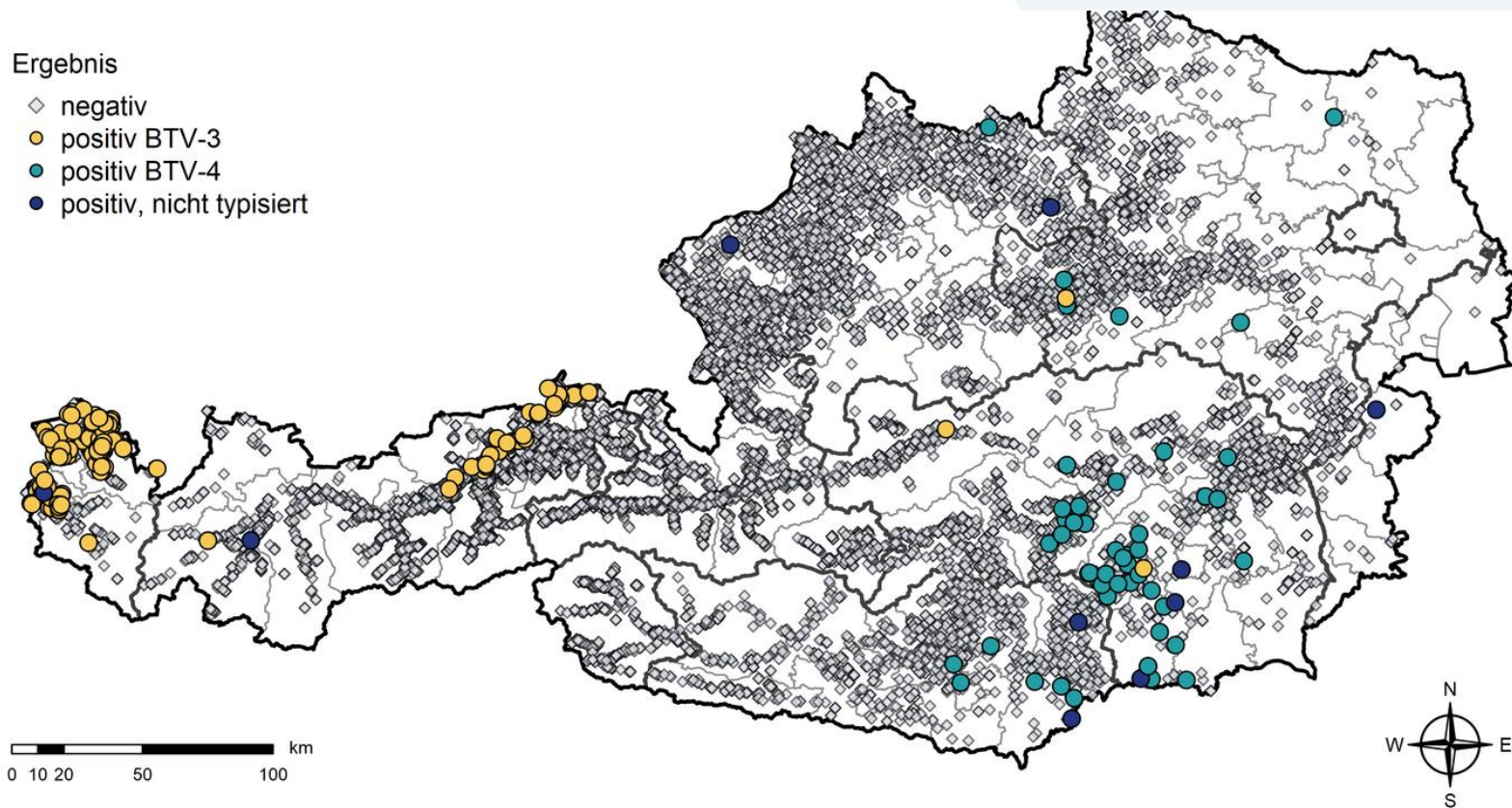
BTV in Austria 2024



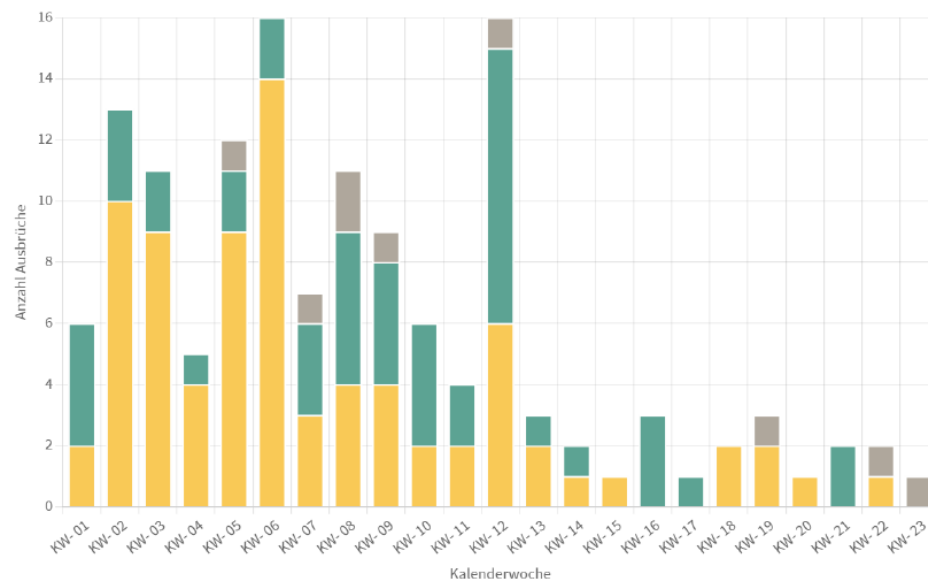
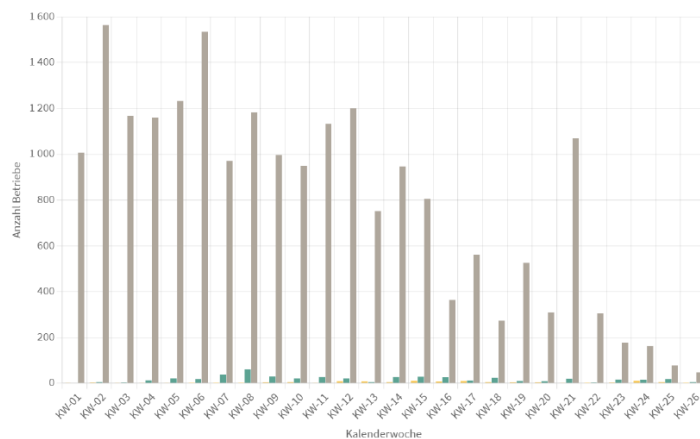
BTV3 & BTV4 - January to June 2025

Ergebnis

- ◇ negativ
- positiv BTV-3
- positiv BTV-4
- positiv, nicht typisiert



Samples and results for the year 2025



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Measures taken in Austria

- Due to the epidemiological situation in and around Austria, the status "**free of bluetongue**" was suspended throughout Austria
- the entire federal territory is designated as a "**bluetongue zone**".
- **This means that additional provisions must be complied with for intra-Community trade (trade between EU member states).**
 - Commission Delegated Regulation (EU) 2020/688 regulates the animal health requirements that must be complied with when moving live animals within the EU.
 - With regard to bluetongue virus (BTV), the requirements set out in Annex V Part II Chapter 2 of Regulation (EUI) 20202/689 must also be complied with.
- **However, susceptible animals may be moved freely within Austria provided that they are apparently healthy on the day of movement - LW confirms this.**

2 phases - official procedure

1st phase → Proceed as usual (until further notice)

2nd phase → Due to the dynamics of the epidemic, we will deviate from the usual procedure and a simplified notification procedure is provided for

Phase 1 - Official measures in the event of suspicion in Austria

- Any suspicion must be reported to the competent authority (ATA) by livestock owners/doctors
- Provisional closure of the holding
- All susceptible animals in the herd must be recorded
- Sampling and entry of the sampling in the VIS by the ATA
- Testing by national reference laboratory (AGES)
- Epidemiological clarification by authority
- **Confirmation of the outbreak OR lifting of the restriction on the holding**

2nd phase - dynamic spread of the disease

- Occurs when the epidemic situation takes a dynamic course analogous to other countries such as NL, LUX, BE or D and
- and the spread of the disease can no longer be controlled by official measures due to the spread of vectors.
- Detection of BTV either by ATA or **veterinarian**
 - No sampling planned, unless these are the first cases in the district
 - The veterinarian can order the BTV examination at AGES to clarify the clinical picture.
 - **Role of the veterinarian - recognizing the relevant clinical symptoms of BTV and reporting the suspicion (using a short form)**
- The aim is to ensure a simple and unbureaucratic procedure

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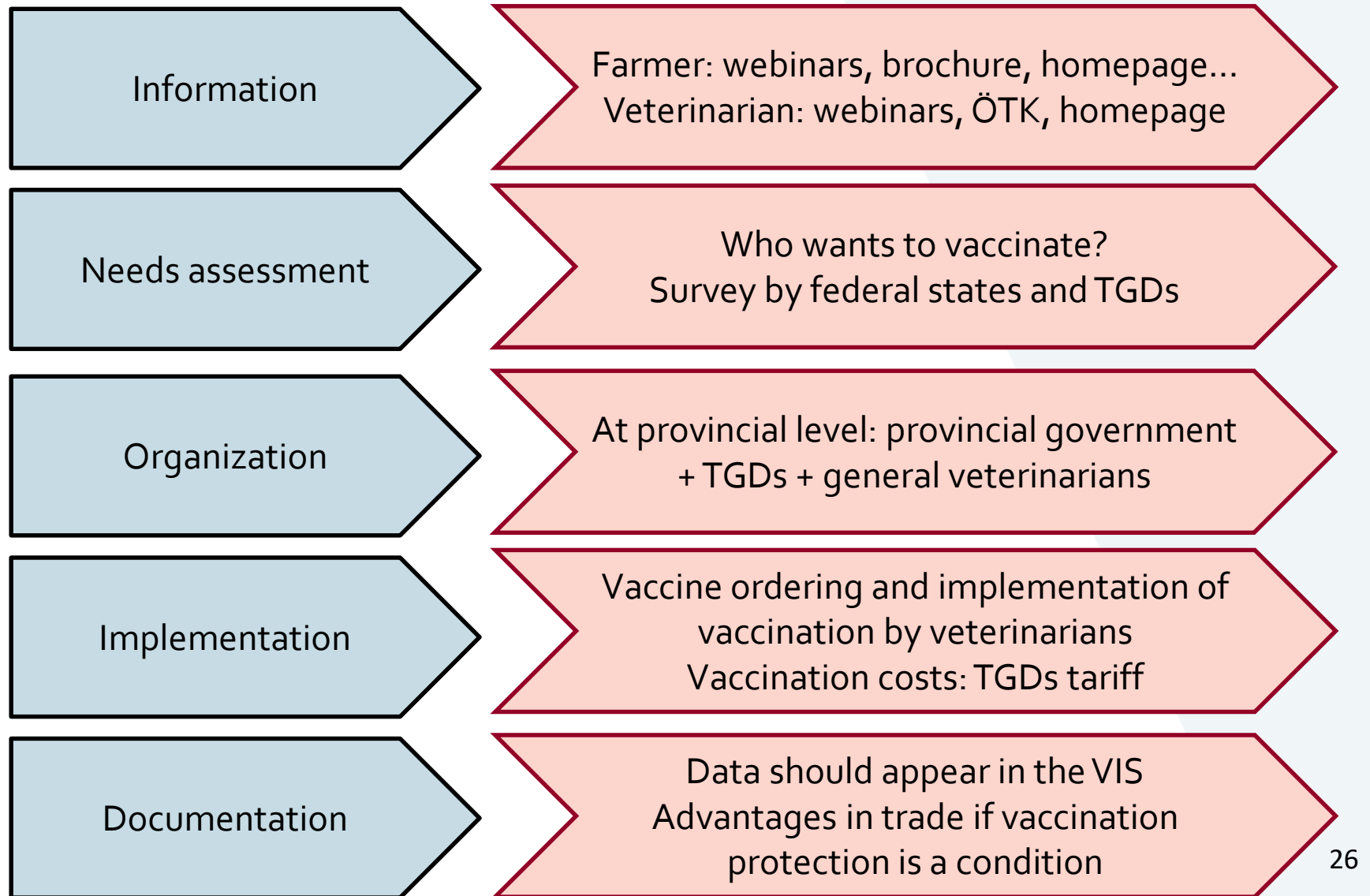
Disease control

- **Containment:** demarcation of an affected farm/area from unaffected farms/areas
 - Not possible with BT, as transmission is via vectors
- **Prevent the spread of the pathogen**
 - Category A diseases: Culling
 - Category C diseases: isolate viraemic animals
- **Prevent entry into own farm**
 - Problem of vectors!
- **Increase biosecurity**
 - Problem of vectors!
- **Vaccination**
 - Financing and organization

Preventive measures

- The **treatment of animals with insecticides** as well as
- **stabling susceptible species** between dusk and dawn can also prevent infection.
- **Avoid grazing on the edge of forests**
- **Control vectors on the farm** - avoid standing water
- There is the possibility of a **FREE vaccination**
 - Vaccination with inactivated BTV-3 vaccines is the most effective measure to protect animals from disease and death in the current situation!
 - In order to prevent animal suffering and keep the costs of treating sick animals as low as possible, owners of susceptible animals are therefore urgently recommended to protect their livestock with a vaccination in consultation with their veterinarians.

Stages of vaccination



Further information

- <https://www.verbrauchergesundheit.gv.at/tiere/krankheiten/bt.html>
- <https://www.ages.at/mensch/krankheit/krankheitserreger-von-a-bis-z/blauzungenkrankheit>

Thank you for your
attention

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