



**National Veterinary Research Institute**

# Update on rabies situation in Poland

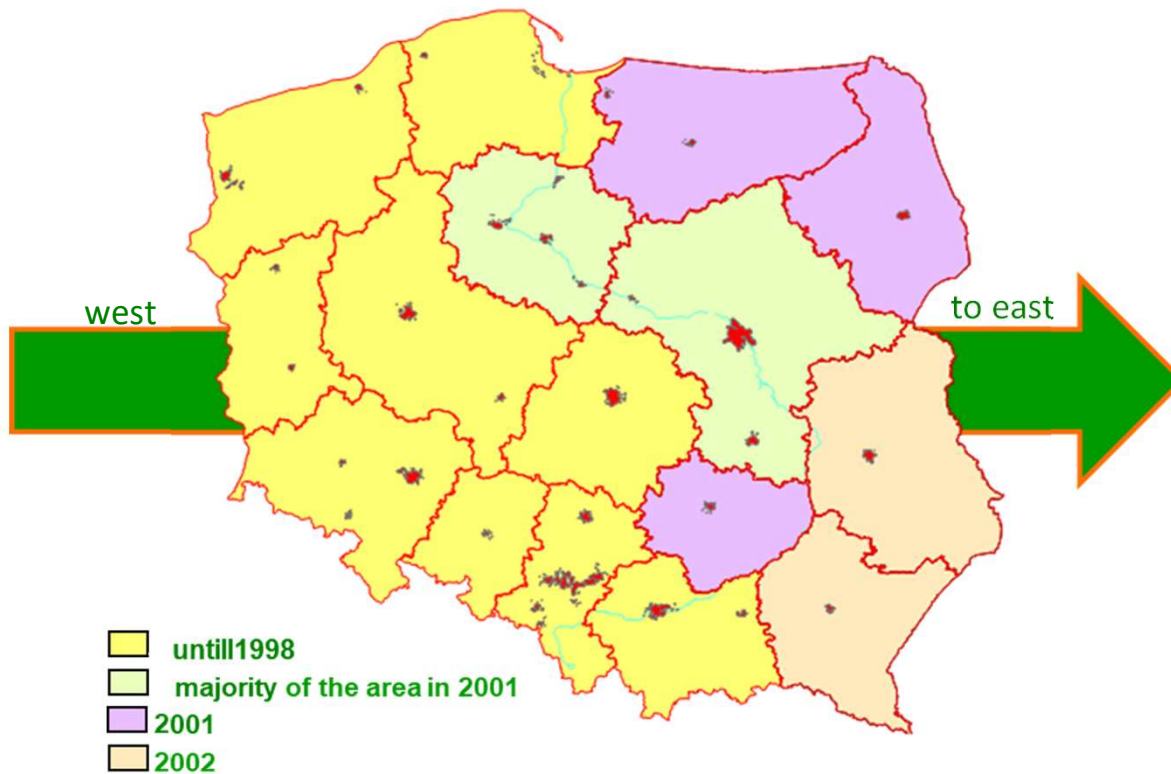


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NRL for RABIES

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14TH WORKSHOP FOR RABIES  
Ljubljana 21-22 June 2023

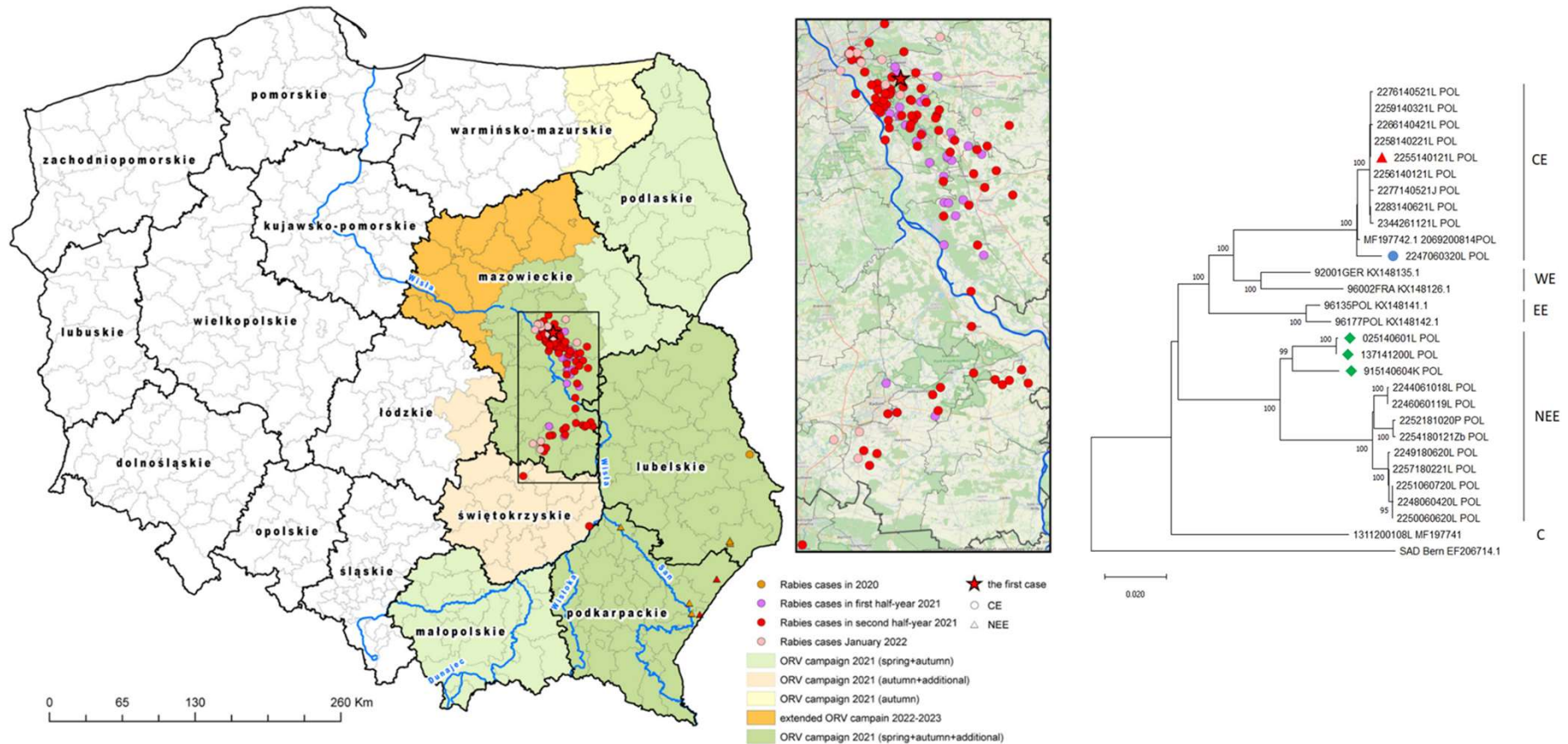
# ORV in Poland



ORV was introduced in Poland in 1993 using oral vaccines Fuchsoral and Lysvulpen. The vaccines are distributed from airplanes and also manually. The vaccination started in the western regions of Poland and was extended in the eastern direction.



# Rabies cases in 2021 in Poland



The highest number of cases was recorded in Mazowieckie Voivodeship in the districts of Otwock and Warsaw

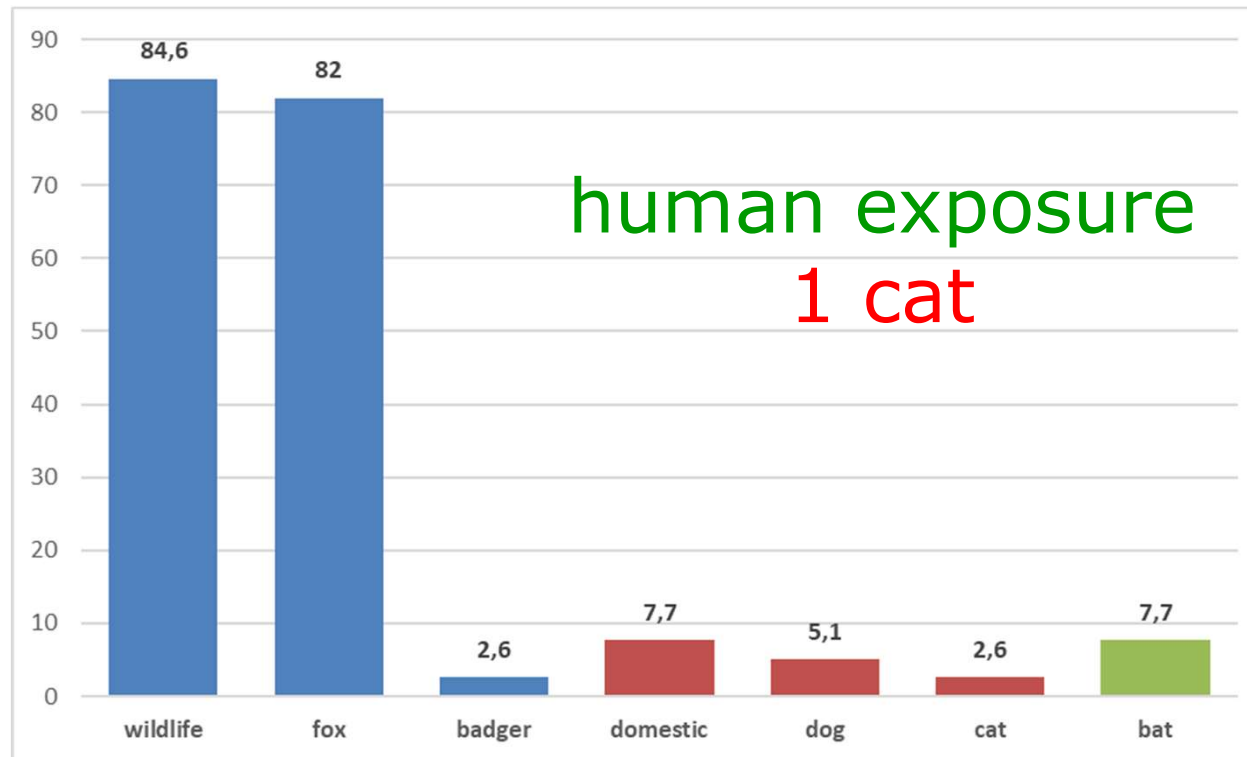
# Rabies cases in 2022 in Poland

Voivodeship	District	fox	dog	cat	badger	No cases	bat	Total
Mazowieckie	Gostynin	2				2		2
	Mińsk Mazowiecki	2		1		3		3
	<b>Otwock</b>	6	1			7		7
	Radom	2	1			3		3
	Szydłowiec	1				1		1
	<b>Warszawa</b>	13				13		13
	Węgrów				1	1		1
	Wołomin	1				1		1
Lubelskie	Ryki	2				2		2
Świętokrzyskie	Starachowi	2				2		2
	Skarzynsko-Kamienna	1				1		1
Wielkopolskie	Poznań						2	2
Warmińsko-Mazurskie	Bartoszyce						1	1
<b>TOTAL</b>		<b>32</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>36</b>	<b>3</b>	<b>39</b>

The highest number of cases was recorded in Mazowieckie Voivodeship in the districts of Otwock, Warsaw as in 2021



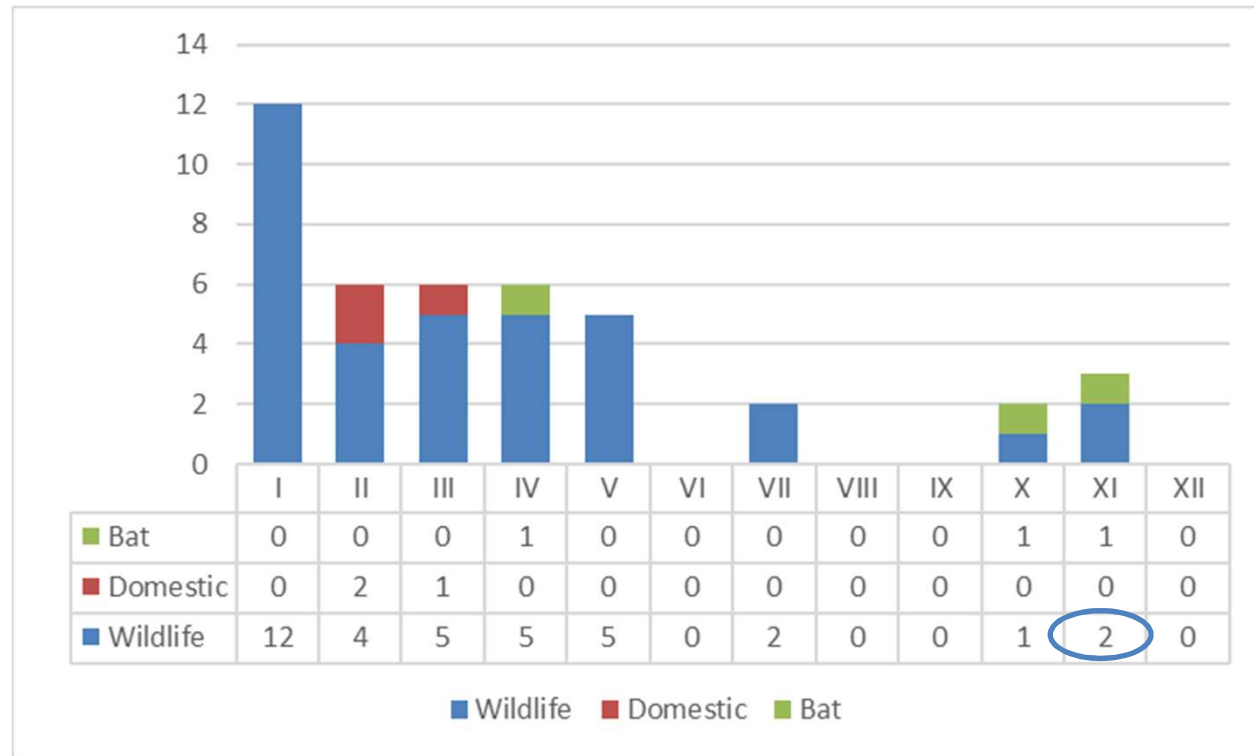
# Prevalence of lyssavirus infection in different animal species



In Poland in 2022 **84.6%** cases were recorded in wildlife and **7.7%** cases were recorded in domestic animals. The highest number of rabies cases (**82.0%**) were recorded in the red fox. Other animal species, both wildlife and domestic, accounted a small percentage of all diagnosed cases of the disease. We also diagnosed 3 lyssavirus (EBLV-1) infections in bats in different regions of Poland, which accounted for **7.7%** of all identified lyssavirus infections in 2022.



# Number of rabies cases in subsequent months 2022



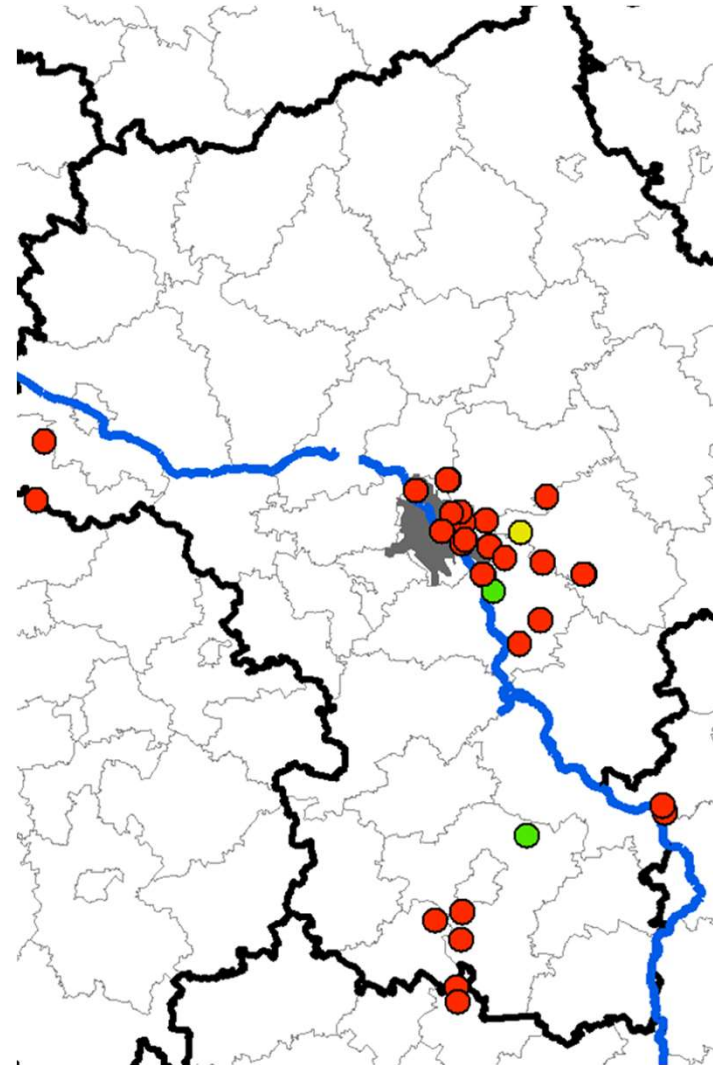
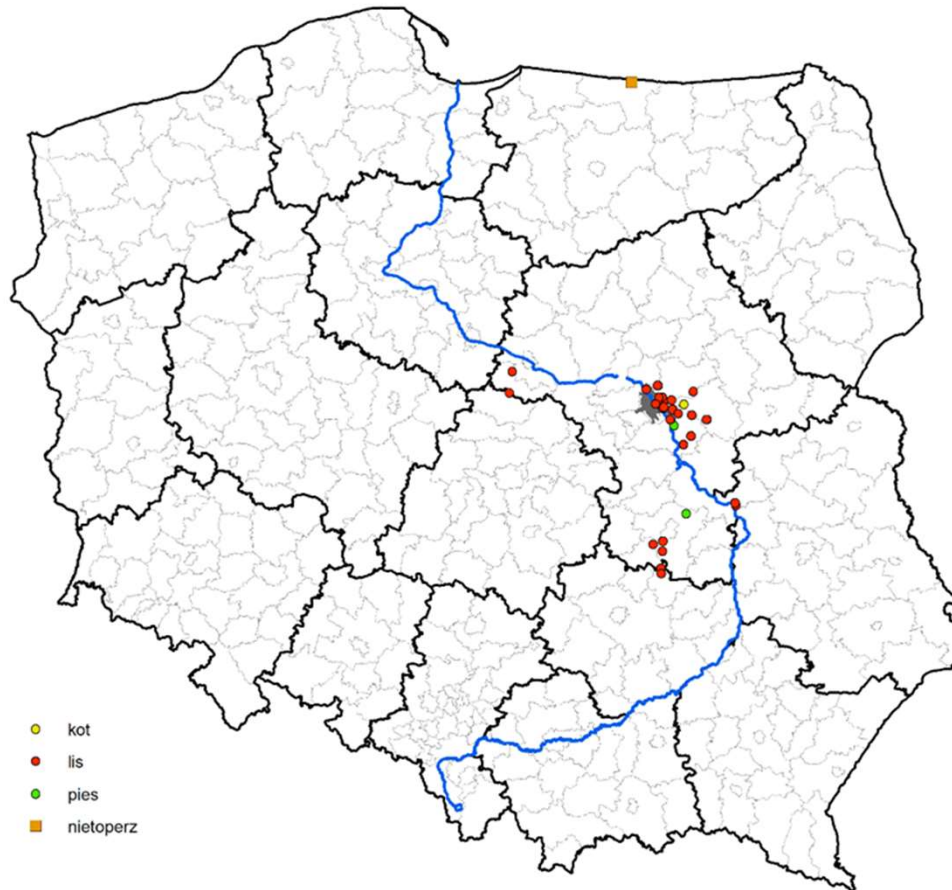
The highest number of cases of the disease among both wildlife and domestic animals were registered in the first half of the 2022.

**Last rabies cases in 2022 were recorded in November in foxes in Otwock and Warsaw district.**

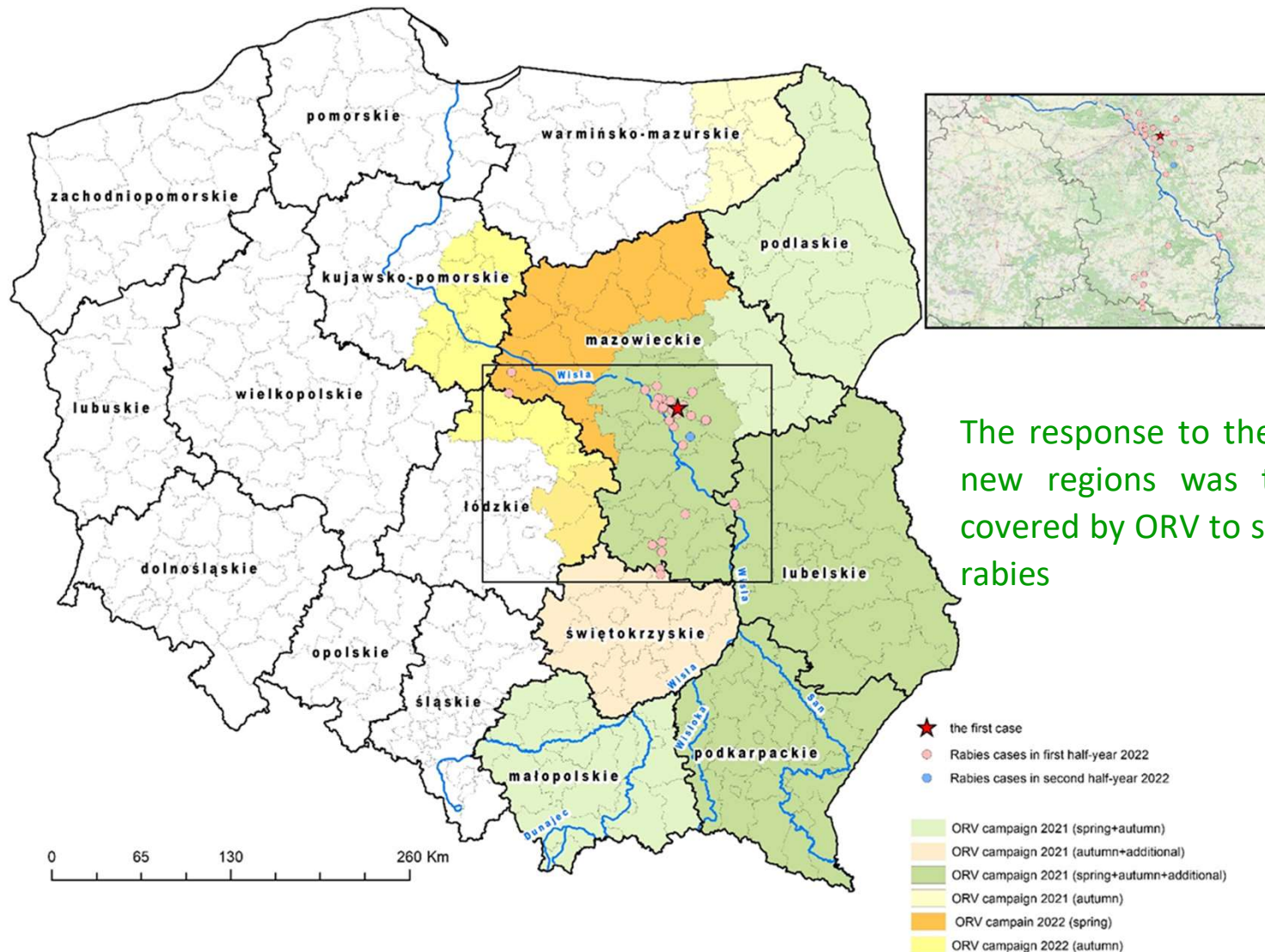




# Distribution of rabies cases in Poland - 2022



# Distribution of Rabies cases 2022 and increase the area of ORV campaigns



The response to the spread of rabies to new regions was to extend the area covered by ORV to stop further spread of rabies





# Response to the outbreak of rabies of Veterinary

## Inspection

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In response to the outbreak of rabies in Poland, a number of ad hoc veterinary public health measures were implemented to cope with the situation. These measures included

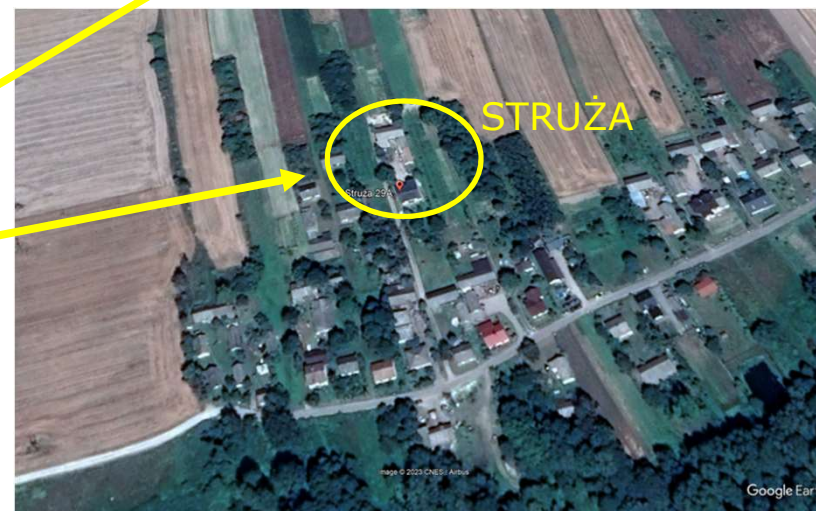
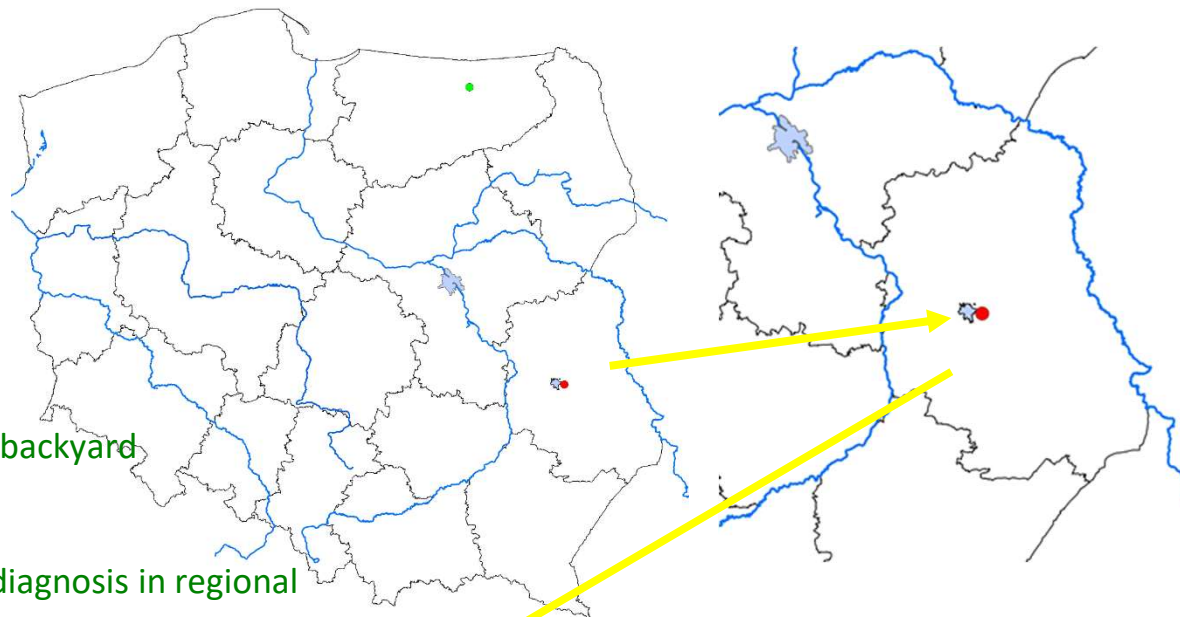
- ✓ immediate issuing of rabies alerts to local veterinary, public health and other competent authorities,
- ✓ public awareness and education campaigns,
- ✓ enhancement of rabies surveillance in the outbreak and neighbouring areas,
- ✓ temporary ban on hunting of all game,
- ✓ obligation for dogs to be kept on a leash or in a fenced yard, and - prohibition of pet animal shows/exhibitions and small animal markets.
- ✓ Enlargement of the area covered by ORV - adaptation to the current rabies epidemiological situation



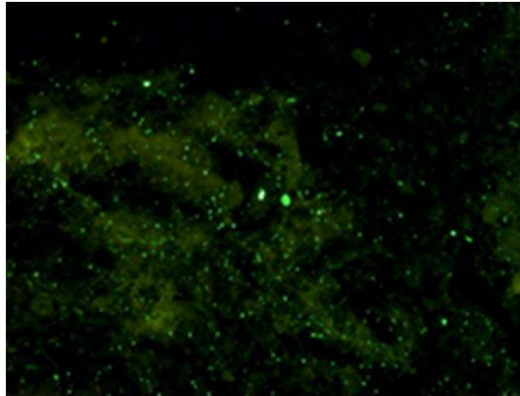
# Rabies in Poland 2023 (January-May)



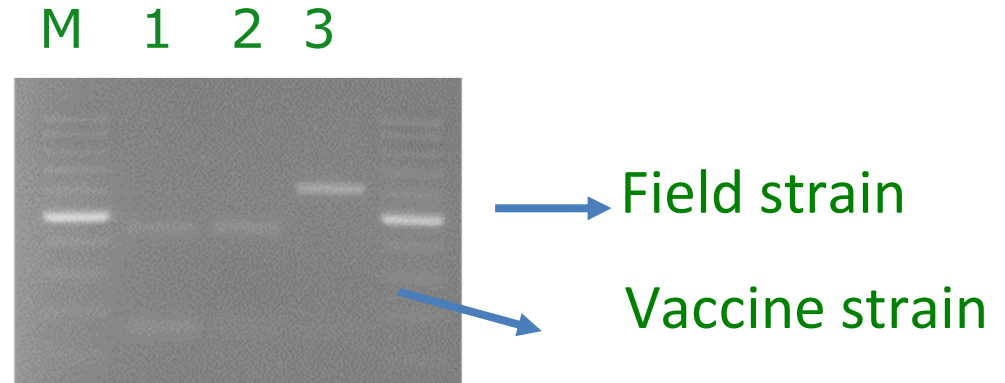
- fox (*Vulpes vulpes*) about 1 year old
- On the 27th of April fox entered private backyard
- **Trawniki municipality, Świdnik district, Lubelskie voivodship**
- fox carcass sent immediately for rabies diagnosis in regional laboratory in Lublin



# Rabies diagnosis and strain differentiation



Immunofluorescence



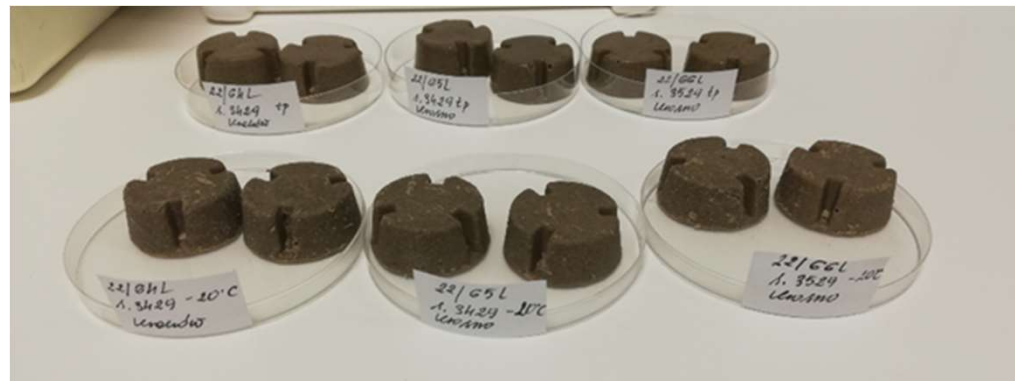
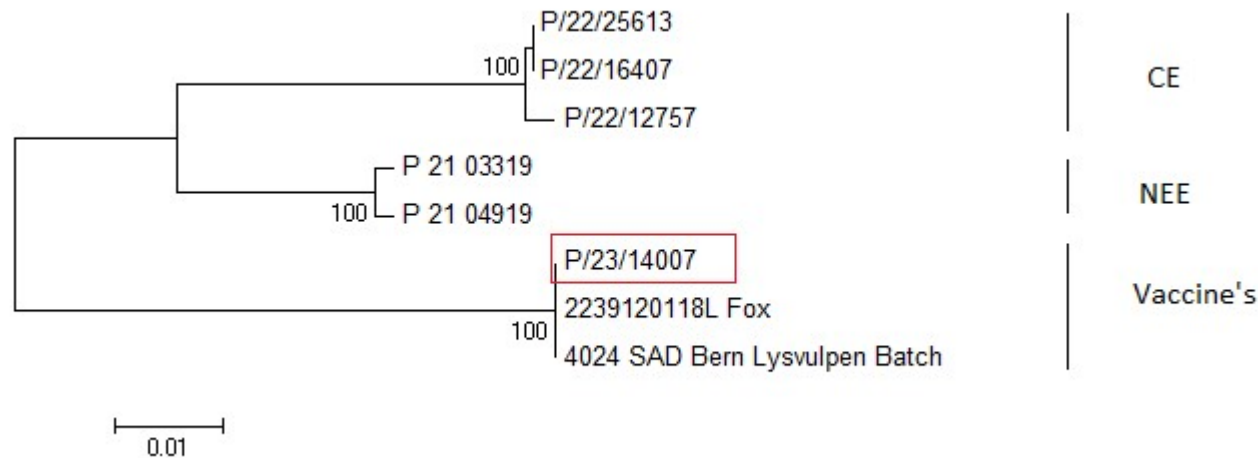
1. P/23/14007
2. K + vaccine strain
3. K+ field strain

In regional laboratory in Lublin submitted fox was testing as part of rabies surveillance and viral antigen was detected in the brain specimen using the fluorescent antibody test .

The result was confirmed by the National Reference Laboratory for Rabies in FAT and strain differentiation of strains by PCR-RFLP using DRA I showed that rabies case was caused by vaccine strain.



# Rabies diagnosis – sequencing of N gene fragment



In order to confirm the result obtained by PCR-RLFP method, sequencing was performed



# Thirty years since the first ORV campaign in Poland - success with turbulence along the way

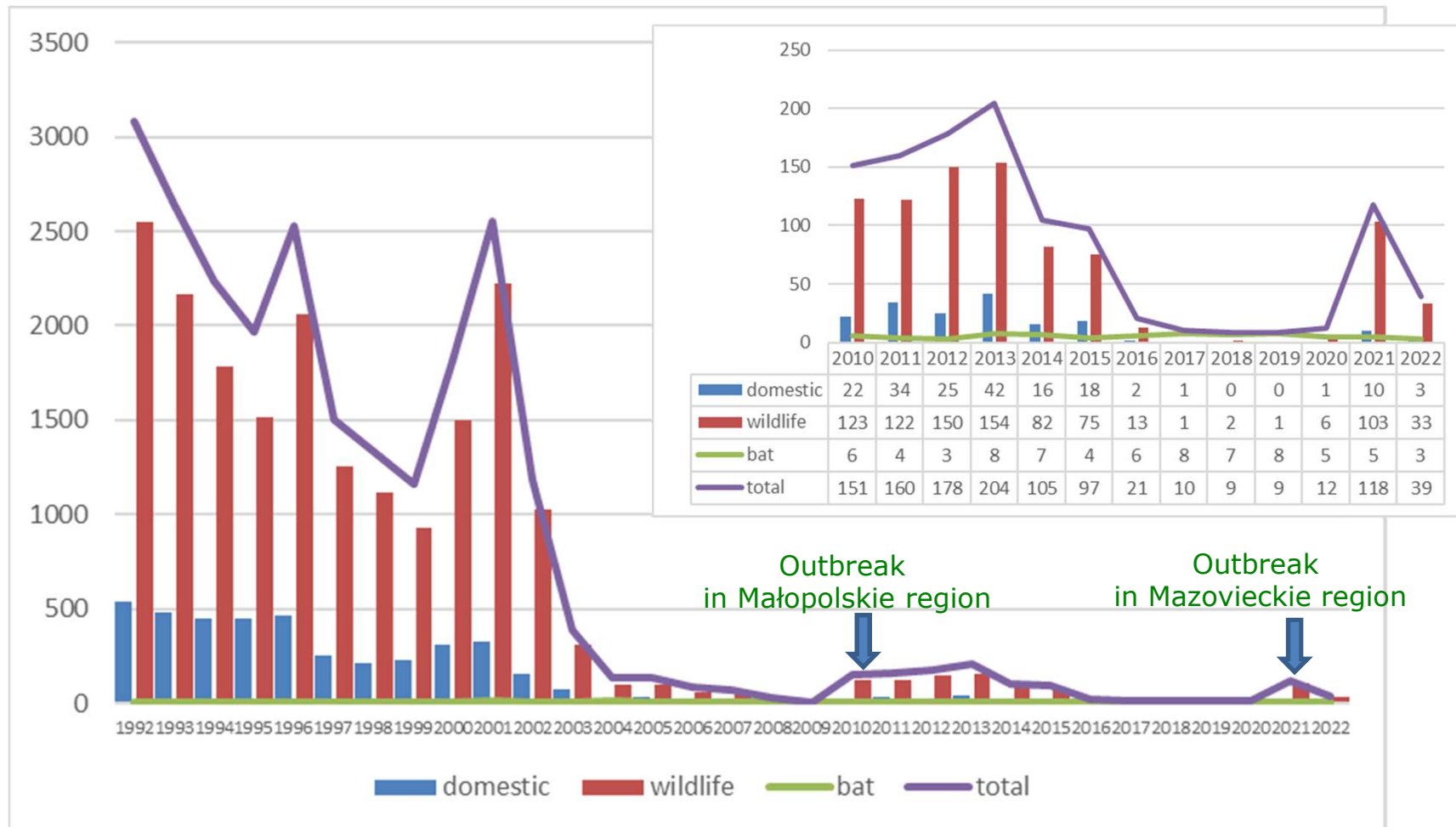
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What we have achieved 30 years after the start of ORV in western Poland and after 21 years of vaccination in the entire territory of Poland?





# The effect of ORV on the epizootic situation of rabies in Poland



Following the introduction of ORVs, a decrease in the number of rabies cases was observed with an outbreak of rabies epizootics in 2010 and 2021



# DISEASE-FREE STATUS FROM INFECTION WITH RABV

## COMMISSION IMPLEMENTING REGULATION (EU) 2021/620

of 15 April 2021

laying down rules for the application of Regulation (EU) 2016/429 of the European Parliament and of the Council as regards the approval of the disease-free and non-vaccination status of certain Member States or zones or compartments thereof as regards certain listed diseases and the approval of eradication programmes for those listed diseases

## COMMISSION DELEGATED REGULATION (EU) 2020/689

of 17 December 2019

supplementing Regulation (EU) 2016/429 of the European Parliament and of the Council as regards rules for surveillance, eradication programmes, and disease-free status for certain listed and emerging diseases

### ANNEX V

#### DISEASE SPECIFIC REQUIREMENTS FOR THE GRANTING AND MAINTENANCE OF THE DISEASE-FREE STATUS AT THE LEVEL OF MEMBER STATES OR ZONES

#### CHAPTER 2

#### Member State or zone free from infection with rabies virus

#### Section 1

#### Granting of the status

**1** The status free from infection with RABV may only be granted to a Member State or a zone if:

- (a)** surveillance has been implemented in accordance with the requirements laid down in Article 3(1) at least for the past 24 months; and
- (b)** no case of infection with RABV has been confirmed during the past 24 months in the targeted animal population

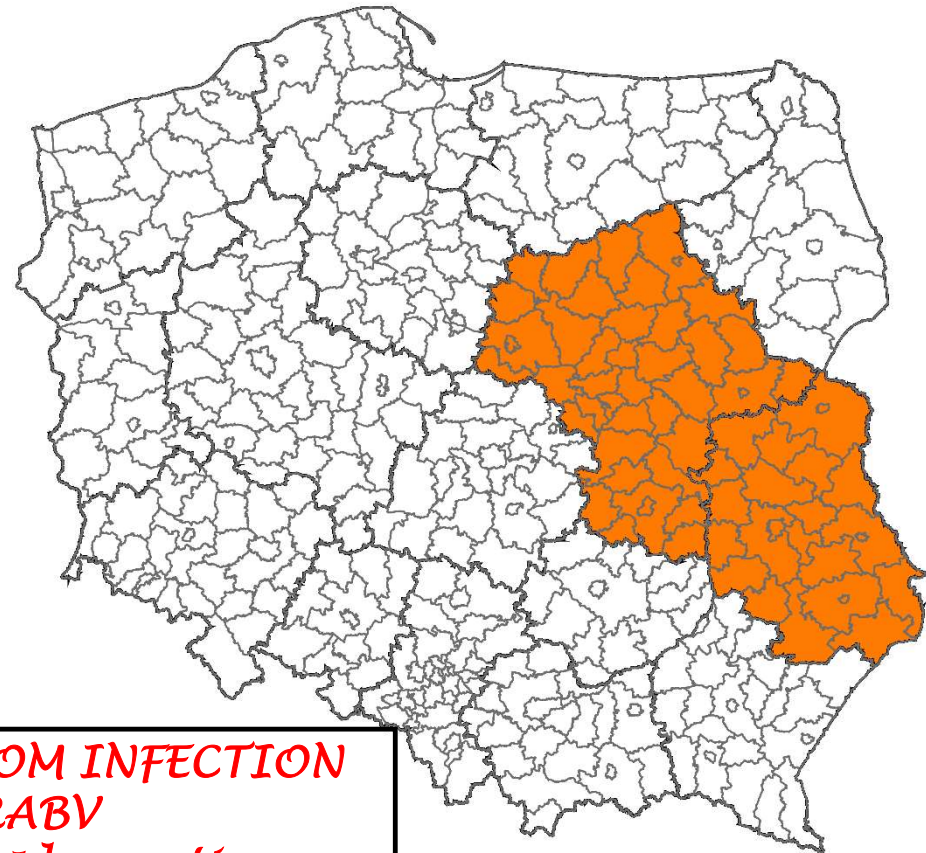
**2** By way of derogation from point 1(b), if a case of infection with RABV has been confirmed, the status may be granted if the infection of the case did not occur in the Member State or in the zone; and

- (a)** the case has been officially confirmed and no epidemiological link may have occurred and resulted in any additional case, which includes detection of the case at a border control post, or in a quarantine establishment or the quarantine facilities of a confined establishment; or
- (b)** epidemiological link may have occurred and no additional case was detected by increased surveillance and epidemiological enquiry and investigations during the 6 months following the death of the case



# DISEASE-FREE STATUS FROM INFECTION WITH RABV

Voivodship Dolnośląskie: [all powiaty](#)  
Voivodship Kujawsko-pomorskie: [all powiaty](#)  
Voivodship Lubelskie the following powiaty: Lubartowski, Lubelski, m.Lublin, Łęczyński, Łukowski, Opolski, Parczewski, Puławski, Radzyński, Rycki, Świdnicki  
Voivodship Lubuskie: [all powiaty](#)  
Voivodship Łódzkie: [all powiaty](#)  
Voivodship Małopolskie: [all powiaty](#)  
Voivodship Mazowieckie the following powiaty: Ciechanowski, Gostyniński, Lipski, Makowski, Mławski, Ostrołęcki, m. Ostrołęka, Płocki, m. Płock, Płoński, Przasnyski, Przysuski, Radomski, m.Radom, Sierpecki, Sochaczewski, Szydłowiecki, Zwoleński, Żuromiński, Żyrardowski  
Voivodship Opolskie: [all powiaty](#)  
Voivodship Podlaskie: [all powiaty](#)  
Voivodship Pomorskie: [all powiaty](#)  
Voivodship Śląskie: [all powiaty](#);  
Voivodship Świętokrzyskie: [all powiaty](#);  
Voivodship Warmińsko-mazurskie: [all powiaty](#);  
Voivodship Wielkopolskie: [all powiaty](#);  
Voivodship Zachodniopomorskie: [all powiaty](#)



**FREE STATUTS FROM INFECTION  
WITH RABV**  
*Commission Implementing  
Regulation (EU)2021/620*





## What else....



....not only a common goal - elimination of rabies was achieved, but also collaboration, support and assistance, harmonization of procedures of ORV but above all, friendships were built in the field of joint work for the health of people and animals



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Thank you



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