



ROMANIA

NATIONAL SANITARY
VETERINARY AND FOOD
SAFETY AUTHORITY

Rabies Situation and Oral
Vaccination of Foxes in 2017
in ROMANIA

May 2018
SCoPAFF, Brussels



The objectives of 2017 programme

- - control of rabies in fox population
- - surveillance of rabies in wild animals population
- - monitoring of oral vaccination in fox population
- - evaluation of vaccination efficiency
- - surveillance of rabies prevalence in the population of domestic animals, including dogs and cats



General data for the implementation of rabies vaccination program in foxes

- Vaccination on all territory of Romania (41 counties) - the baits distribution includes border with Serbia, Hungary, Ukraine, Moldova and Bulgaria
- In 2016 spring and autumn campaign were performed –
 - Spring campaign started in 09 may 2017 and ended in 06 june 2017
 - Autumn campaign started in 03 october 2017 and ended in 21 november 2017
- Estimated area for vaccination : 213.375 km² for each campaign
- Baits distributed by airplanes:
 - Spring - 5.292.535 baits with an approx. of 25 baits/km²
 - Autumn - 5.334.375 baits with an approx. of 25 baits/km²
- Baits manual distributed: 150.800 baits in both campaigns
- Total length of flying tracks: aprox. 950.000 linear kms/both campaign
- Total number of flying hours: 6200 hrs/both campaigns
- 28 airplanes with fixed wings used in both campaigns





Surveillance and monitoring

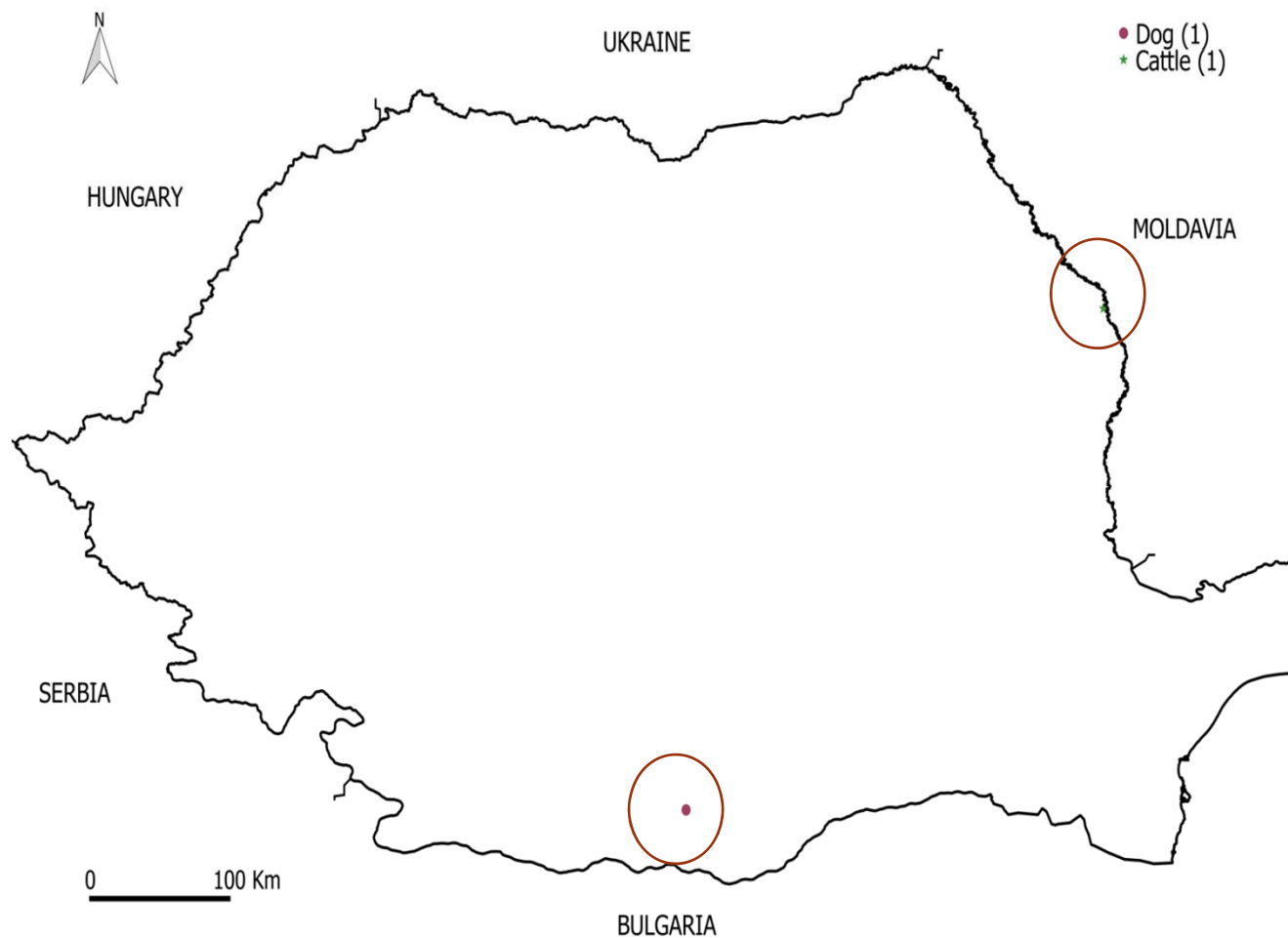
- FAT tests – for rabies confirmation on shot foxes – 8261 tests
- AB-ELISA : for efficiency of vaccination – 7355 tests
- Tetracycline Biomarker detection - 8261 tests
- Titration of baits for suitability of the vaccine – 26 batches (3 baits/batch)
- Age determination – yes
- PCR – **All viruses isolated by PCR-sequencing (PCR positive) (for molecular characterization of rabies isolates) showed only wild strains and no vaccine strain.**



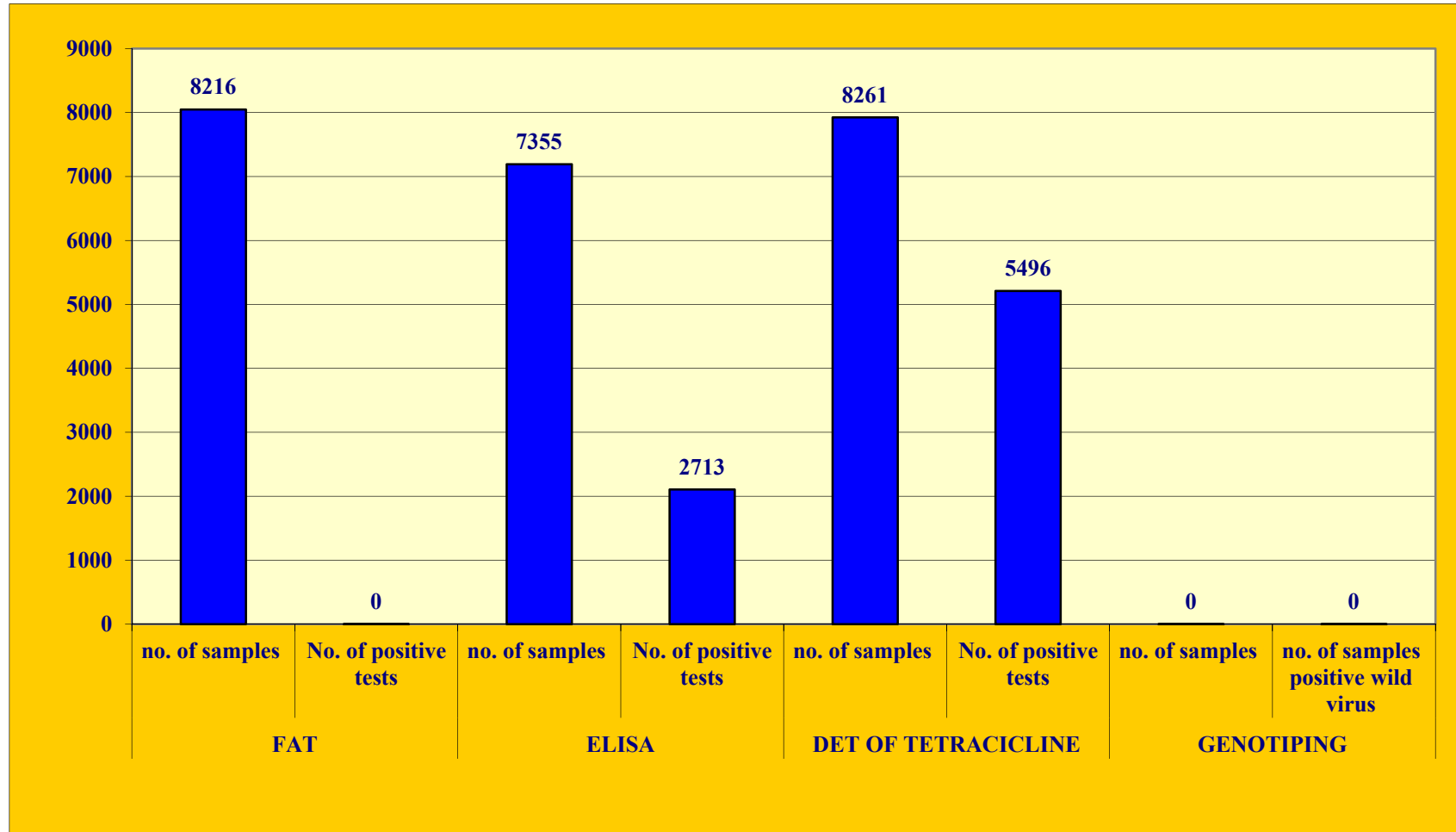
Surveillance

- **FAT – for rabies confirmation**
 - **active surveillance - 8261 tests** with NO positive case
 - **passive surveillance - 911 tests** (found dead, with clinical signs and by car accidents):
 - 369 domestic animals **2 positive** – 0,5% positive
 - 542 foxes and other wild animals **0 positive** – 0 % positive

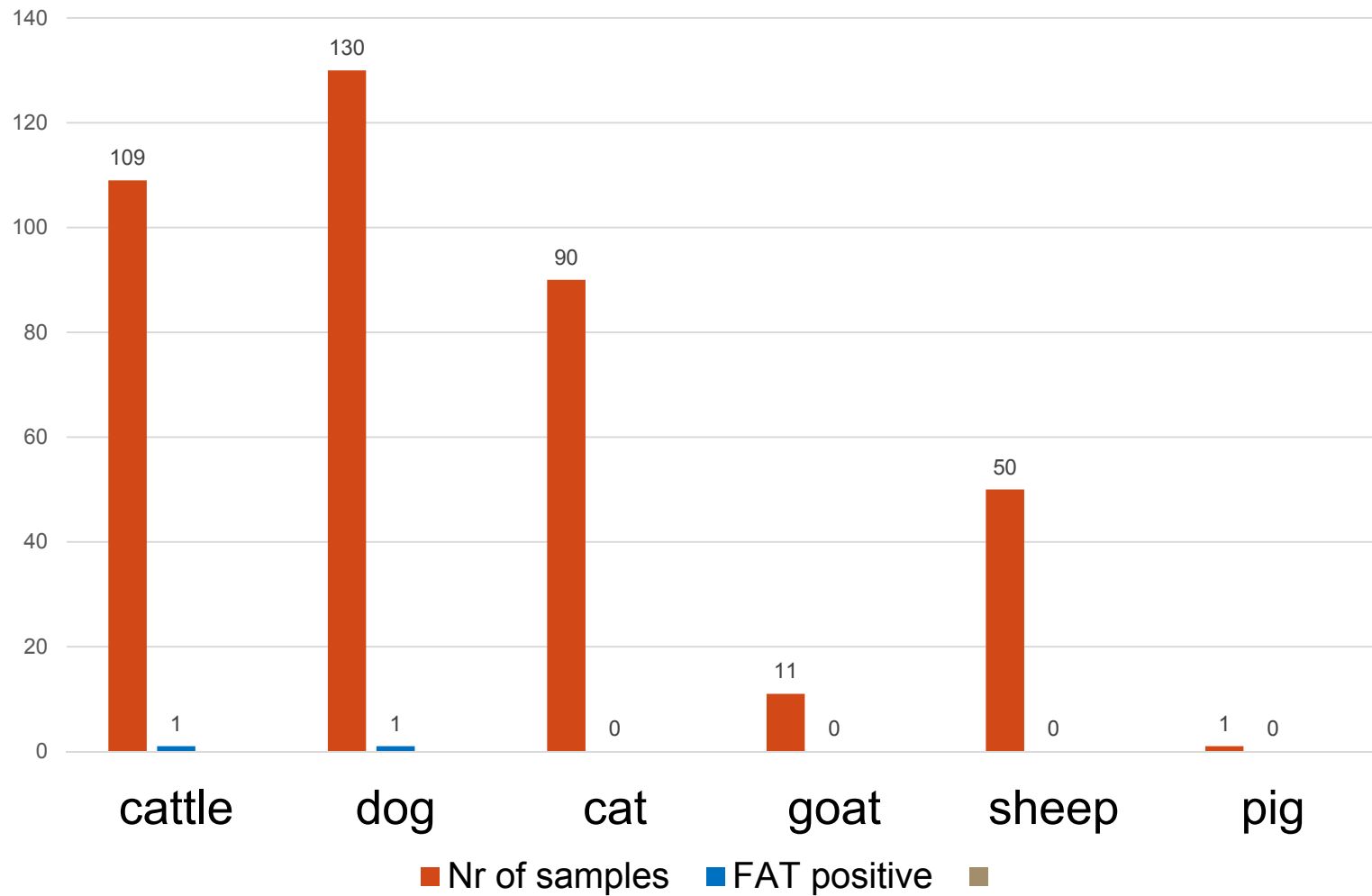
Rabies positive cases 2017



Graph No. 1 - The active surveillance of rabies in foxes – year 2017

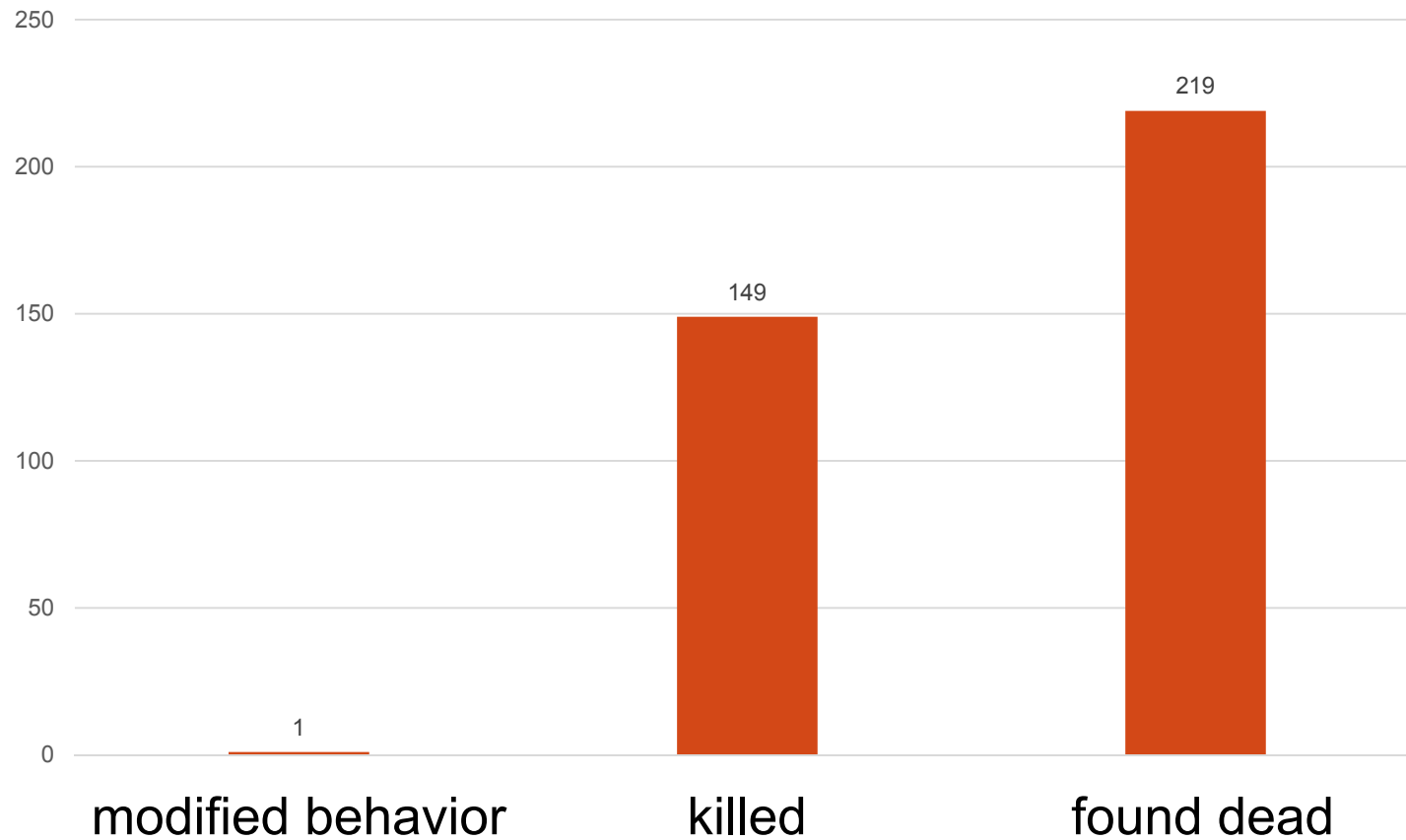


The passive surveillance of rabies in 2017 (domestic)



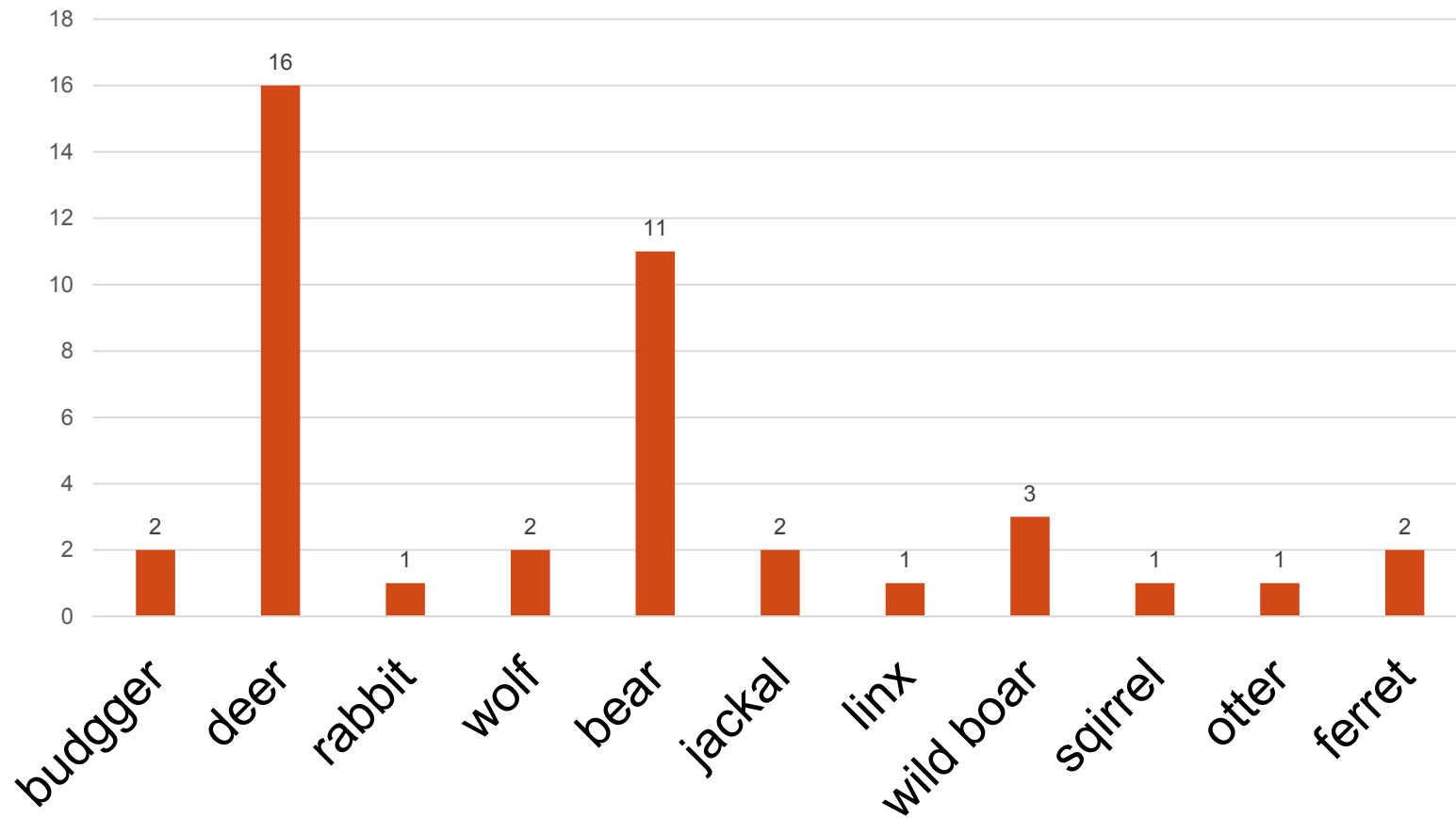
-NO VACCINE STRAIN

Passive surveillance of rabies in 2017 (foxes)



-NO FAT positive sample

Passive surveillance of rabies in 2017 (wild animals except foxes)

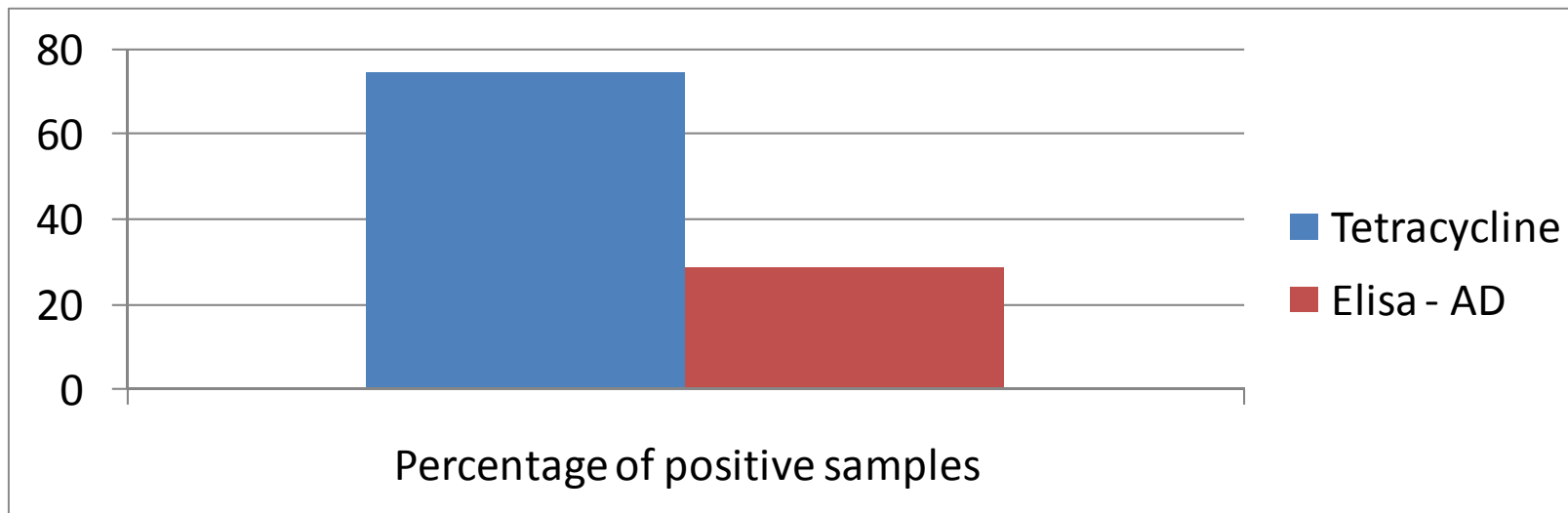


-NO FAT positive sample



Monitoring of 2017 rabies eradication programme

- **Evaluation of vaccination efficacy**
 - Bait up -take - determination of bio-marker TTC :
 - 8216 samples - 5496 positive and 2765 negative = **67 % tetracycline +**
 - Detection of antibodies from thoracic liquid - Elisa:
 - 7355 samples -2713 positive and 4642 negative = **37 % seroconversion**
 - Titration of baits for suitability of the vaccine – all 26 batches tested showed that titer was into the approved level.



Conclusions

- higher number of foxes sampled for evaluation of vaccination efficiency in 2017 comparing with previous years (97% from the programmed number): 94 in 2016 comparing with 92 in 2015, 78.21% in 2014 and 39% in 2013.
- **2 positive animals for rabies in 2017**, in 2014 – 161 outbreaks, in 2015 – 28 cases, in 2016 - 16 cases and in 2017 – 2 cases.



I'm lucky, I'm vaccinated

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