

NATIONAL SANITARY VETERINARY AND FOOD SAFETY AUTHORITY

Rabies Situation and Oral Vaccination of Foxes in 2014 in ROMANIA

September 2015 SCoPAFF, Brussels



The objectives of 2014 programme

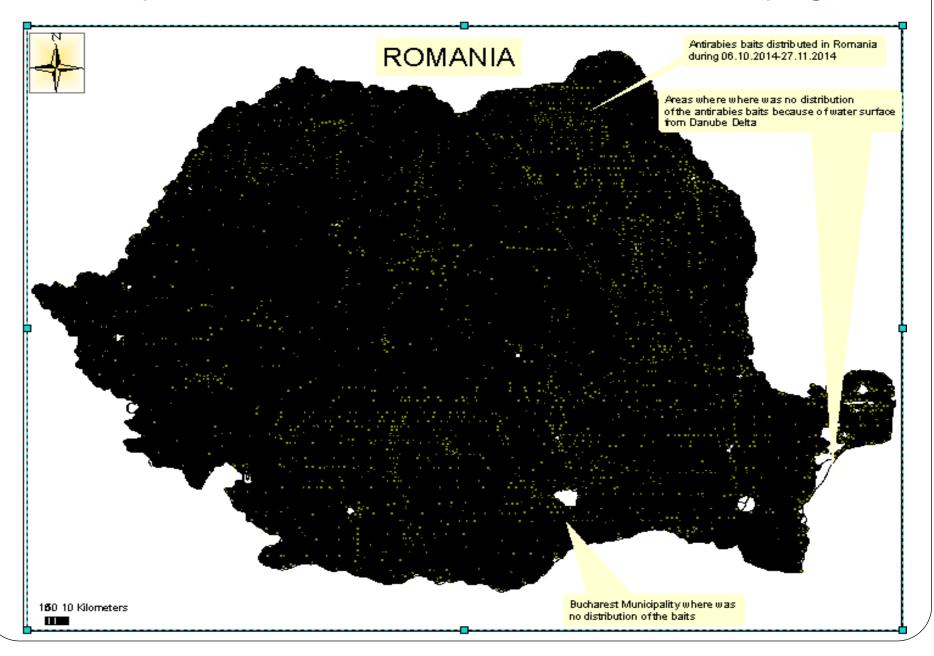
- - control of rabies in fox population
- surveillance of rabies in wild animals population
- - monitoring of oral vaccination in fox population
- evaluation of vaccination efficiency
- - surveillance of rabies prevalence in the population of domestic animals, including dogs and cats



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 2014 only autumn campaign took place started in 6 October and ended in 27 November
- Estimated area for vaccination : 213.375 km2
- Distribution pattern: "cross-flights"
- Baits distributed by airplanes <u>5.334.375</u> baits with an approx. of 25 baits/km2
- Baits manual distributed: 75.400 baits.
- Total length of flying tracks: 475.322,6 km linear,
- Total number of flying hours: 3120,
- 25 airplanes with fixed wings used.

Map of aerial distribution in 2014 - autumn campaign





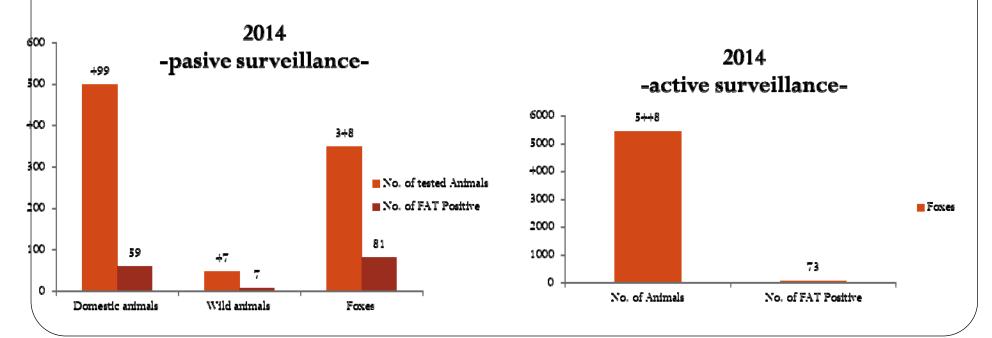
Surveillance and monitoring

- FAT tests for rabies confirmation on shot foxes 5448 tests
- AB-ELISA: for efficiency of vaccination 5048 tests
- Tetracycline Biomarker detection 5385 tests
- Titration of baits for suitability of the vaccine 13 tests (3 baits/test)
- Age determination yes
- PCR <u>All viruses isolated by PCR-sequencing (PCR positive)</u> (for molecular characterization of rabies isolates) showed only wild strains and no vaccine strain.

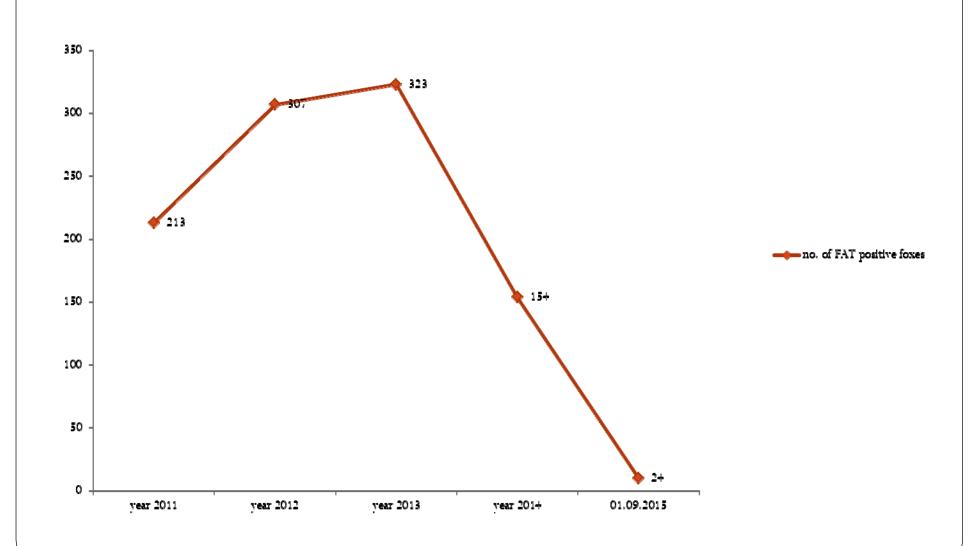


Surveillance

- FAT for rabies confirmation
 - active surveillance 5448 tests from which 73 positive
 - passive surveillance 894 tests (found dead, with clinicalk signs and by car accidents):
 - 499 domestic animals **59 positive** 11% positive
 - 348 foxes from which **81 positive** 23 % positive
 - 47 other wild animals from which **7 positive** 14 % positive



Rabies incidence 2011-2015

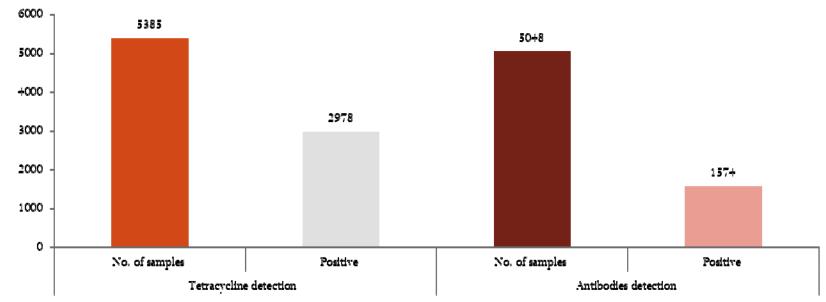




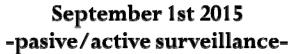
Monitoring of 2014 rabies eradication programme

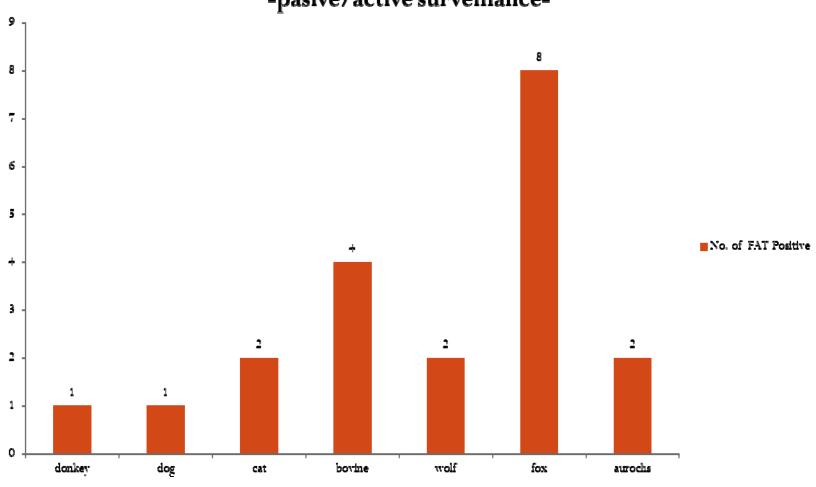
- Evaluation of vaccination efficacy
 - <u>Bait up take</u> determination of bio marker TTC :
 - -5385 samples 2978 positive and 2407 negative = 55,30 % tetracycline +
 - <u>Detection of antibodies</u> from thoracic liquid Elisa:
 - -5048 samples -1574 positive and 3474 negative = **31,18 % seroconversion**
 - <u>Titration of baits for suitability of the vaccine</u> all 13 batches tested showed that titer was into the approved level.

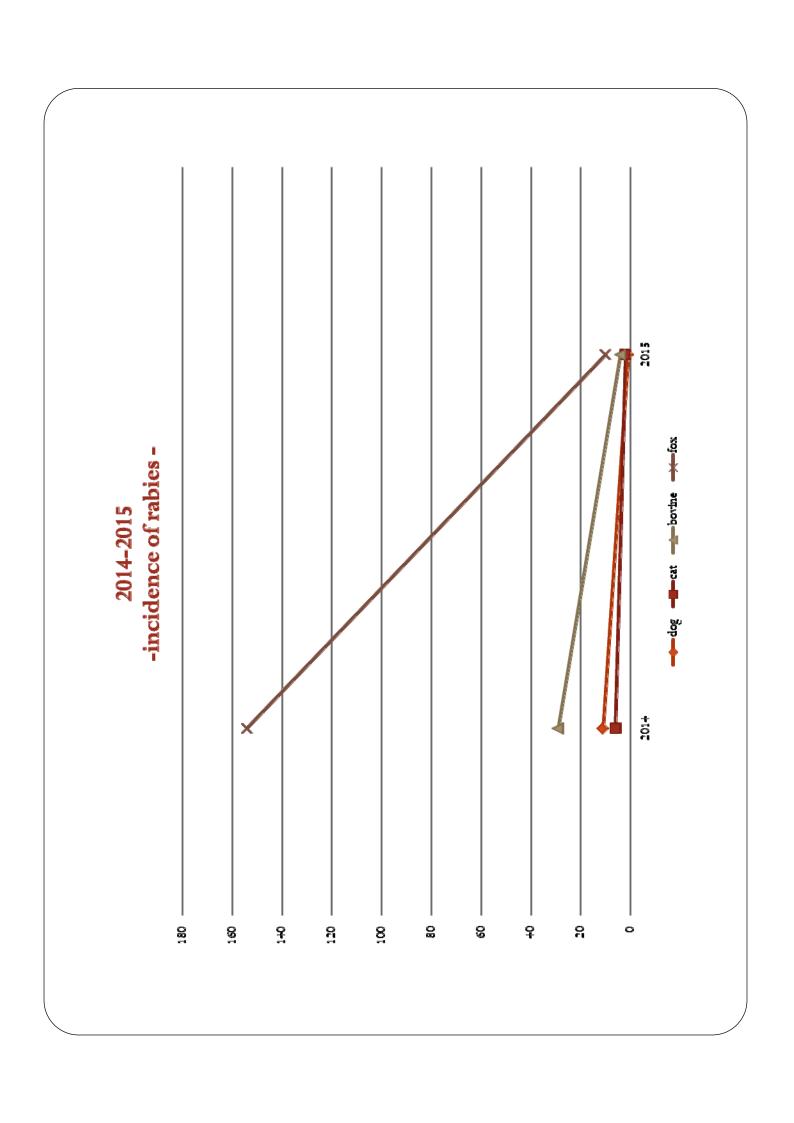




Rabies incidence at 1st of September 2015







Conclusions

- higher number of foxes sampled for evaluation of vaccination efficiency in 2014 comparing with 2013 (% from the programmed number): 78.21% in 2014 and 39% in 2013.
- lower number of positive animals for rabies in 2014 and 2015 (01.09) than previous years was.
- all isolated virus strains were wild strains.

Conclusions of FVO audit in Romania - animal health - rabies - 19-23 January 2015 - DG(SANTE)/2015-7623

- The new multiannual contract for supply and aerial distribution of rabies vaccine baits addresses this issue and provides an assurance of uninterrupted continuation of the eradication programme for the 2014-2017 period.
- The adequate pre-distribution quality checks on vaccine batches in 2014 ensure the quality of the vaccine used.
- Both aerial and manual distributions of vaccine baits in the autumn campaign 2014 were well-organised and well supervised, therefore suitable to achieve the objectives of the programme.
- Improvement seen after the autumn campaign 2014 and at the beginning of 2015 should provide sufficient information to demonstrate that rabies eradication is progressing according to the objectives of the programmes.
- The public awareness of the risks and typical symptoms of rabies and the actions taken to control the risk of spread to humans and domestic animals are appropriate.

