



# THE RESULTS OF THE IMPLEMENTATION OF THE RABIES CO - FINANCED ERADICATION PROGRAMME IN THE SLOVAK REPUBLIC IN 2017

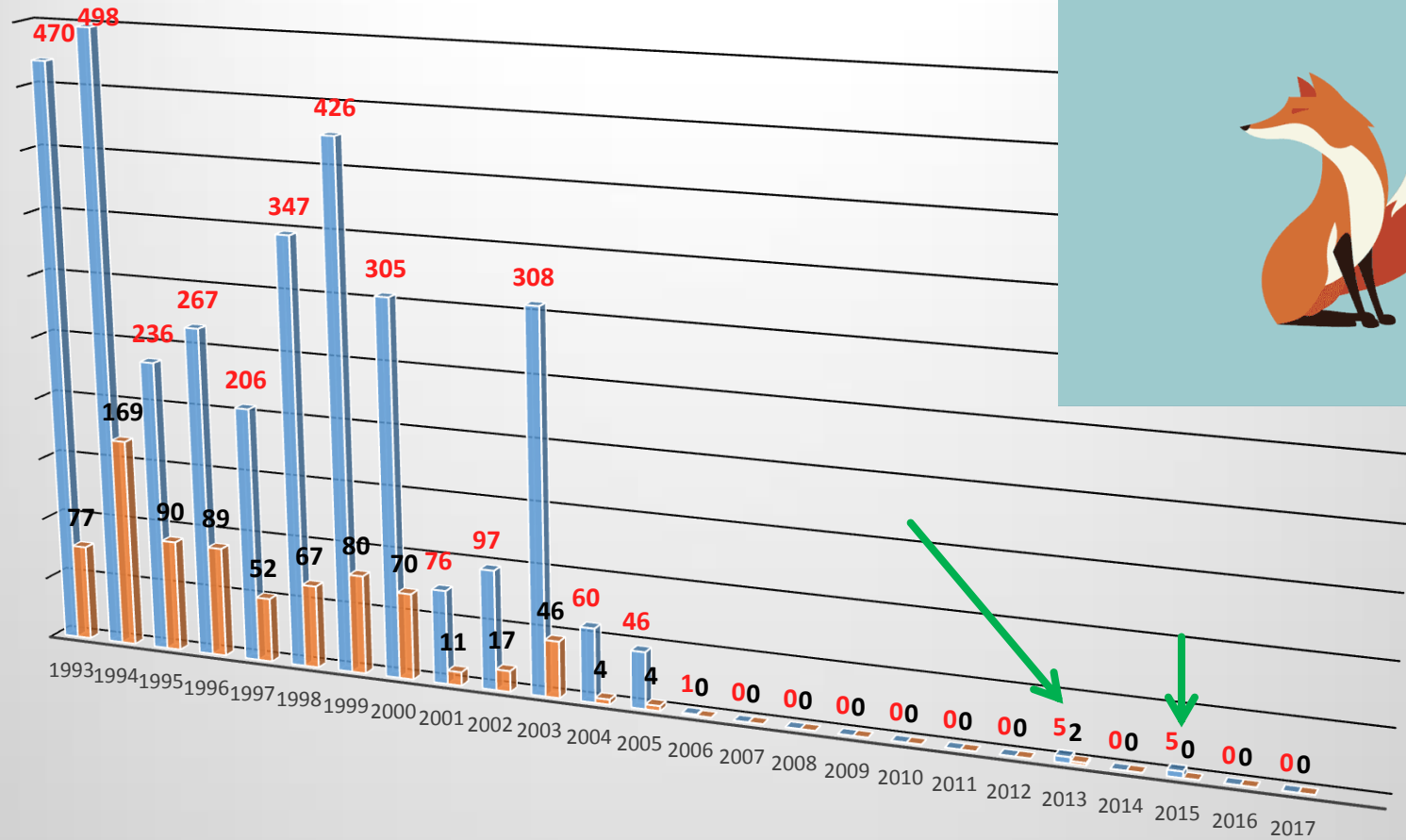


Martin Chudy, DVM. Acting HoU  
Animal health and animal welfare department

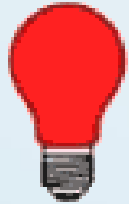
State Veterinary and Food Administration of the Slovak republic  
Paff Comm Brussels, June 2018



# Development of Positive Cases - Wild and Domestic Animals 1993 to 2017 Slovak Republic



■ Wild animals ■ Domestic animals



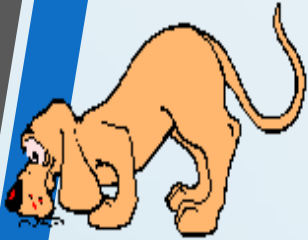
## *Main goals of the programme- 2017*

1. early detection of ( possible) rabies occurrence
2. protection of the slovak territory regarding further introduction of disease

**All activities performed within legal framework : law on veterinary care; National Program of Eradication of Rabies in the Slovak Republic in 2017; Methodical Instructions of Oral Vaccination of Foxes**



***NATIONAL PROGRAMME of rabies  
eradication in the Slovak Republic 2017***



**I N C L U D E S**

- ✓ legal basis of the programme
- ✓ definition of some terms
- ✓ instruction on the disease
- ✓ diagnostics
- ✓ system of disease notification
- ✓ control mechanisms
- ✓ movement of animals of susceptible species
- ✓ compensation at eradication
- ✓ measures at the disease occurrence
- ✓ vaccination programme





# Data on animals – year 2017

## Wildlife red fox and racoon dogs

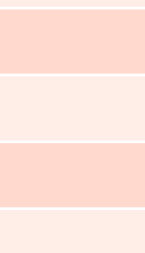


<b>Region</b>	<b>Total number of animals</b>	<b>Number of animals to be tested under the programme</b>	<b>Number of positive animals</b>
<b>Slovak Republic</b>	<b>Foxes Approx. 34 000-35 000</b>	<b>1 743</b>	<b>0</b>
<b>Slovak Republic</b>	<b>Racoon dogs Approx. 1802</b>	<b>21</b>	<b>0</b>

# Technical evaluation of the situation in the Slovak Republic in 2017

<b>Disease/species</b>	<b>Test</b>	<b>Type of sample</b>	<b>Type of test</b>	<b>Number of tests performed</b>
<b>Rabies/wildlife red fox/raccoon dog</b>	<b>Virological analysis</b>	<b>brain</b>	<b>FAT</b>	<b>1 743/21</b>
<b>Rabies/wildlife red fox/raccoon dog</b>	<b>Serological analysis</b>	<b>blood</b>	<b>ELISA</b>	<b>501/13</b>
<b>Rabies/wildlife red fox/raccoon dog</b>	<b>Imunofluorescence (TTC marker detection)</b>	<b>Bone (mandibula)</b>	<b>Fluorescence test (TTC)</b>	<b>505/14</b>

Year	Wild animals				Domestic animals				The total number of animals	
	Red fox		Other		Dogs and cats		Other			
	Posit	Negat	Posit	Negat	Posit	Negat	Posit	Negat	Posit	Negat
2017	0	1 743	0	61	0	163	0	8	0	1 975
2016	0	1 716	0	51	0	172	0	7	0	1 946
2015	5	1 874	0	33	0	217	0	9	5	2 133
2014	0	1 396	0	32	0	226	0	10	0	1 664
2013	4	3 587	1	64	2	263	0	6	7	3 920
2012	0	3 369	0	44	0	242	0	13	0	3 668
2011	0	3 264	0	60	0	279	0	20	0	3 623
2010	0	2 922	0	42	0	323	0	16	0	3 303
2009	0	3 203	0	86	0	391	0	28	0	3 708
2008	0	3 422	0	77	0	484	0	25	0	4 008
2007	0	3 751	0	86	0	445	0	31	0	4 313
2006	1	3 630	0	105	0	485	0	21	1	4 241
2005	44	1 767	2	126	4	654	0	42	50	2 589
2004	54	1 563	6	109	3	660	1	50	64	2 382
2003	295	1 791	13	159	43	676	3	72	354	2 698
2002	94	1 452	3	130	16	713	1	80	114	2 375
2001	72	1 027	4	116	11	674	0	62	87	1 879
2000	292	1 416	13	164	66	793	4	69	375	2 442
Total	861	42 893	42	1 545	145	7 860	9	569	1 057	52 867

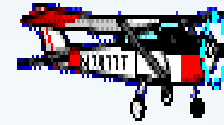


# Nr. Of Tests performed period 2005-2017 (wildlife red fox, raccon dog)

Year	Virological tests		Serological tests		Other tests IF (TTC)	
	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples
2005	1767	42	1078	282	1279	838
2006	3630	4	3098	1109	3289	2591
2007	4309	0	3000	1115	3129	2315
2008	3422	0	3288	1172	3517	2842
2009	3196	0	2763	1134	2976	2406
2010	2922	0	2357	922	2404	1772
2011	3264	0	2731	1334	2751	2026
2012	3369	0	2869	1062	2890	1845
2013	3596	4	649	227	650	482
2014	1 398	1 (confirmation January 2015)	484	315	484	387
2015	1 887	4	530	258	535	379
2016	1737	0	550	229	552	344
2017	1743	0	514	210	519	340



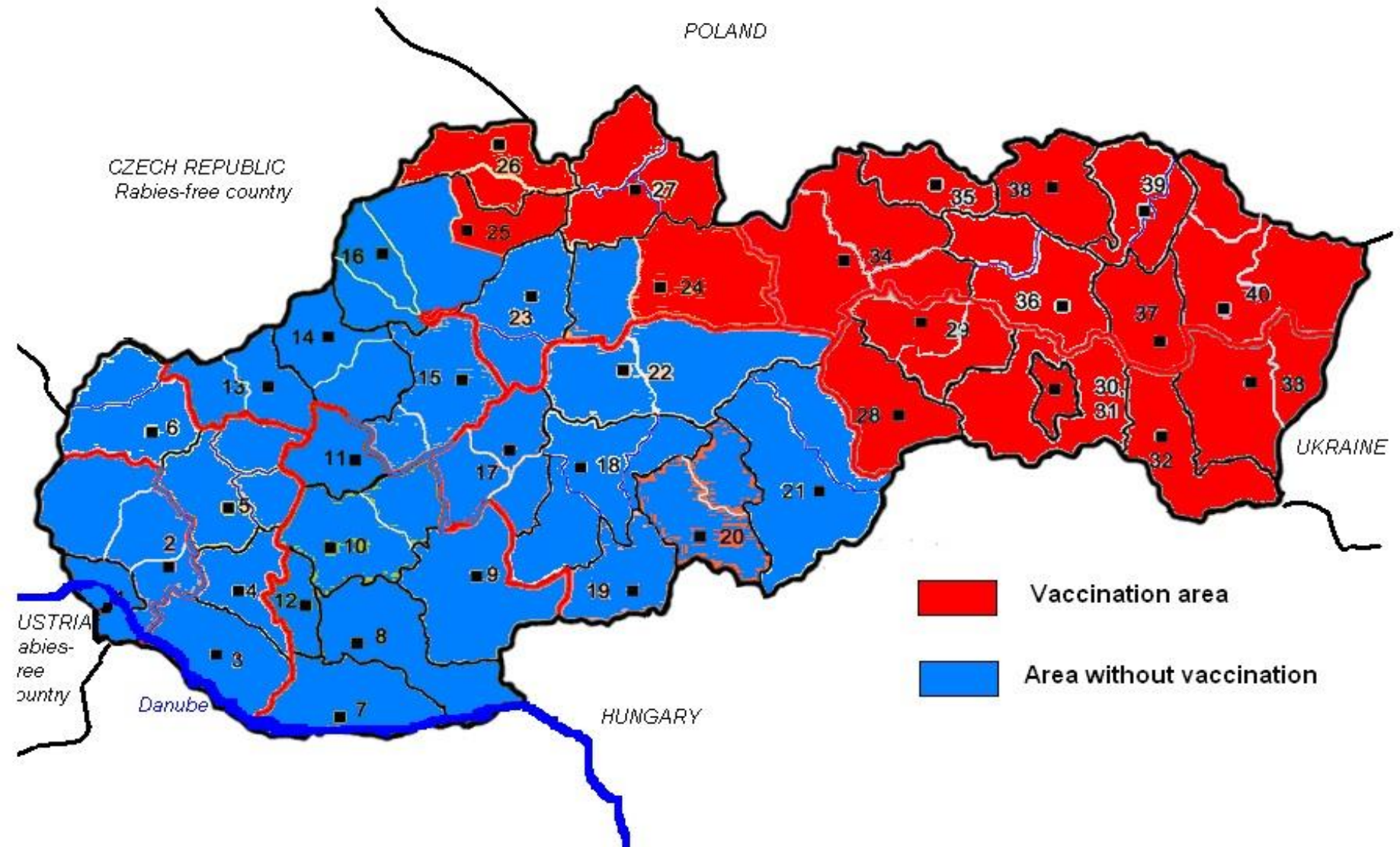
# Oral vaccination of foxes in 2017 in the Slovak Republic



- Lyssvulpen por a.u.v., Bioveta a.s., CZ, - modified, attenuated rabies virus SAD Bern (+ TTC as indicator) given to bait
- **SPRING:**
- spread by plain - in area approx. 12 250 km<sup>2</sup>, total 306 250 baits, 25 baits/1km<sup>2</sup>
- spread by hand – in area approx. 208 km<sup>2</sup>, near the towns total 3900 baits, 18 baits/1km<sup>2</sup>
- **AUTUMN**
- in two seasonal campaigns i.e.
- spread by plain - in area approx. 12 250 km<sup>2</sup>, total 306 250 baits, 25 baits/1km<sup>2</sup>
- spread by hand – in area approx. 208 km<sup>2</sup>, near the towns, total 3 900 baits, 18 baits/1km<sup>2</sup>



# Distribution of vaccine baits for oral vaccination of fox population in the Slovak republic in the year 2017

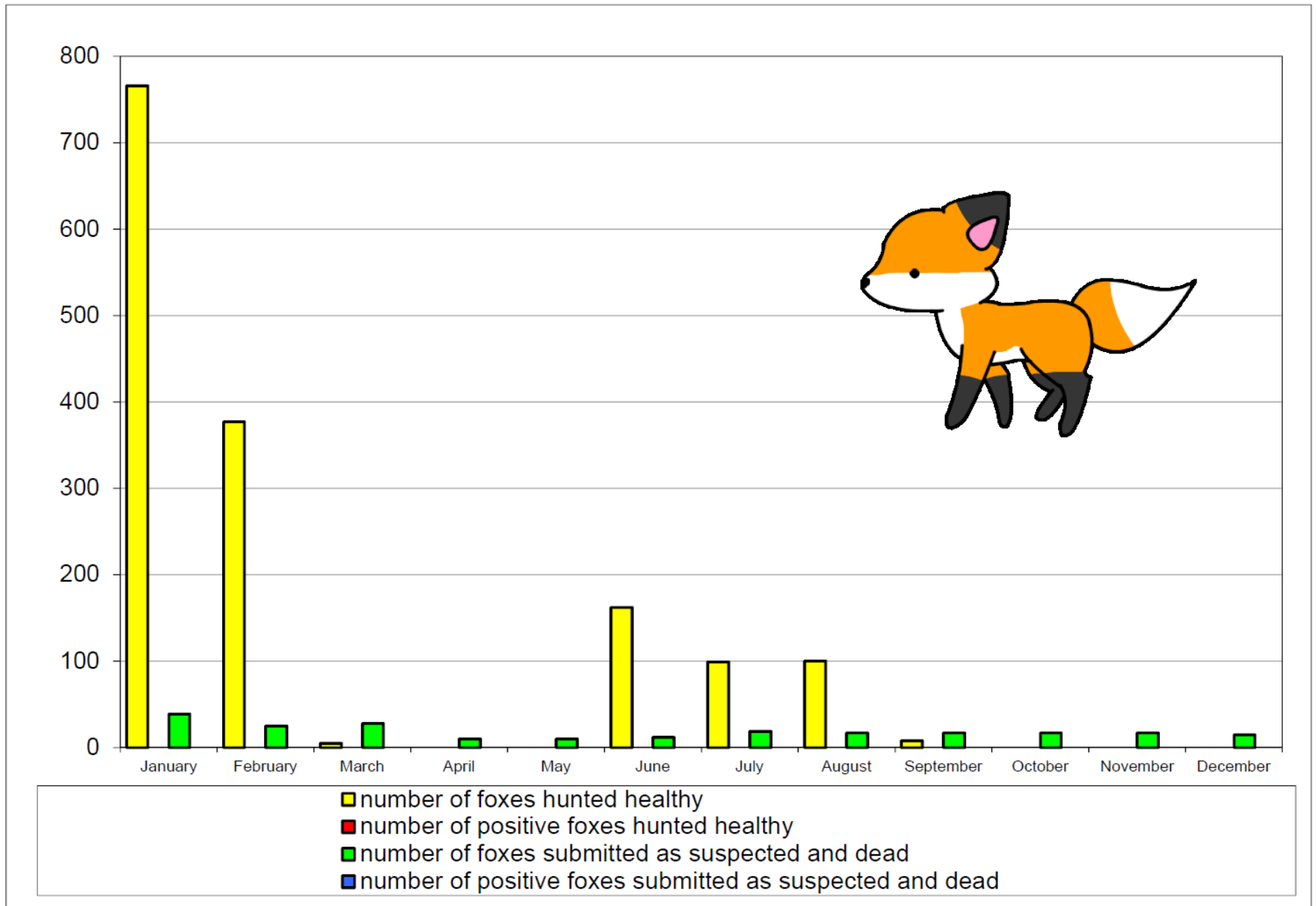


# Number of vaccine baits used within realization of the National Rabies Eradication Programme

YEAR	Oral vaccination of foxes spring campaign	Oral vaccination of foxes autumn campaign
2000	688.180 baits SAD Bern	335.000 baits SAD Bern 353.480 baits SAD Vnukovo 32/107
2001	280.000 baits SAD Bern 487.180 baits SAD Vnukovo 32/107	298.120 baits SAD Bern 503.268 baits SAD Vnukovo 32/107
2002	298.120 baits SAD Bern 503.268 baits SAD Vnukovo 32/107	798.600 baits SAD VA-1
2003	300.000 baits SAD Bern 399.950 baits SAD VA-1	727.400 baits SAD Bern
2004	876.000 baits SAD Bern	868.500 baits SAD Bern
2005	856.900 baits SAD Bern	856.900 baits SAD Bern
2006	856.900 baits SAD Bern	856.900 baits SAD Bern
2007	856.900 baits SAD Bern	856.900 baits SAD Bern
2008	856.900 baits SAD Bern	856.900 baits SAD Bern
2009	856.900 baits SAD Bern	622.340 baits SAD Bern
2010	622.340 baits SAD Bern	622.340 baits SAD Bern
2011	328 850 baits SAD Bern	328 850 baits SAD Bern
2012	328 850 baits SAD Bern	328 850 baits SAD Bern
2013	303 750 baits SAD Bern	303 750 baits SAD Bern
2014	303 750 baits SAD Bern	303 750 baits SAD Bern
2015	303 700 baits SAD Bern	303 900 baits SAD Bern
2016	303 900 baits SAD Bern	310 150 baits SAD Bern
2017	310 150 baits SAD Bern	310 150 baits SAD Bern

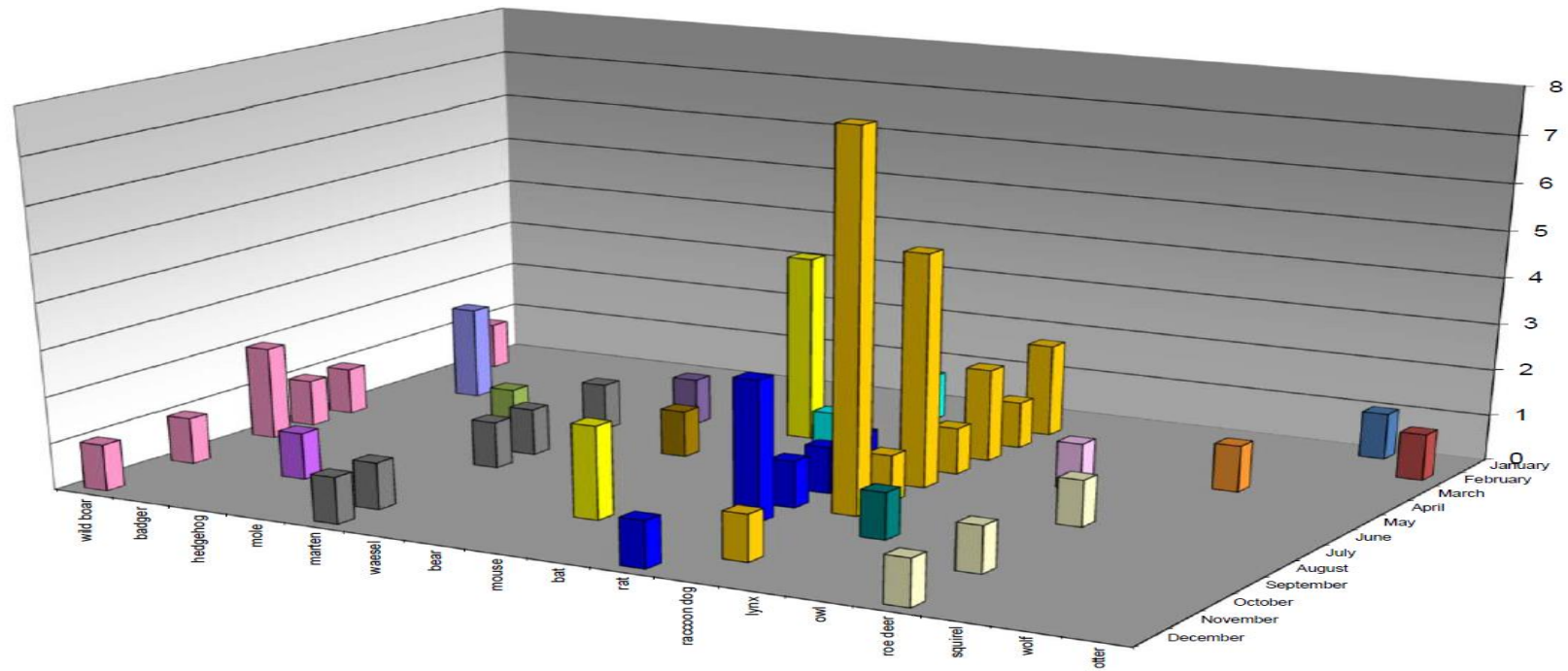


# Foxes submitted for Rabies investigation in Slovakia during 2017



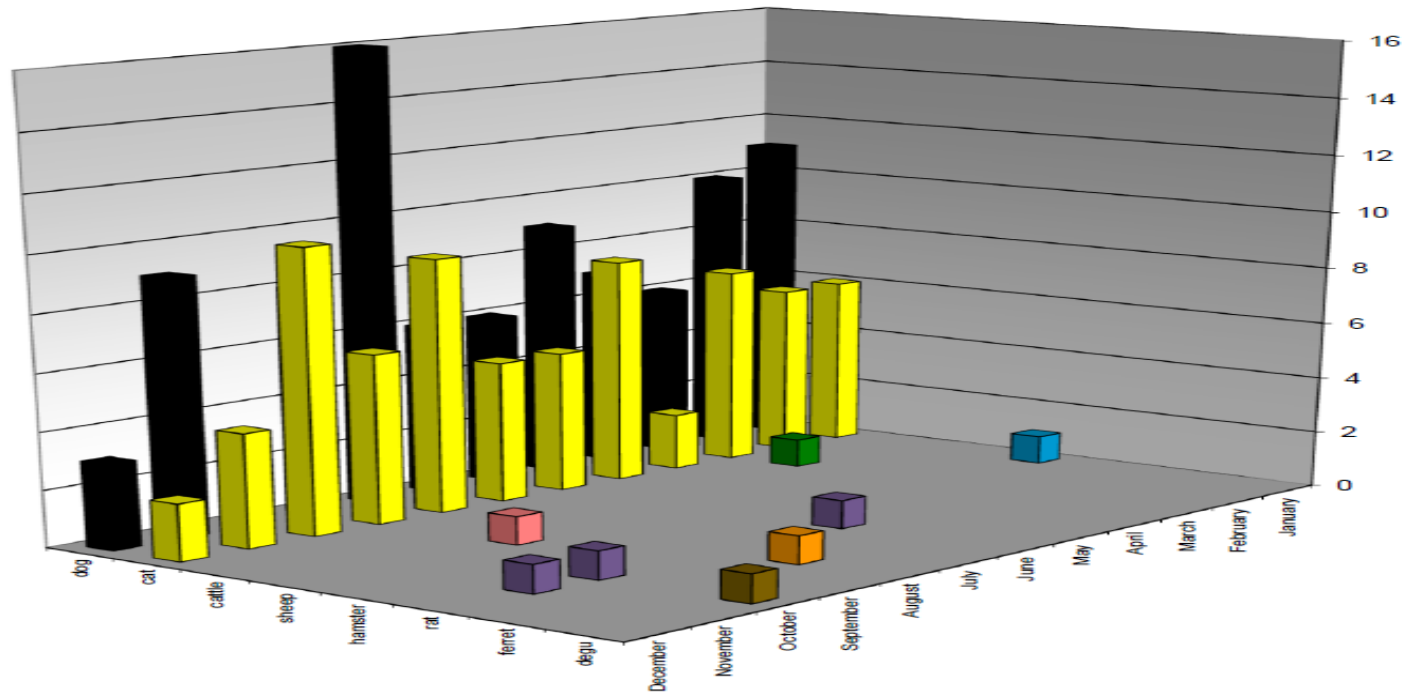
month	number of foxes hunted healthy	number of positive foxes hunted healthy	% of positive	number of foxes submitted as suspected and dead	number of positive foxes submitted as suspected and dead	% of positive	number of foxes submitted total	number of positive foxes total
January	766		0,0%	39		0,0%	805	
February	377		0,0%	25		0,0%	402	
March	5		0,0%	28		0,0%	33	
April			0,0%	10		0,0%	10	
May			0,0%	10		0,0%	10	
June	162		0,0%	12		0,0%	174	
July	99		0,0%	19		0,0%	118	
August	100		0,0%	17		0,0%	117	
September	8		0,0%	17		0,0%	25	
October			0,0%	17		0,0%	17	
November			0,0%	17		0,0%	17	
December			0,0%	15		0,0%	15	
total	1517	0	0,0%	226	0	0,0%	1743	0

# Wildlife animals (without foxes) submitted for Rabies investigation in Slovakia during 2017



animal	January	February	March	April	May	June	July	August	September	October	November	December	Total
wild boar		1				1	1	2		1		1	7
badger				2									2
hedgehog										1			1
mole						1							1
marten					1		1	1			1	1	5
waesel				1									1
bear						1							1
mouse				4						2			6
bat		1			1								2
rat						1	1	1	3			1	7
raccoon dog		2	1	2	1	5	1	8			1		21
lynx									1				1
owl					1								1
roe deer							1			1		1	3
squirrel				1									1
wolf	1												1
otter		1											1
<b>total</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>10</b>	<b>4</b>	<b>9</b>	<b>5</b>	<b>12</b>	<b>4</b>	<b>5</b>	<b>2</b>	<b>4</b>	<b>62</b>

## Domestic animals submitted for Rabies investigation in Slovakia during 2017



animal	January	February	March	April	May	June	July	August	September	October	November	December	total
dog	11	10	6	7	9	6	6	16	8	1	9	3	92
cat	6	6	7	2	8	5	5	9	6	10	4	2	70
cattle			1										1
sheep									1				1
hamster	1												1
rat						1				1	1		3
ferret								1					1
degu										1			1
total	18	16	14	9	17	12	11	26	15	13	14	5	170

# Financial provision of plan part with financial contribution from the EC

- financial contribution from the Community for the eradication, control and monitoring representing 75% of costs intended for
  - cost of vaccine doses and baits (per dose)
  - cost of vaccine distribution (per dose)
  - **laboratory diagnostics – ELISA test, test to detect tetracycline in bone, FAT test, sequencing analyses, vaccine titration tests**
  - sampling delivery of wild animals



Grant Decision- SANTE/VP/2017/SK/Sl2.749901





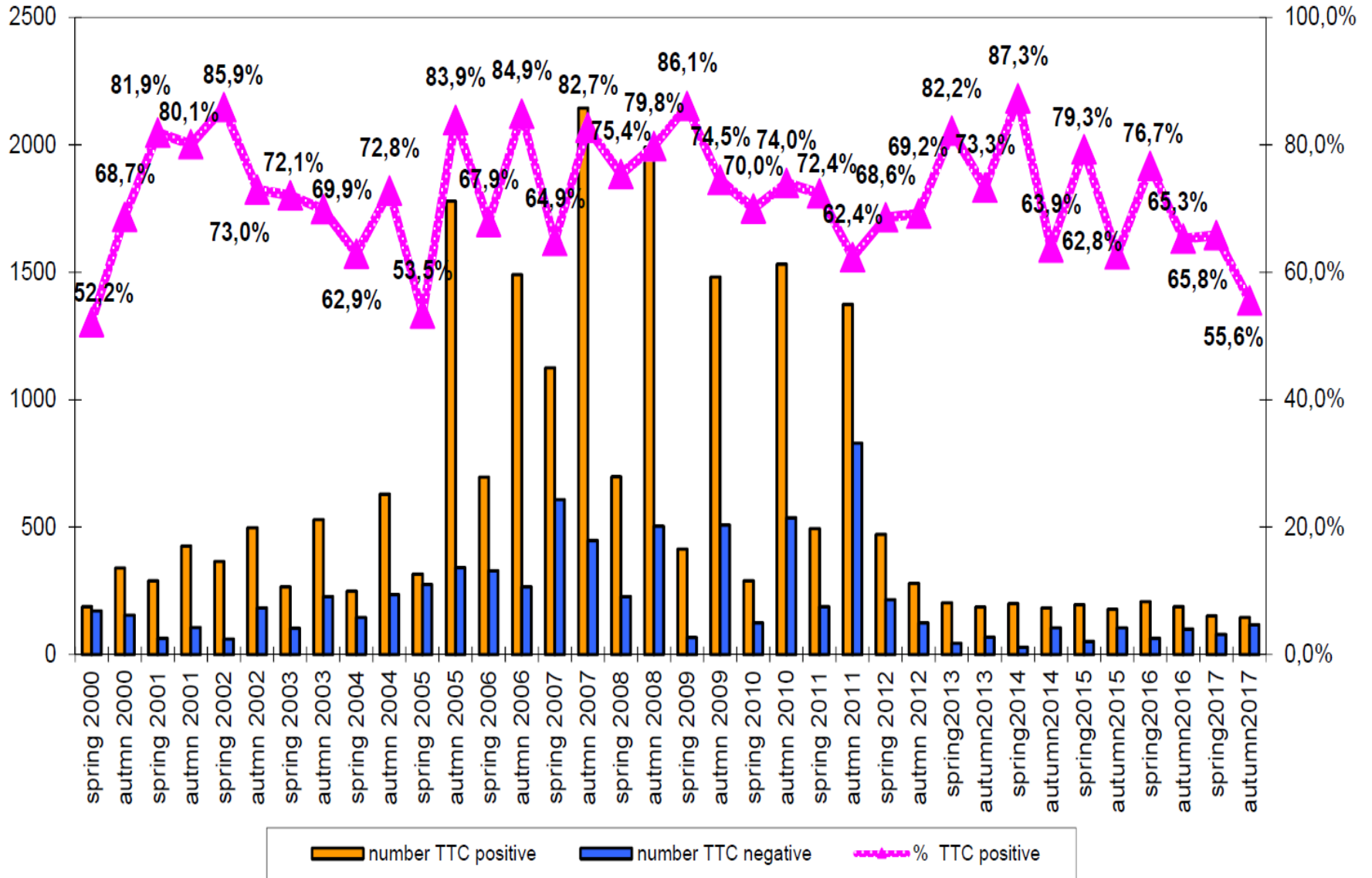
# Final Financial Report in Slovak Republic in 2017 – measures eligible for Rabies co-financed eradication program



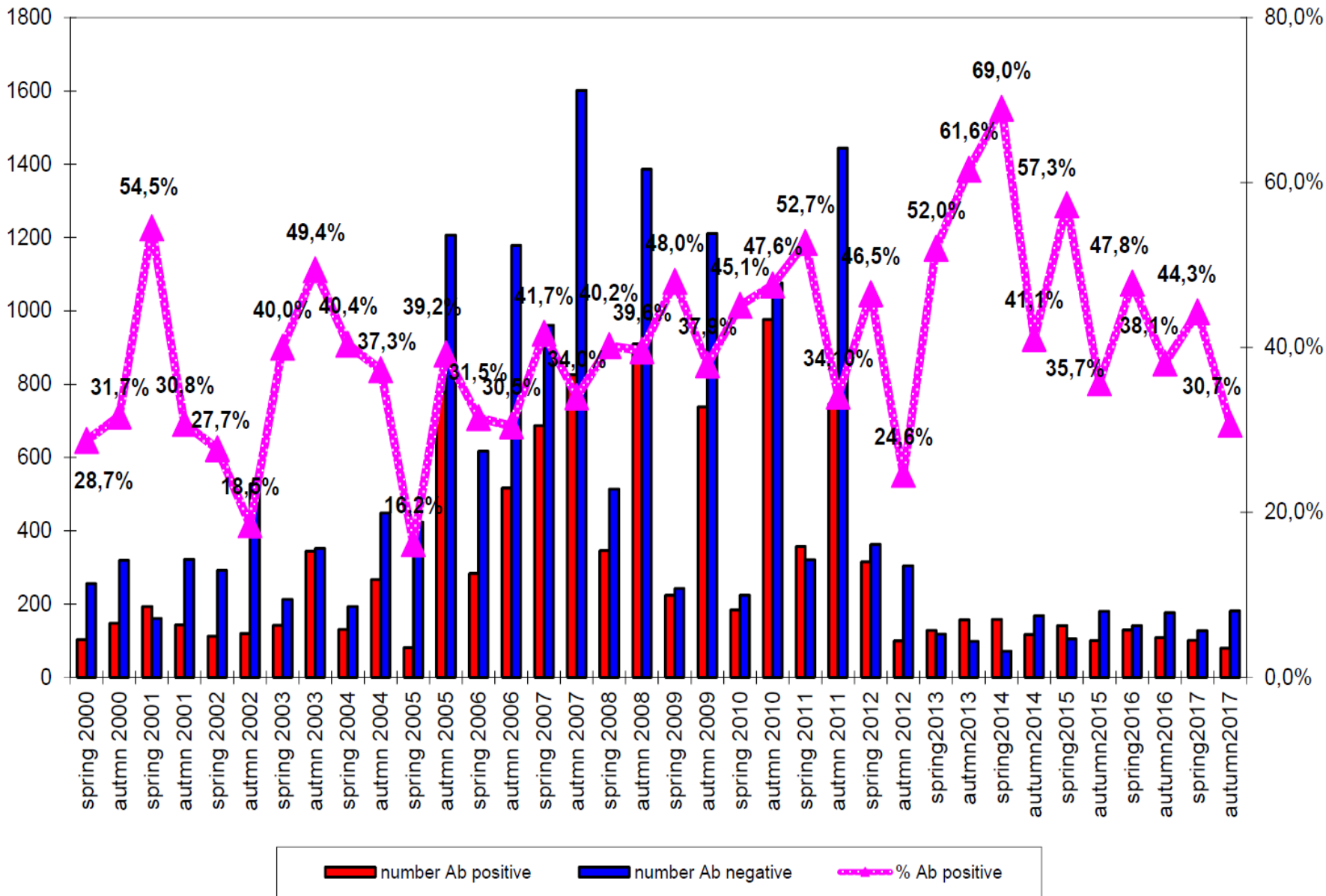
Region	Vaccines and distribution (EUR)	Laboratory analysis (EUR)	Sampling	Totally Costs (EUR)
Slovak Republic	245 069,25	26 859,11	12 521,25	284 449,60



# TTC detection from 2000 - 2017



## Antibody detection from 2000 - 2017



# *Conclusions*



**Positive cases : 2013, 2015**

**Without positive cases from 2016 (the same situation 2018)**

**Programme continues in 2018**

- Oral vaccination of foxes
- Vaccination of domestic carnivoras
- Surveillance and monitoring programme ( whole country, special focused on the high risk area close to the neighboring countries with rabies occurrence )

**Due to favourable situation SK will ask for recovery of free rabies status ( 3 years period without positive case)**

Thank you for your attention

