



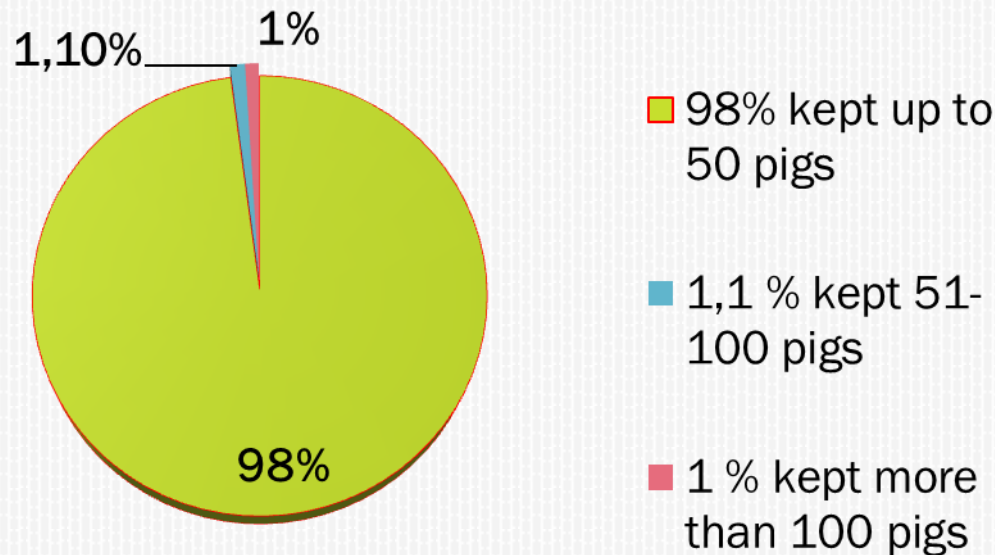
MINISTRY OF AGRICULTURE
VETERINARY AND FOOD SAFETY DIRECTORATE

***Classical Swine Fever
Programme in Croatia for
2015***

June 2016

2015–PIG POPULATION IN CROATIA

There were **97 140 holdings** in Croatia in 2015, with a population of **1.5 million pigs**.



1% had more than 100 pigs and these holdings produced 47,1% of pigs.

CSF SEROLOGICAL SURVEILLANCE IN DOMESTIC PIGS IN 2015

Target populations (high risk pig populations) to which results of CSF surveillance are applicable:

- **Component I** - commercial pig farms with 100 or more fattening pigs in 4 counties: Karlovac, Sisak-Moslavina, Brod-Posavina and Vukovar-Srijem county
- **Component II** - farms keeping 5 or more sows in these 4 counties
- **Component III** - mixed herds keeping 10 or more pigs in these 4 counties – with not fully implemented biosecurity measures
- **Component IV** - mixed herds keeping 10 or more pigs in territory of other 17 counties – with not fully implemented biosecurity measures

By County	Number of farms according to the programme for 2015				In total	Number of farms tested
	I	II	III	IV		
Zagreb				11	11	45
Krapina-Zagorje				10	10	12
Sisak-Moslavina	8	54	86		148	379
Karlovac		16	60		76	25
Varaždin				12	12	22
Koprivnica-Križevci				12	12	59
Bjelovar-Bilogora				12	12	8
Primorje-Gorski Kotar				4	4	0
Lika-Senj				4	4	2
Virovitica-Podravina				12	12	17
Požega-Slavonia				14	14	15
Brod-Posavina	46	38	89		173	209
Zadar				3	3	2
Osijek-Baranja				15	15	135
Šibenik-Knin				4	4	0
Vukovar-Srijem	37	79	104		220	336
Split-Dalmatia				6	6	9
Istra				7	7	7
Dubrovni-Neretva				2	2	1
Međimurje				10	10	10
The City of Zagreb				10	10	11
Total	91	187	339	148	765	1304

Minimum number of farms according to the programme for 2015 was 765.

The actual number of farms included in the program was 1304.

CSF VIROLOGICAL SURVEILLANCE IN DOMESTIC PIGS IN 2015

Components of virological surveillance:

- Virological testing (for the purpose of ruling out CSF) (for example whenever suspicious death occurs in a pig farm)
- Pigs which exhibit clinical symptoms associated with CSF
- Pigs not responding to 5-day antibiotic therapy

CSF VIROLOGICAL SURVEILLANCE FROM 2007- 2015 – DOMESTIC PIGS

Suspicion on CSF – measures on suspicion

Year	Number of locations with CSF suspicions	Number of confirmed suspicions	Number of suspicions ruled out
2007	209	128	81
2008	9	3	6
2009	4	0	4
2010	22	0	22
2011	7	0	7
2012	6	0	6
2013	3	0	3
2014	4	0	4
2015	2	0	2

In 2015 two suspicions in two different holdings were reported to the competent authority. All necessary measures were implemented in accordance with legislation and suspicions were ruled out.

CSF VIROLOGICAL SURVEILLANCE FROM 2007- 2015 – DOMESTIC PIGS

Exclusion of disease in 2015

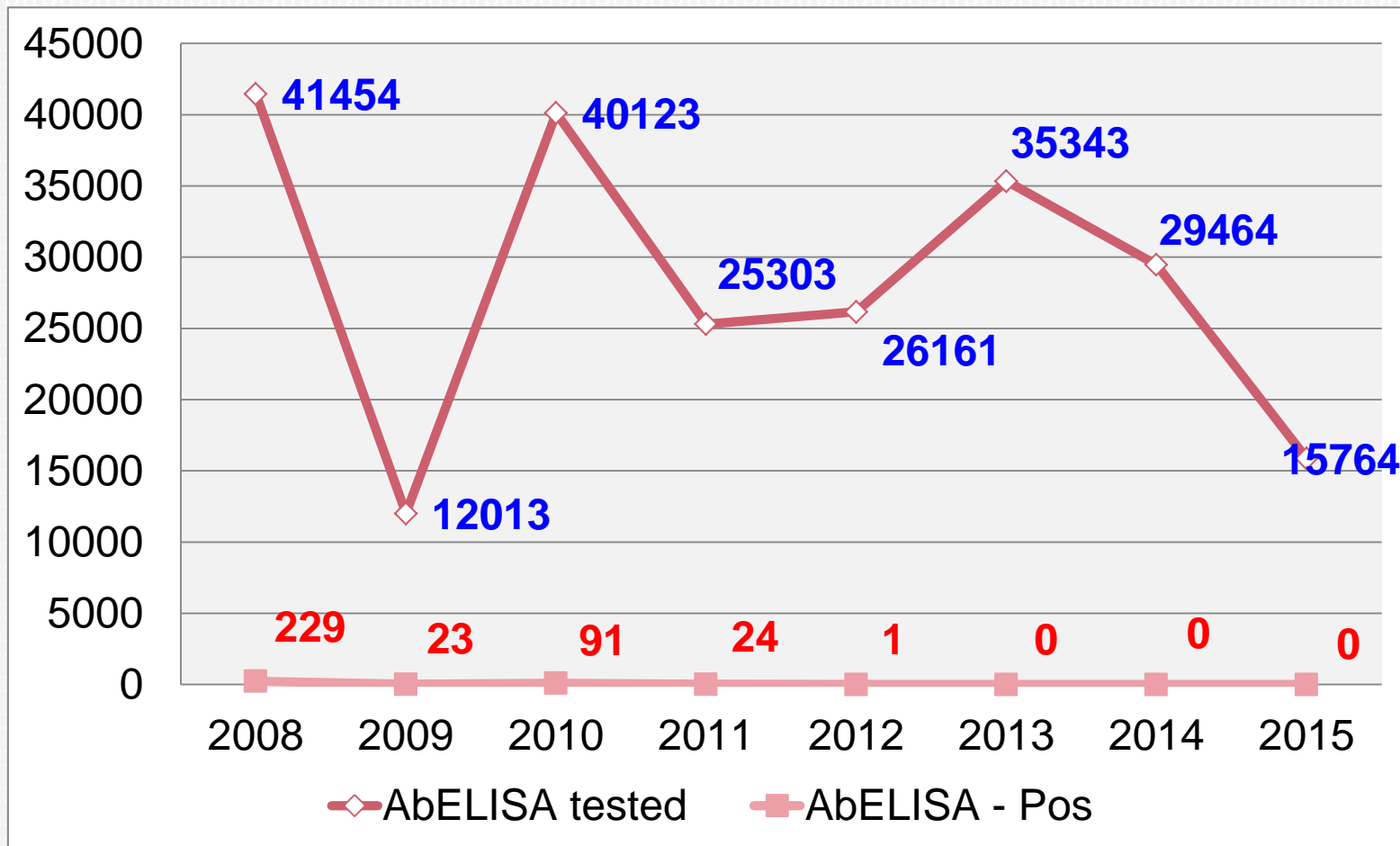
Year	Number of holdings where CSF was ruled out	Number of CSF positive findings
2008	46	0
2009	14	0
2010	29	0
2011	67	0
2012	31	0
2013	39	0
2014	42	0
2015	38	0

2015			
Number	County	Holdings	Number of pigs
1	Koprivnica-Križevci	22	22
2	Zagreb	6	8
3	Karlovac	7	7
4	Vukovar-Srijem	3	11
4	In total	38	48

In 2015 in 38 pig holdings, CSF was ruled out.

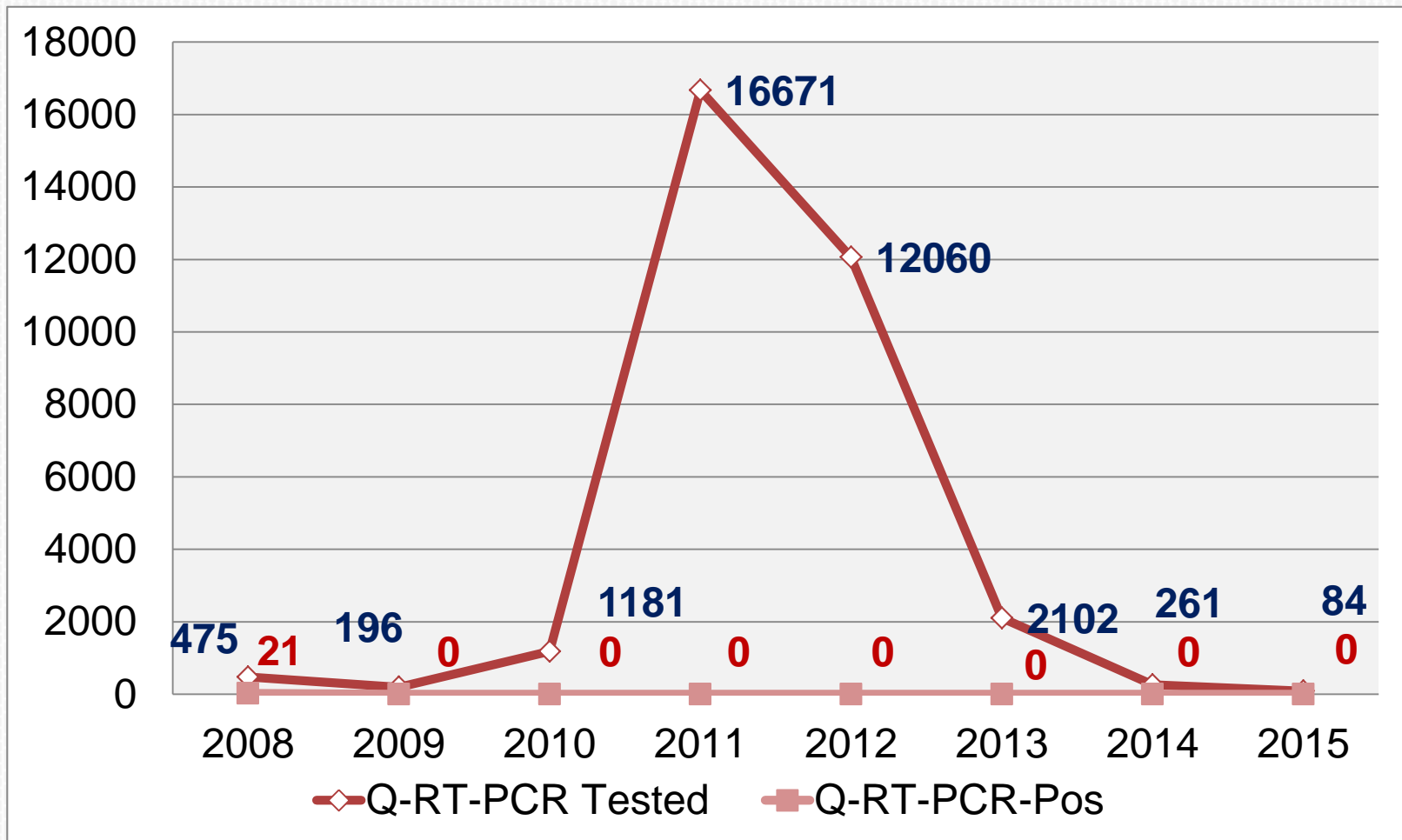
CSF SEROLOGICAL TESTING IN DOMESTIC PIGS

2008 - 2015



In 2015 a total of 15764 serological tests in domestic pigs were performed and all of them were negative.

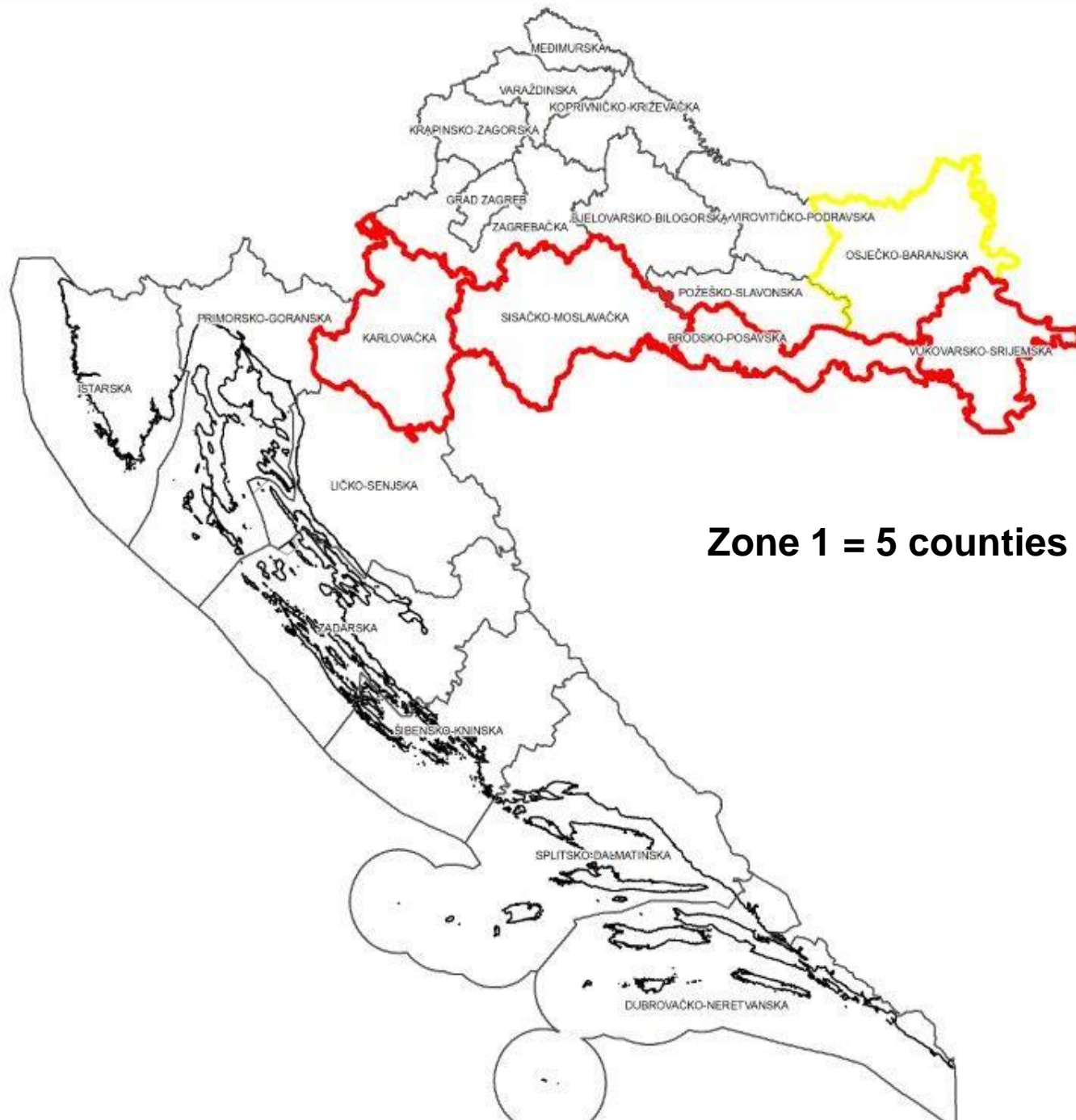
CSF VIROLOGICAL TESTING IN DOMESTIC PIGS 2008 - 2015



A total of 84 virological tests in domestic pigs were performed and all of them were negative.

2015 CSF SURVEILLANCE IN WILD BOAR

- Taking into account risk factors associated with CSF in wild boars and according to the Decision 2013/764/EC in the territory of the counties of Karlovac, Sisak-Moslavina, Slavonski Brod-Posavina and Vukovar-Srijem, data on CSF status of wild boar population was collected at a country level.
- Two Zones have been established:
 - **Zone 1** which includes 5 counties (Karlovac, Sisak-Moslavina, Slavonski Brod-Posavina, Vukovar-Srijem and Osijek Baranja county)
 - **Zone 2** which includes 16 counties (rest of the country)
- The whole country (Zone 1 and 2) has been divided into 65 sampling areas according to the administrative areas (counties) and estimated number of wild boars at the peak of hunting season.



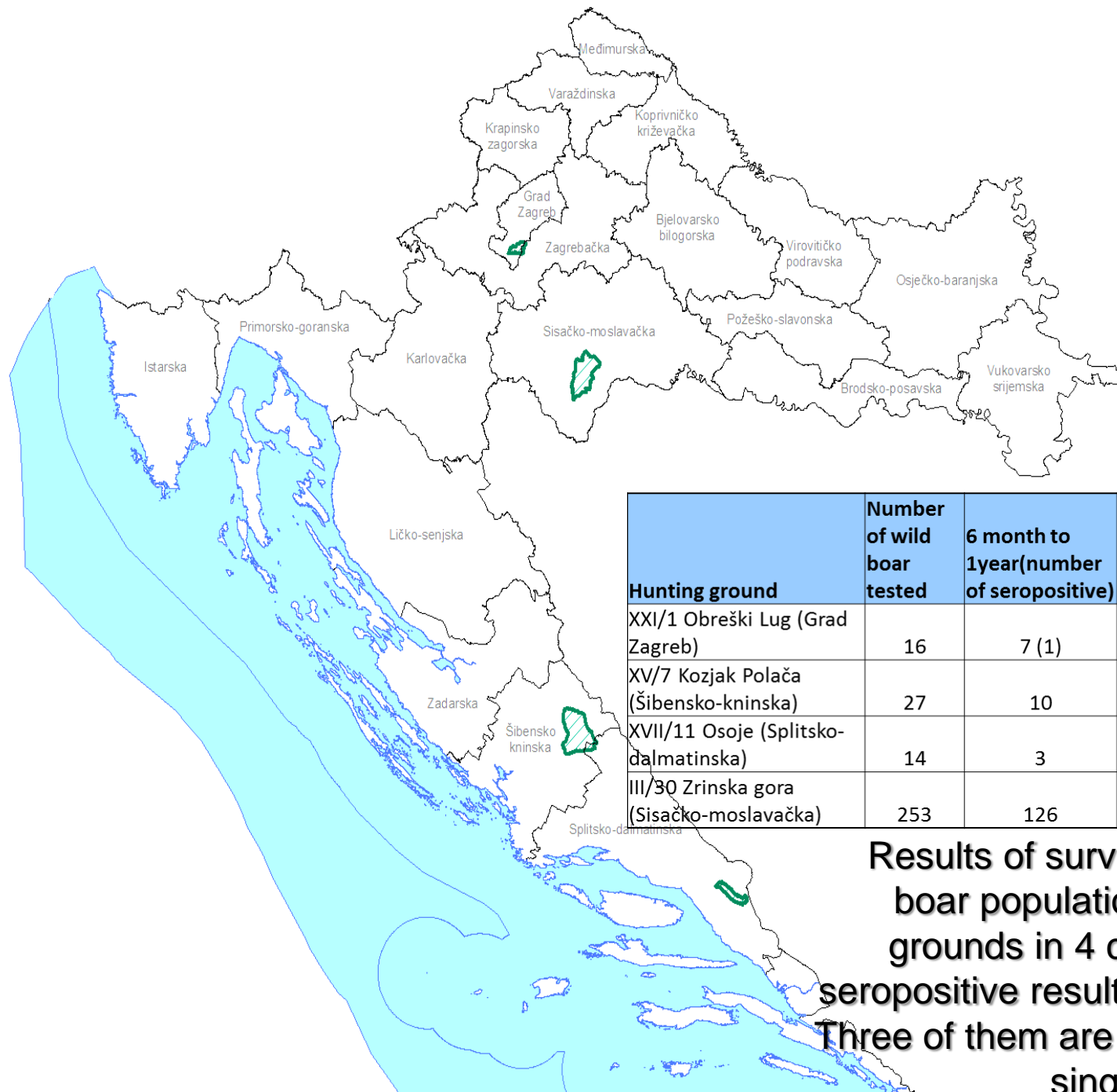
Zone 1 = 5 counties

2015 CSF SURVEILLANCE IN WILD BOAR

- In Zone 1 are hunting areas where organ and blood samples were taken from hunted wild boars for CSF serological and virological examinations. In every sampling area 138 samples were taken for the purpose of serological and virological testing. This allows detection of at least 1 seropositive wild boar if CSF seroprevalence in the sampling area is 2% or more, with 95% confidence.
- In Zone 2 are hunting areas, where only blood samples were taken from hunted wild boars for CSF serological examination. In every sampling area 59 blood samples were taken for the purpose of CSF serological testing. This allows detection of at least 1 seropositive wild boar if CSF seroprevalence in the sampling area is 5%, with 95% confidence.

Number of wild boar tested by age structure for 2015 final results

Counties	Zone	Number of wild boar tested	In total number of seropositive	Number of positives (%)	VN-test	6 month to 1 year tested	6 month to 1 year(number of seropositive)	1 to 2 years tested	1 to 2 years(number of seropositive)	>2 years tested	>2 years(number of seropositive)	Tested organs/PCR
Zagreb	2	247	0	0		113	0	53	0	81	0	0
Krapina-zagorje	2	96	0	0		54	0	25	0	17	0	0
Sisak-Moslavina	1	2964	1	0,03	1	1556	0	727	1	681	0	2902
Karlovac	1	1420	0	0		698	0	355	0	367	0	1332
Varaždin	2	77	0	0		43	0	17	0	17	0	0
Koprivnica-Križevci	2	120	0	0		62	0	15	0	43	0	3
Bjelovar-Bilogora	2	288	0	0		119	0	63	0	106	0	7
Primorje-Gorski Kotar	2	195	0	0		87	0	61	0	47	0	0
Lika-Senj	2	291	0	0		97	0	77	0	117	0	12
Virovitica-Podravina	2	136	0	0		86	0	19	0	31	0	0
Požega-Slavonia	2	263	0	0		171	0	33	0	59	0	1
Brod-Posavina	1	647	0	0		363	0	123	0	161	0	613
Zadar	2	74	0	0		43	0	7	0	24	0	11
Osijek-Baranja	1	337	0	0		170	0	73	0	94	0	91
Šibenik-Knin	2	126	1	0,79	1	30	0	35	0	61	1	47
Vukovar-Srijem	1	1196	0	0		583	0	268	0	345	0	1174
Split-Dalmatia	2	366	1	0,27	1	114	0	136	1	116	0	41
Istra	2	107	0	0		49	0	26	0	32	0	0
Dubrovnik-Neratva	2	73	0	0		12	0	17	0	44	0	0
Međimurje	2	84	0	0		42	0	21	0	21	0	0
The City of Zagreb	2	32	1	3,12	1	13	1	7	0	12	0	9
Total		9139	4	0,04%	4	4505	1	2158	2	2476	1	6243



Hunting ground	Number of wild boar tested	6 month to 1 year (number of seropositive)	1 to 2 years	>2 years	Tested organs/PCR
XXI/1 Obreški Lug (Grad Zagreb)	16	7 (1)	1	8	6
XV/7 Kozjak Polača (Šibensko-kninska)	27	10	7	10(1)	19
XVII/11 Osoje (Splitsko-dalmatinska)	14	3	3(1)	8	9
III/30 Zrinska gora (Sisačko-moslavačka)	253	126	67(1)	60	247

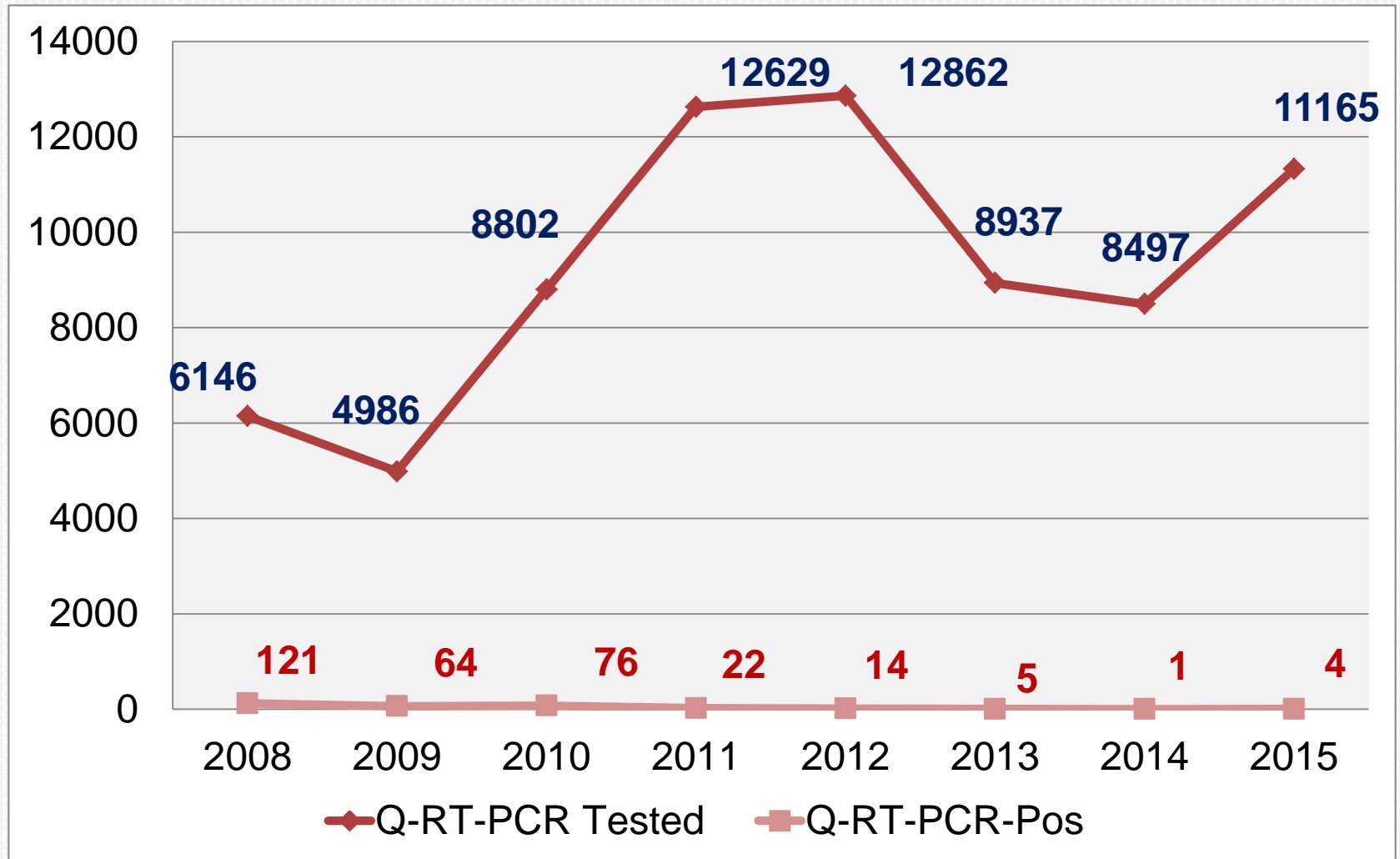
Results of surveillance in wild boar population in 4 hunting grounds in 4 counties where seropositive results were found. Three of them are considered as singleton reactors.

Hunting ground	Number of wild boar tested	6 month to 1year(number of seropositive)	1 to 2 years	>2 years	Tested organs/PCR
XXI/1 Obreški Lug (Grad Zagreb)	16	7 (1)	1	8	6
XV/7 Kozjak Polača (Šibensko-kninska)	27	10	7	10(1)	19
XVII/11 Osoje (Splitsko-dalmatinska)	14	3	3(1)	8	9
III/30 Zrinska gora (Sisačko-moslavačka)	253	126	67(1)	60	247

Results of surveillance in wild boar population in 4 hunting grounds in 4 counties where seropositive results were found. Three of them are considered as singleton reactors

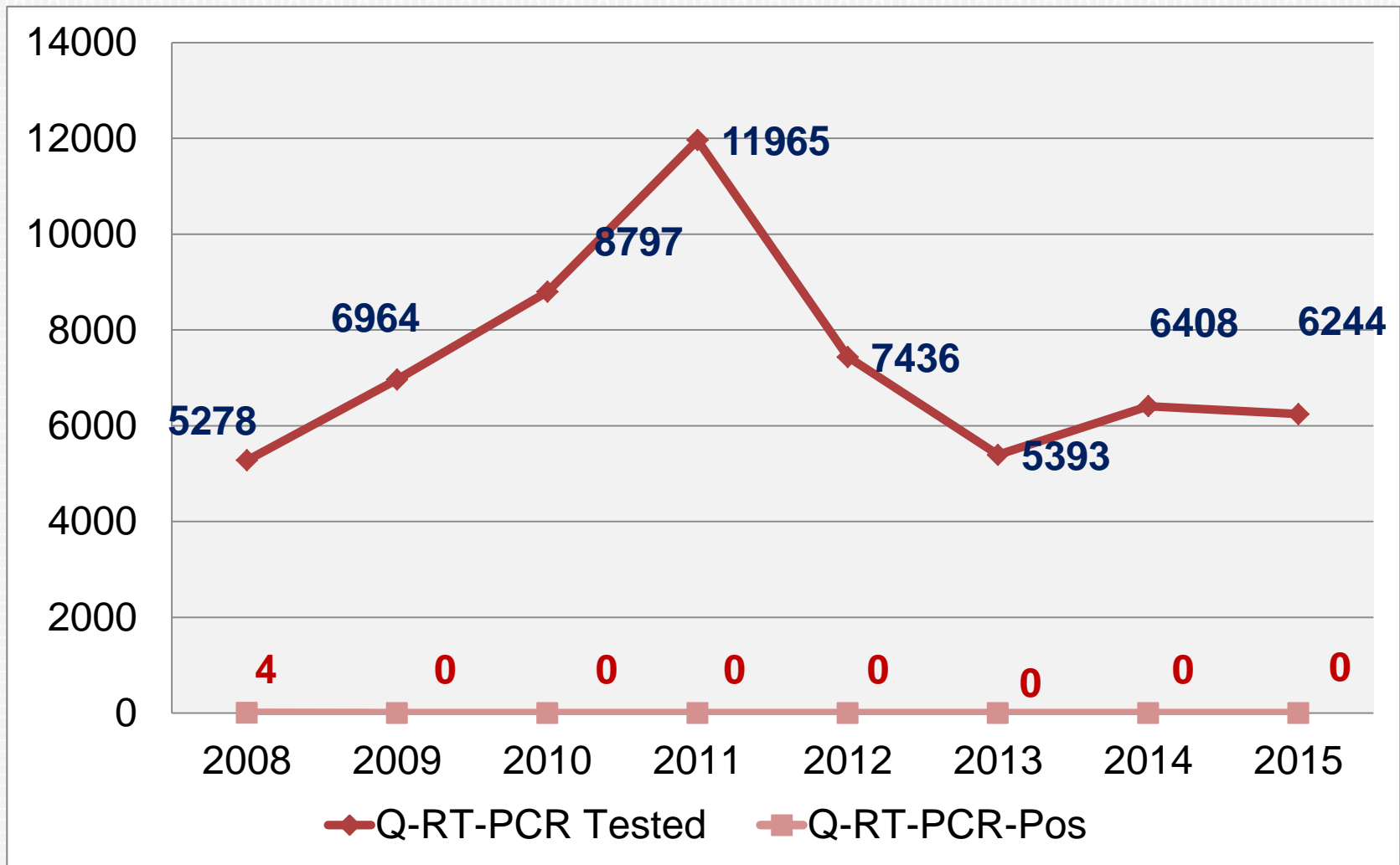
Three serologically positive samples (from 4 serologically positive) are defined as singleton reactors since none of them was CSF virus positive, all other wild boars shot at the same day and from the same herd were serologically negative; further monitoring within and around the area of the hunting ground where they were shot didn't result in any new positive findings, no clinical signs were observed that would indicate a disease and none other conclusion could be made.

CSF SEROLOGICAL TESTING IN WILD BOARS FROM 2008 - 2015



In 2015 a total of 11165 serological tests in wild boars were performed and 4 of them were positive.

CSF VIROLOGICAL TESTING IN WILD BOARS FROM 2008 - 2015



A total of 6244 virological tests in wild boars were done and non of them were positive.



MINISTRY OF AGRICULTURE
VETERINARY AND FOOD SAFETY DIRECTORATE

Thank you for your attention!