

GF-TADs

GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES



Food and Agriculture
Organization of the
United Nations



Standing Group of Experts on ASF in Europe
under the GF-TADs umbrella

16th meeting (SGE ASF16)

November 2020

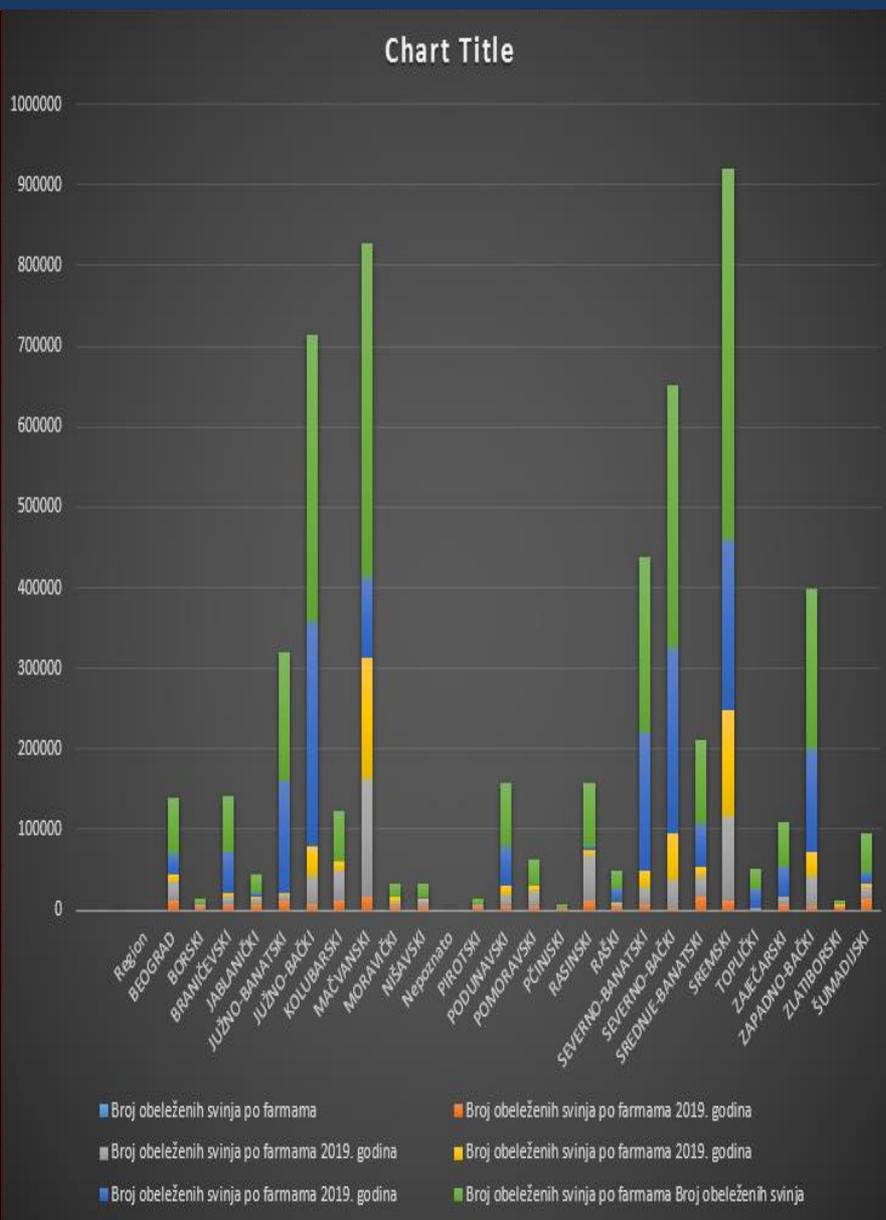
ASF Serbian experience

EARLY REACTION AND CONTROL MEASURES IN DOMESTIC PIGS

S E R B I A

NUMBER OF MARKED AND REGISTERED PIGS IN RS

DISTRICT	2019.				Total
	Number of marked pigs				
	Holding	Small farm	Medium farm	Big comercial farm	
BEOGRAD	10,587	25,310	7,348	26,155	69,400
BORSKI	5,785	1,010	619		7,414
BRANIČEVSKI	6,293	10,445	4,630	51,409	72,777
JABLANIČKI	7,862	6,859	1,748	5,399	21,868
JUŽNO-BANATSKI	10,898	7,526	3,825	139,800	162,049
JUŽNO-BAČKI	7,917	34,670	35,542	284,113	362,242
KOLUBARSKI	12,410	37,092	11,277	1,714	62,493
MAČVANSKI	16,539	146,467	153,052	101,234	417,292
MORAČIČKI	4,381	5,914	5,935	568	16,798
NIŠAVSKI	5,391	7,192	1,982	1,498	16,063
PIROTSKI	4,635	1,562	111	1,073	7,381
PODUNAVSKI	5,258	13,692	12,101	49,577	80,628
POMORAVSKI	5,446	18,212	7,440	530	31,628
PČINJSKI	2,637	392	134		3,163
RASINSKI	12,801	53,974	7,756	4,956	79,487
RAŠKI	3,743	3,577	2,897	14,704	24,921
SEVERNO-BANATSKI	8,201	20,665	19,356	172,764	220,986
SEVERNO-BAČKI	2,891	35,074	58,912	230,311	327,188
SREDNJE-BANATSKI	16,568	24,889	11,348	54,161	106,966
SREMSKI	11,792	105,698	132,770	212,914	463,174
TOPLIČKI	1,082	1,224	115	23,172	25,593
ZAJEČARSKI	7,236	8,983	651	37,592	54,462
ZAPADNO-BAČKI	4,693	37,385	30,990	128,234	201,302
ZLATIBORSKI	4,550	1,282	552		6,384
ŠUMADIJSKI	13,135	14,941	4,079	15,285	47,440
Grand Total	192,731	624,035	515,170	1,557,163	2,889,099

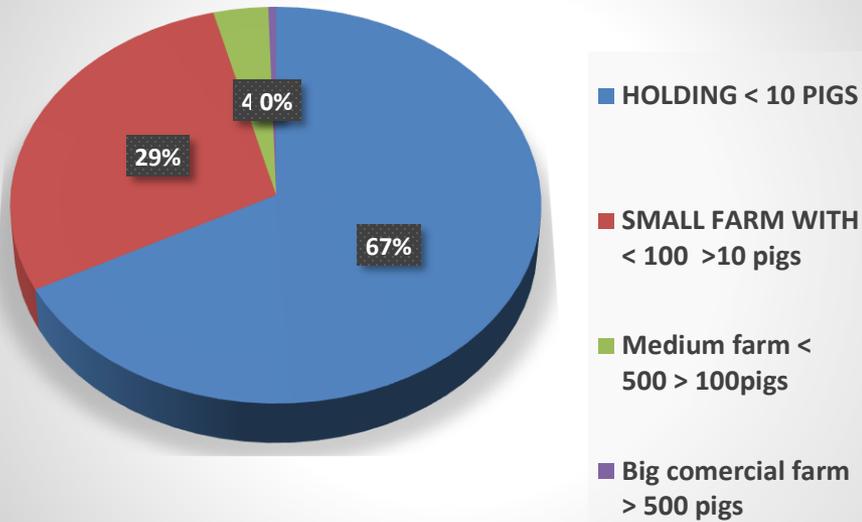


Domestic pigs population

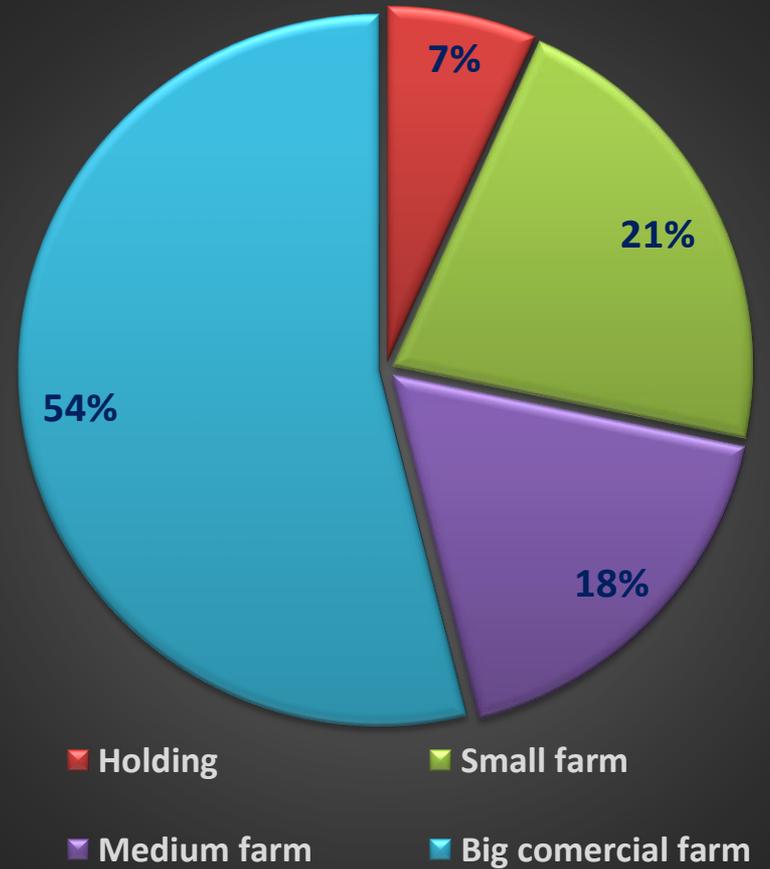
- in 2019, a total of 74,985 pig holdings were registered in Serbia, of which:
- 50,1251 kept up to 10 pigs,
- 21, 741 kept 10 to 100 pigs,
- medium commercial farms of 100 to 500 pigs- 2,721
- large commercial farms with more than 500 pigs- 398.
- The highest density of holdings is in the northwest part of the country.



**NUMBER AND CATEGORY OF HOLDING
RELATIVE TO NUMBER OF PIGS BY
DISTRICTS IN RS IN 2019**

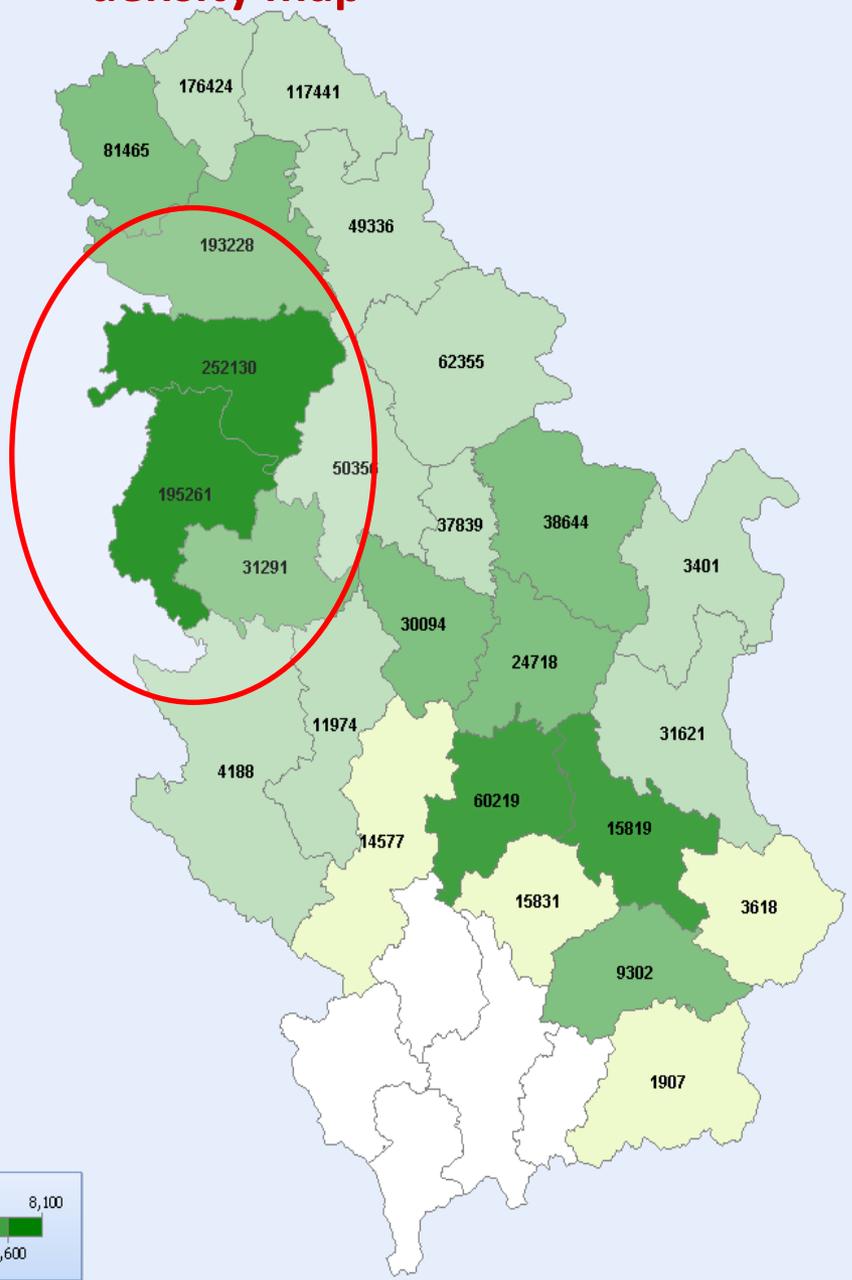


**NUMBER OF MARKED AND REGISTERED
PIGS IN RS 2019**

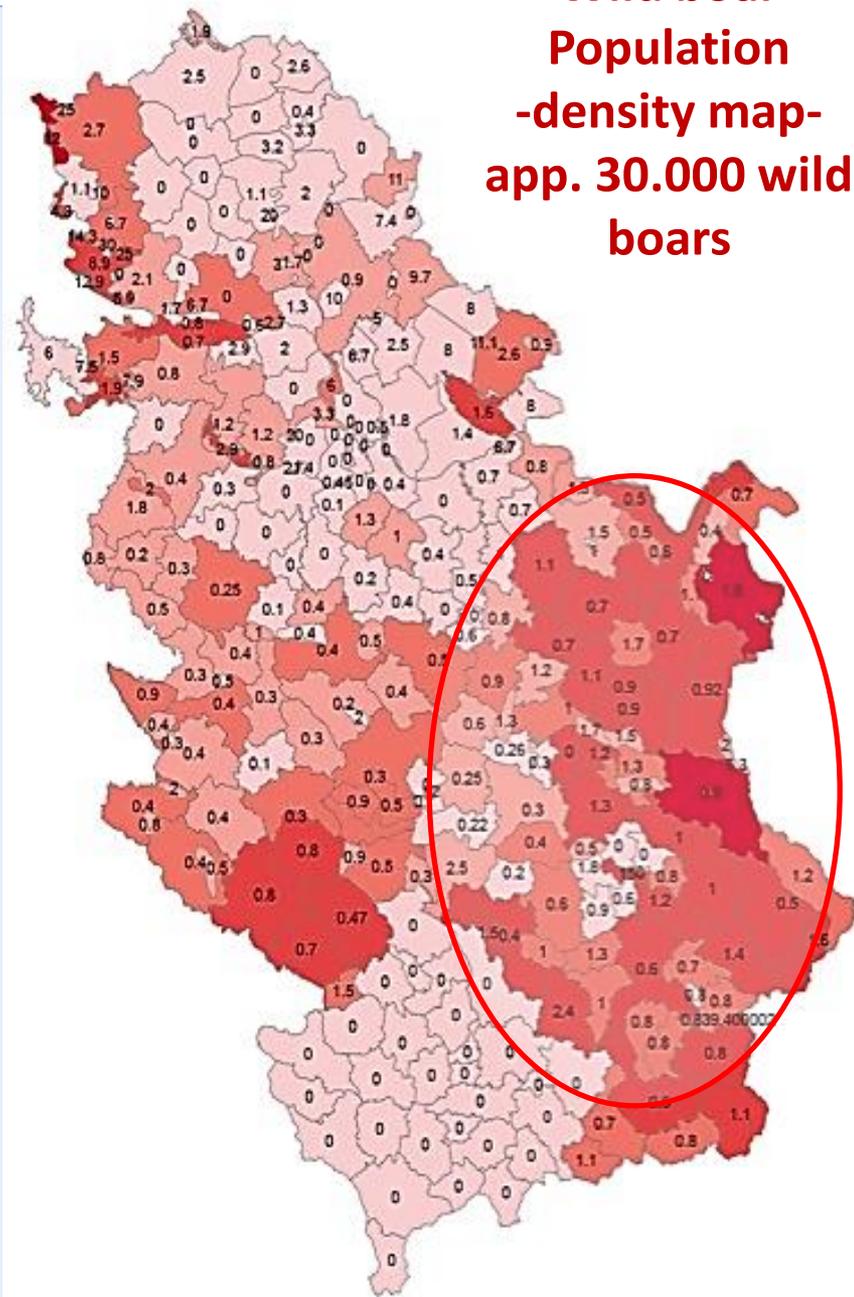


Domestic pig Population

-density map-

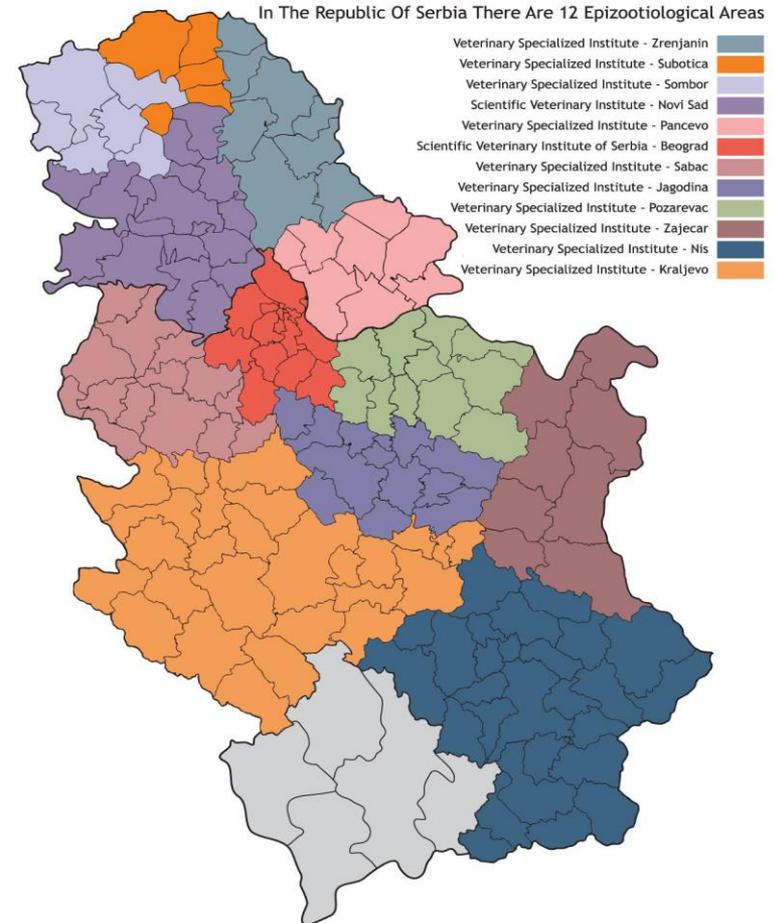


Wild boar
Population
-density map-
app. 30.000 wild
boars



VETERINARY SYSTEM

- app.2500 veterinarians involved
- 355 veterinary stations (staffed with a minimum of three veterinarians)
- 627 veterinary ambulances (staffed with a minimum of one veterinarian).
- 12 veterinary institutes (ten specialistic and two scientific)



ADMINISTRATIVE DISTRICTS IN SERBIA (25)



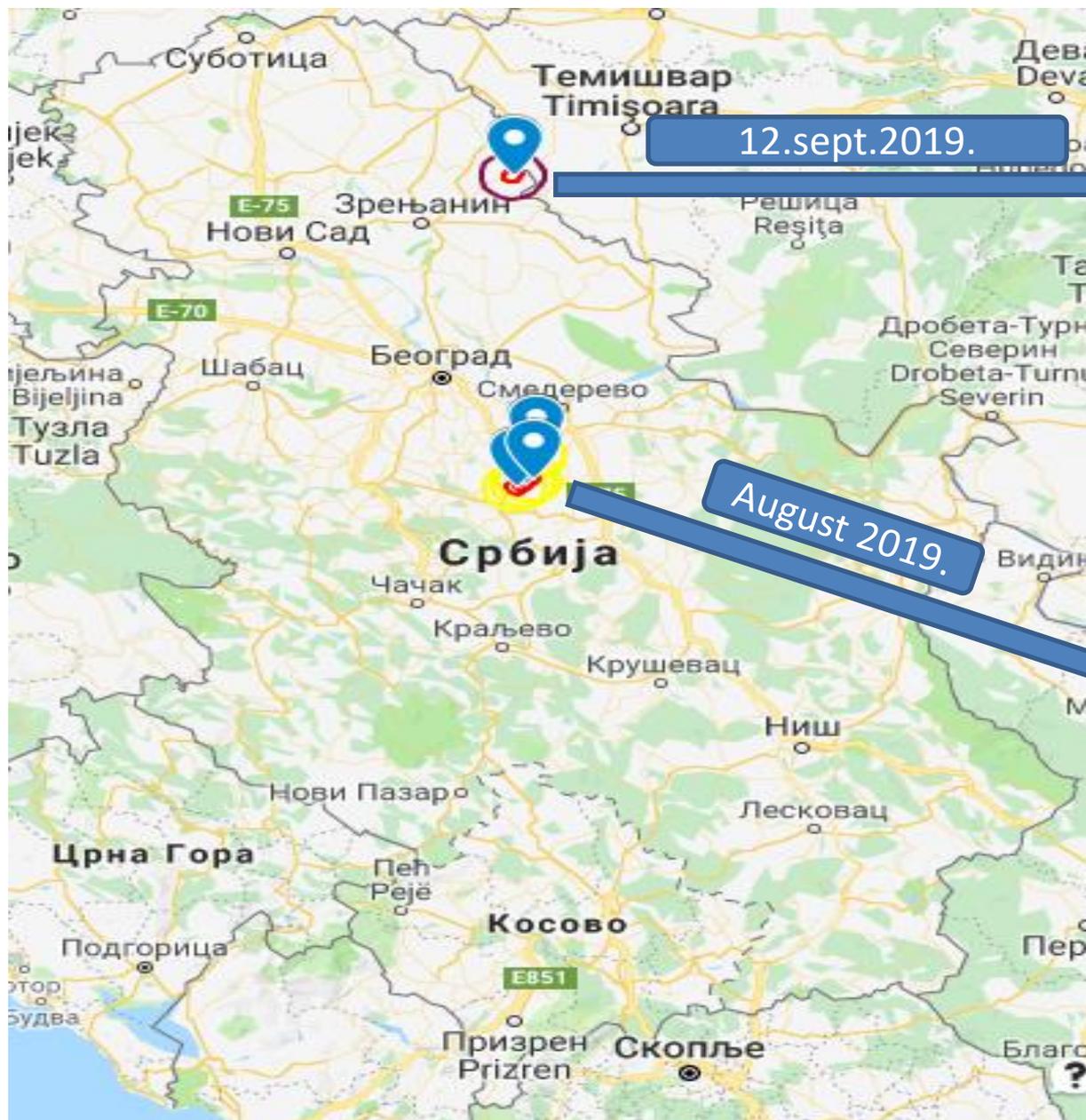
12 Regional crisis centres



4 RAPID RESPONSE CENTERS:

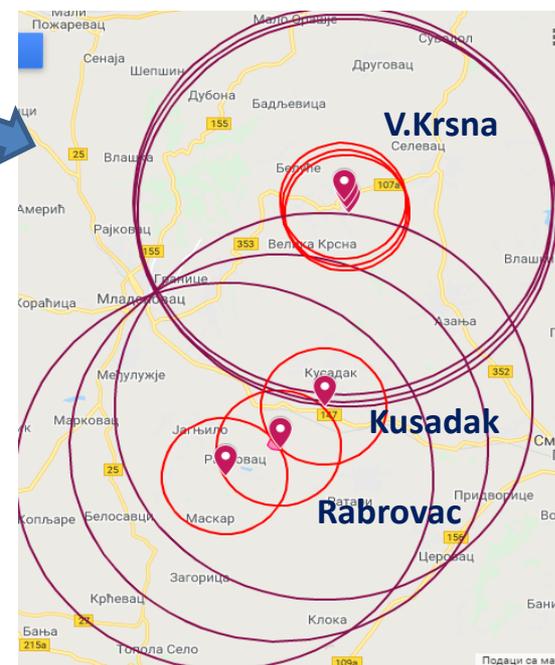
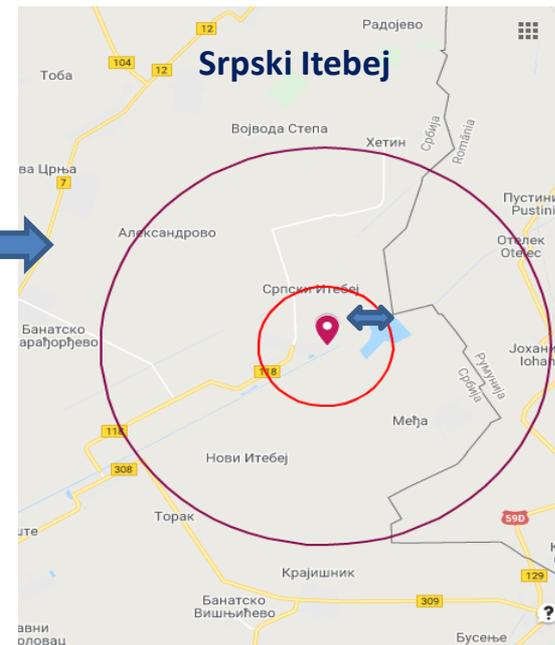
1. SVI NOVI SAD
2. SVI S BELGRADE
3. VSI KRALJEVO
4. VSI NIS

ASF IN SERBIA domestic pigs 2019



12.sept.2019.

August 2019.

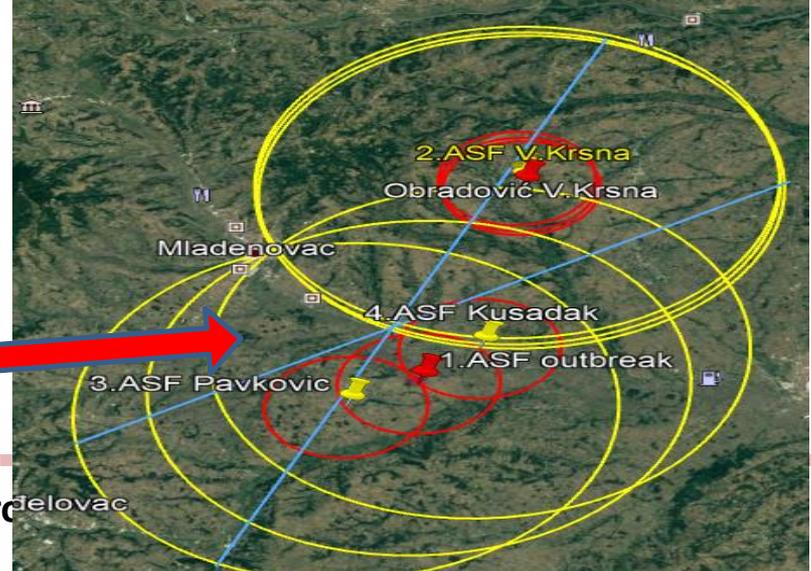
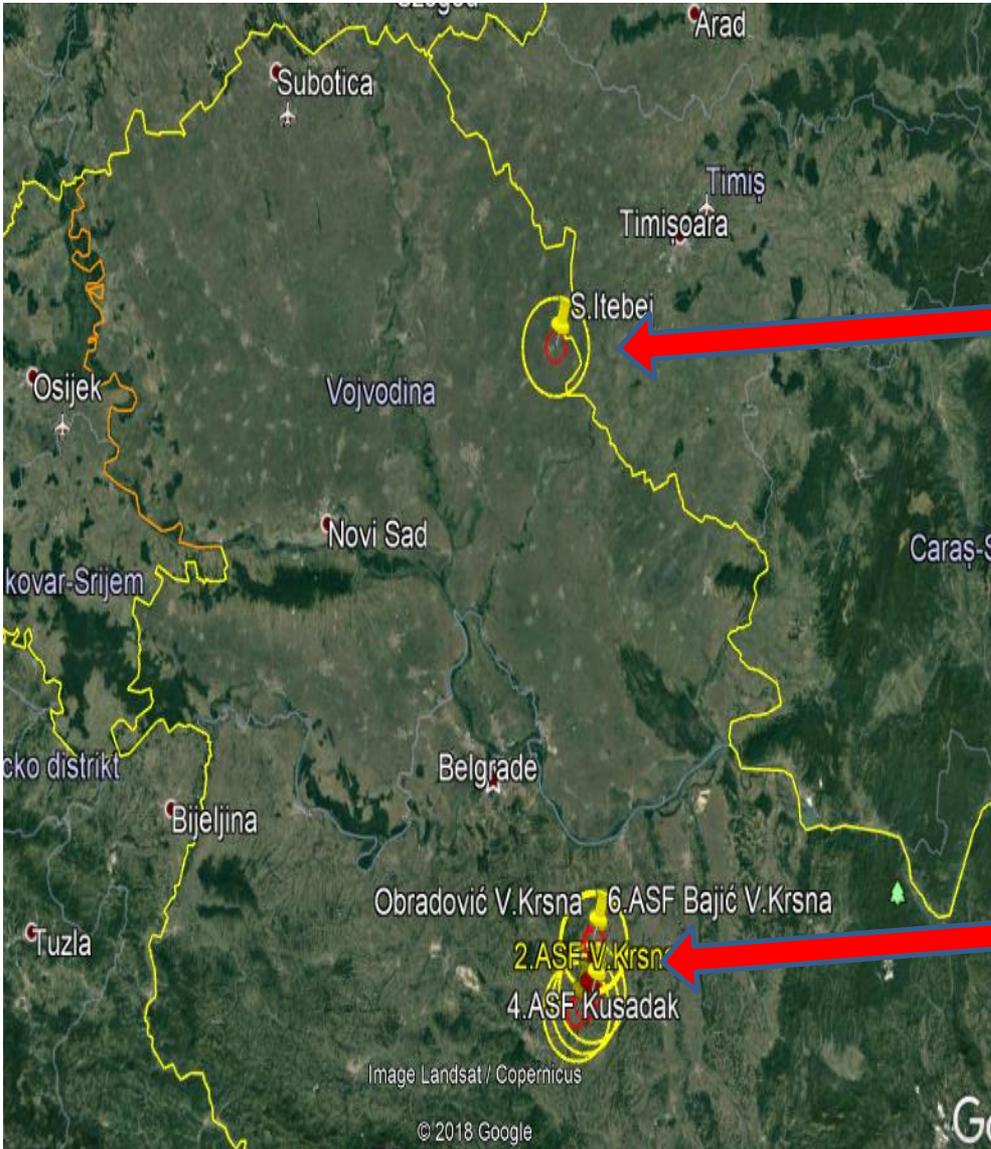


ASF in domestic pigs - 30.July to 12.September

- ❖ *Despite the primary identified risk zones in order to enhance surveillance and control measures within the bordering regions to Hungary, Romania, Bulgaria, the first appearance of ASF in domestic pigs happened in **17 outbreaks** (three settlements- Rabrovac, Velika Krsna, Kusadak, two municipalities -Mladenovac, Smederevska Palanka and two districts- City of Belgrade, Podunavski). in the central parts of the country.(31/7-19/8)*
- ❖ *Finally, the **18th outbreak** occurred in the village of Srpski Itebej (municipality of Žitište, Srednjebanatski district), close to the Romanian border.(12/9).*
- ❖ ***In total 634 pigs were destroyed in 47 holdings***
- ❖ ***No big/commercial farms were affected.***
- ❖ ***After the appropriate measures applied with no positive results or evidence of presence and spreading of ASF were found during the overall surveillance, the outbreaks were officially reported in December to OIE as resolved***



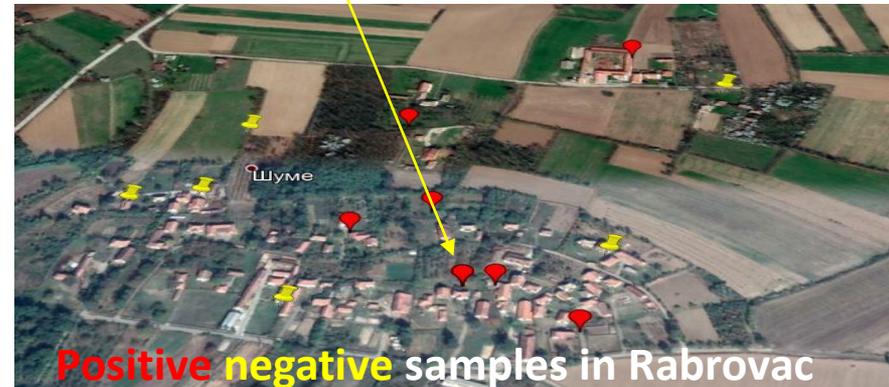
Geodistribution 2019



STAMPING OUT/PREVENTIVE DEPOPULATION ON CONTACT HOLDINGS

RABROVAC

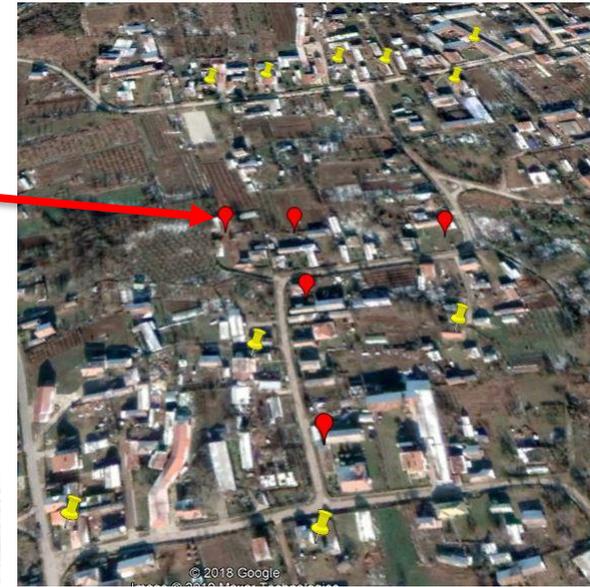
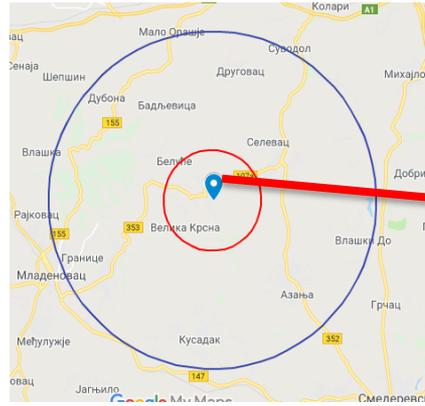
- 31/7.- stamping out on infected holding (**24 pigs culled**)
- 31/7. – **stamping out of 202 pigs on 17 contact holdings**
- Out of 17 samples taken during stamping out 8 positive ,9 negative
- **30. – 31/7. 1447 pigs in 124 holdings were clinically examined**



Depopulation zone in Rabrovac (Šume)

STAMPING OUT/PREVENTIVE DEPOPULATION ON CONTACT HOLDINGS

- 1/8.- new outbreak in Velika Krsna
- 1.-2/8. stamping out of 75 pigs in 8 contact holdings
- 3-4/8. 2.550 pigs in 246 holdings were examined



Legal base ACTIVITIES

- **The official ordinance on establishing protection and surveillance zones were issued**
- **The emergency headquarters (Regional/Local Crisis Centers were established AND ENFORCED**
- **The Government „Order on taking measures to prevent the immeditation, emergency, detection, distribution, eradication, and eradication of ASF (pestis suum africana) in the Republic of Serbia“ including the implementing Directive ammended and adopted**
- **The „Plan of surveillance and diagnostic tests on the african swine fever (ASF) in domestic pigs for 2019 and 2020 “ adopted**
- EUVET team“ visit (14-16 AUGUST 2019.)
- GF-TADs Veterinary Mission on ASF (10-13 December.2019)
- **The ordinance of establishing the infected zone and additional protection (buffer) zone on asf in wild boar**
- **The Instruction and quidelines for hunters and hunting activities**

The plan on ASF surveillance and diagnostic tests in domestic pigs 16.9-1.12.2019

- The specific surveillance program was carried out throughout entire territory of the Country by veterinary institutes and veterinary service under the Animal Health Measures Program, adopted on annual basis, with the aims to do:
- Active surveillance:
- **Visiting farms/holdings, clinical examination of pigs, determining the health status of holdings and completing the Questionnaire, carried out every 7-14 days**
- Rising awareness campaign for farmers and pig holders
- Passive surveillance:
- Diagnostic examination (clinical and laboratory) for the presence of the African swine fever virus genome to determine the health status of pigs on the holdings/farms and epidemiological situation in the Country.
- Diagnostic examination (clinical and laboratory) for the presence of the African swine fever virus genome and antibodies in affected (restriction) zone.
- ***The target group for testing on African swine fever virus includes dead or sick domestic pigs older than 2 months, or any other category in case no pigs older than 2 months are present at the farms/households.***

THE PLAN

ASF SURVEILLANCE AND DIAGNOSTIC TESTS IN DOMESTIC PIGS results

16-9-1-12-2019.

No	VSI/NIV	Number of farm visits with questionnaire completion and number of samples taken				Total number of visits / questionnaires completed	Total number of blood taken on a swab
		Veterinary stations		Veterinary services on farms			
		Number of visits / questionnaires completed	Number of blood taken on a swab	Number of visits / questionnaires completed	Number of blood taken on a swab		
1	VSI "SUBOTICA"	11,720	1,343	44	638	11,764	1,981
2	VSI "SOMBOR"	14,257	255	47	206	14,304	461
3	VSI "ZRENJANIN"	33,990	795	122	1,051	34,112	1,846
4	VSI "PANČEVO"	18,708	102	106	343	18,814	445
5	VSI "JAGODINA"	23,926	74	0	0	23,926	74
6	VSI "POŽAREVAC"	20,492	357	42	92	20,534	449
7	VSI "ZAJEČAR"	20,143	23	15	53	20,158	76
8	VSI "NIŠ"	42,043	548	11	38	42,054	586
9	VSI "KRALJEVO"	46,347	53	19	0	46,366	53
10	NIV "NOVI SAD"	41,944	1,821	154	1,452	42,098	3,273
11	VSI "ŠABAC"	58,951	2,923	0	0	58,951	2,923
12	NIV SRBIJE	14,344	4129	110	0	14,454	4,129
TOTAL		346,865	12,423	670	3,873	347,535	16,296

ASF IN DOMESTIC PIGS 2020

Outbreak in Vrandol, Pirot district

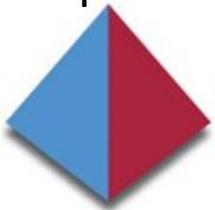
- ❖ The first case of ASF in domestic pigs was confirmed **on 30/06/2020**. in Vrandol village, Municipality of Bela Palanka in the Pirot administrative district, **in three holdings** which were the only outbreaks in the first semester of 2020. **The disease was confirmed in 12 pigs (6 dead and 6 killed). Finally, out of 180 destroyed pigs in three villages and 12 holdings 39 were positive.**
- ❖ Nevertheless, assuming that the virus can spread to the wild and domestic population, there were preventive culling foreseen and conducted within infected areas **in non-affected holdings/backyards with low biosecurity level, during which 1977 domestic pigs on 521 small holdings were destroyed or slaughtered in addition.**

ASF IN DOMESTIC PIGS 2020

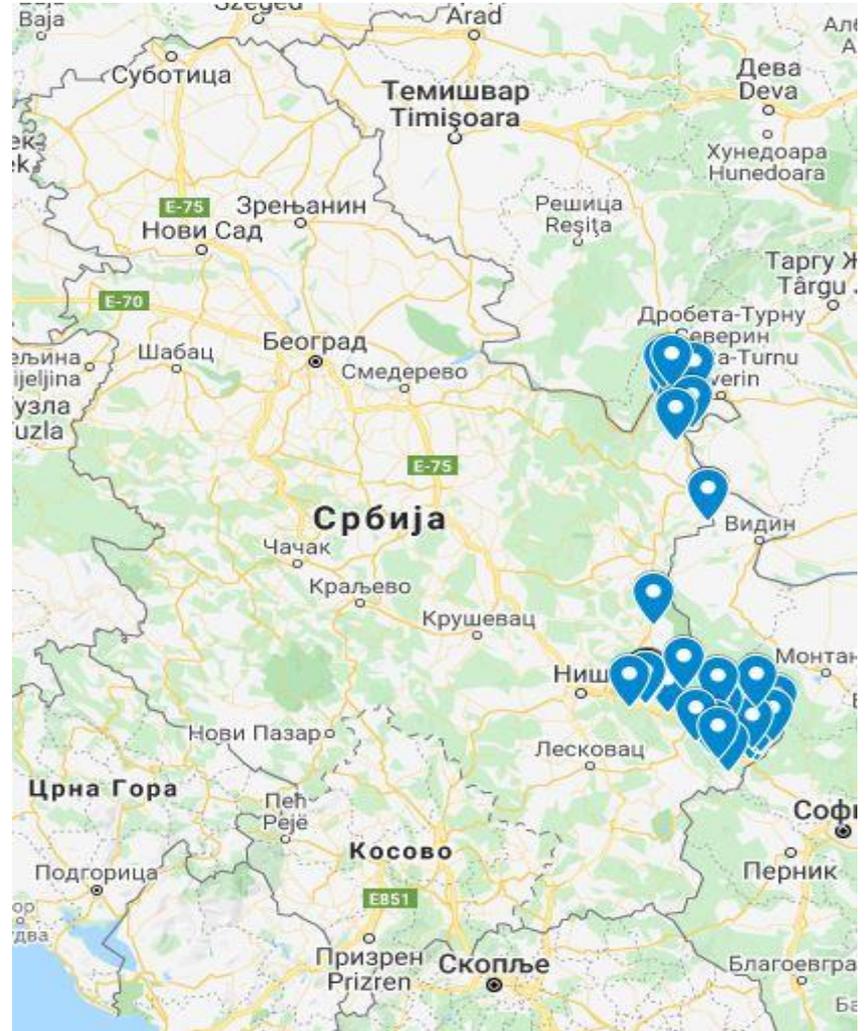
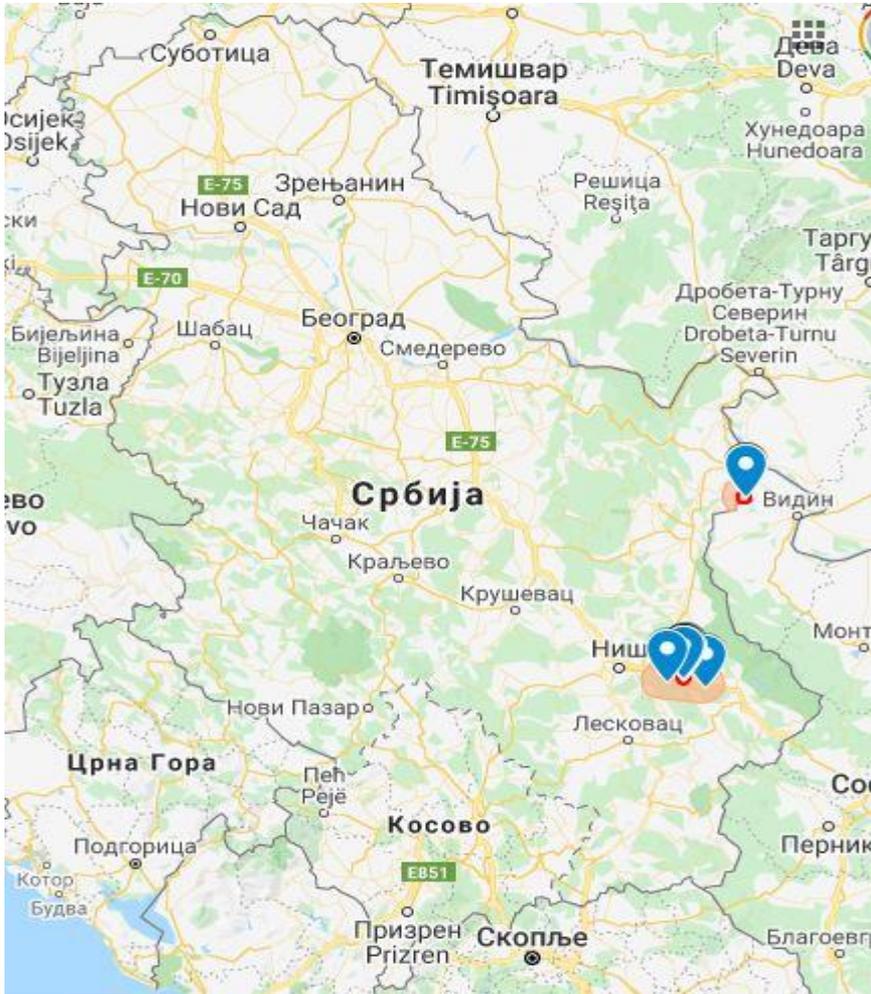
Outbreak in Aleksandrovac, Bor district

- At the time of confirmation of the occurrence, ASF was confirmed in 4 pigs on 3 holdings. By the decision of the Veterinary Directorate on **15/9/2020**, the protection zone, from outbreak in the village of Aleksandrovac, near the Bulgarian border (2 km), which includes three settlements, and the surveillance zone of the municipality of Negotin in the Bor administrative district, was declared.

- **Preventive depopulation of pigs on farms with a low level of biosecurity was carried out. A total of 174 pigs were euthanized in 33 farms** in the settlement of Aleksandrovac, in order to prevent the spread of the disease. After the preventive depopulation, the payment and compensation of material resources was provided in full and all owners were compensated by urgent procedure.



ASF in domestic pigs/wild boar 2020



Standing Group of Experts on ASF in Europe under the GF-TADs umbrella

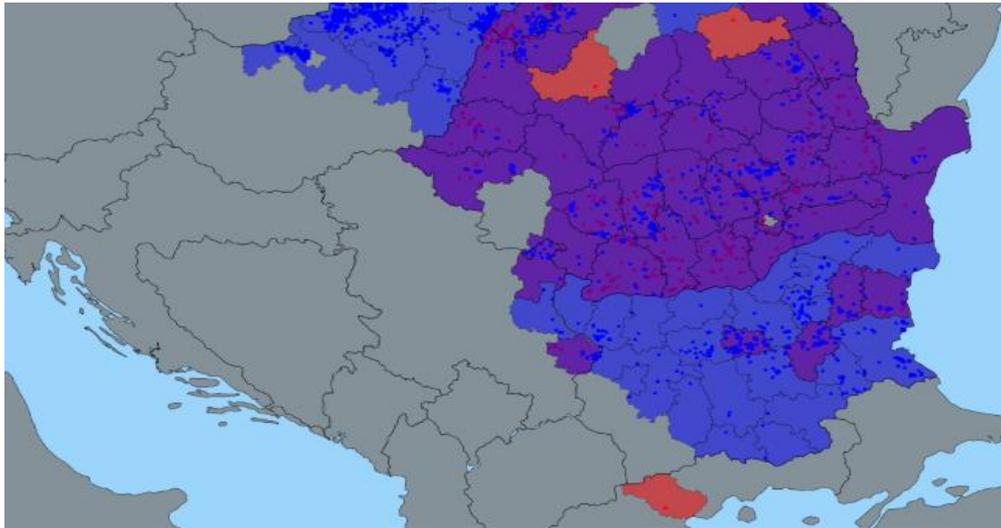
			CONTACT HOLDINGS				AFFECTED HOLDINGS			
DISTRICT	MUNICIPALITY	SETTLEMENT	HOLDINGS WHERE PIGS PRVENTIVE KILLED	PREVENTIVE KILLED PIGS	HOLDINGS WHERE PIGS PREVENTIVE SLAUGHTERED	PREVENTIVE SLAUGHTERED PIGS	AFFECED HOLDINGS	CONFIRMED CASES	DEAD PIGS	DISTROYED PIGS
BOR	MAJDANPEK	Голубиње	61	152						
		Мироч	40	82						
	NEGOTIN	Уровица	1	13						
		Александровац	33	174			3	4		20
	KLADOVO	Петрово село	14	53						
		Манастирица	4	16						
		Подвшка	45	122						
		Текија	15	49						
		Кладово	1	1						
		Брза Паланка	30	113						
		Велика Каменица	6	22						
		Грабовица	27	106						
		Купузиште	3	16						
Река	5	35								
	Милутиновац	1	29							
	3	15	286	983	0	0	3	4	20	
PIROT	PIROT	Извор	12	68	24	78				
		Бериловац	2	2	18	40				
		Пољска Ржана	24	208	43	192				
		Велики Јовановац	12	52	15	34				
		Мали Јовановац	2	28	1	2				
		Трњана	1	1	3	11				
		Градиште	0	0	1	3				
		Обреновац	1	10	3	4				
	DIMITROVGRAD	Чиниглавци	1	13	1	2				
		Радејна	1	22	2	4				
		Мојинци	1	10	0	0				
	PIROT	Гуленовци	1	2	0	0				
		Велико Село	5	50	8	10				
Крупац		22	66	27	64					
BELA PALANKA	Пирот	1	13	3	3					
	Врандол	1	2	0	0	3	12	6	6	
	Црвена Река	0	0	0	0	8	11	0	28	
	Вета	0	0	0	0	1	16	1	146	
	3	18	87	547	149	447	12	39	7	180
	6	33	373	1530	149	447	15	43	7	200

The plan on ASF surveillance and diagnostic tests in domestic pigs 2020 (ongoing)

- The specific surveillance program carried out throughout entire territory of the Country, adopted on annual basis with the aims to do active and passive surveillance on the same principles, providing the foreseen activities within certain risk areas (*₁, *₂).
- Visiting farms/holdings, clinical examination of pigs, determining the health status of holdings and completing the Questionnaire, carried out in affected territory every month (high risk area*₁) or at least once per quartal period (*₂.)
- *high risk area*₁ refers to ASF affected area in wild boars (infected area) and ASF affected area in domestic pigs (protection zone)*
- *quartal period*₂. refers to the obligation for the veterinary stations to every pig holding has to be checked by visiting at least once per three months.*
- **According to the Plan, the surveillance results are to be provided and confirmed upon the end of every quarter period and finally at the end of the year. As for the first semester of 2020, a total of 2377 samples were tested (PCR) with no positive findings**

Sources of introduction in domestic pig holdings

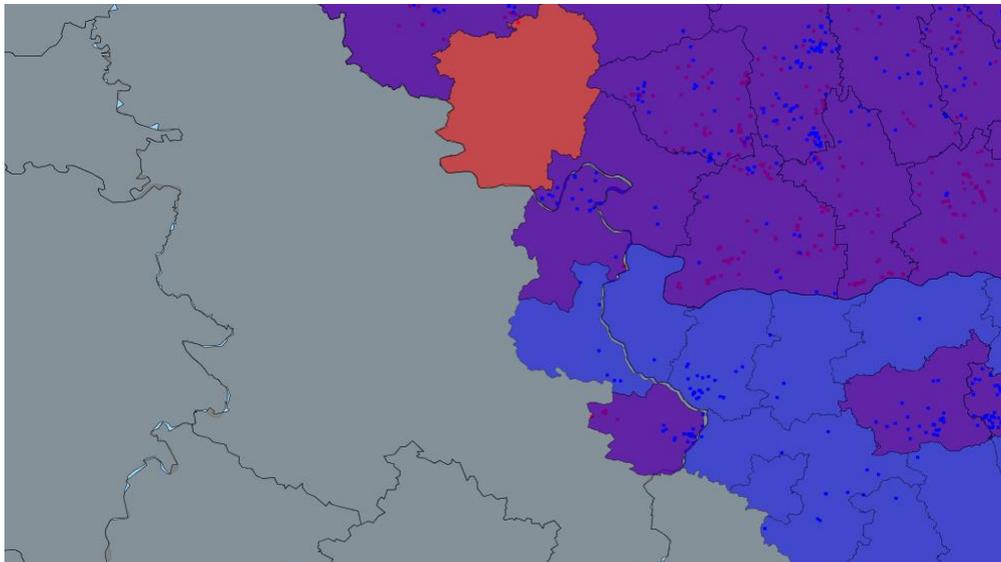
- Taking into account the objective circumstances that preceded the previous occurrence of ASF in the wild boar population in the Pirot and Bor districts, where the presence of the virus was recorded for a long time, as well as the extensive way of keeping pigs on holdings with low level of biosecurity, it was expected to disease will be transmitted to domestic pigs in backyards.
- Although the confirmation of the disease in wild boars banned hunting in the infected area, in order to avoid further contact with hunters, the positive cases originating from carcasses were located near pig farms where direct or indirect contact with the virus could not be excluded. If considered there was no such knowledge that direct contact between domestic pigs and wild boars could be possible, **the transmission of the virus had to involve a person who brought the pathogen from the external environment to the holding in any way.** The new circumstances related to the location of the outbreak opened the question of the pathways of spreading the infection, but the conclusion would not put the dominant human factor out to the question.
- Preventive depopulation of domestic pigs in the narrowly infected area in wild pigs in Pirot and Bor districts delayed and slowed the spread of the disease, but it could not prevent the virus to be entered due to its continuous presence in the environment. The consequent occurrence of ASF in domestic pigs was subsequently confirmed in a wider area with a higher density of small farms, but the disease did not spread to commercial farms or outside the areas affected by ASF in wild boars.



ADNS MAP OF ASF SITUATION AND REGIONALIZATION ISERBIA 2020

Blue: ASF affected regions in wild boar (Zaječar district)-Part II

Purple: ASF affected regions in wild boars and domestic pigs (Pirot and Bor district)-Part III



Challenges

The presence of ASFV in other parts of the country?

Early detection and fast response

The presence of ASFV in WB population, ASFV surveillance in wild boar?

The preparedness of local level?

Ways of spreading, human mediation?

Safe disposal of carcasses?

Low level of biosecurity on backyards

High risk of Introduction of virus in commercial farms and regions with high pig density

Financial and human resources

Continue awareness campaign



CONCLUSIONS & REMARKS

- The activities in the preparedness period were successful for two years (aug.2017-aug.2019.)
- The „Plan of surveillance and diagnostic tests on the ASF in domestic pigs in the Republic of Serbia “ is adopted and implemented continuously.
- The preventive population of domestic pigs was initiative to stop spreading of disease from wild boars for the certain period.
- No commercial farms were affected.
- **THE CONTROL AND SURVEILLANCE IN WILD BOARS has to be appropriate with results of findings of spreading the virus with no further risk within conducted activities.**
- **PREPAREDNESS AND RAPID RESPONCE IS CRUCIAL.** The combating stuff and sources must be recognize in real availability
- **THE STRATEGIC PLAN HAS TO BE FORESEEN AND IMPLEMENTED** according to the priorities
- **COOPERATION AND COORDINATION WITH THE LOCAL AUTHORITIES AN PUBLIC institutions**
- **AWARENESS CAMPAIGN**
- **FINANCIAL AND LEGAL SUPPORT**
- **REGIONAL COOPERATION**

THANK YOU



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