



Standing Group of Experts on Lumpy Skin Disease (SGE LSD) in South-East Europe under the GF-TADs umbrella Meeting 14 January 2021

LSD epidemiological situation in Europe and neighbouring areas – Occurrence and vaccination. Current State of play (evolution since GF TADs – SGE LSD9)



Rafael Olvera Porcel
Animal Health Unit
DG SANTE
European Commission

OUTLINES

- **LSD state of play in Europe.**
- **LSD epidemiological situation in Europe and neighbouring areas.**
- **Overview of LSD vaccination in South-East European countries.**
- **Overview of LSD Surveillance activities in South-East European countries**
- **EU funding of surveillance/control measures against Lumpy Skin Disease (LSD).**
- **EFSA LSD epidemiological scientific report IV: data collection and analysis.**
- **Concluding remarks.**

LSD current state of play

- Since 2017, no lumpy skin disease (LSD) outbreaks were reported in South-Eastern Europe.
- LSD outbreaks were reported in Turkey.
- Mass vaccination regional campaign with homologous LSD vaccine continued for the fifth year in the region, preventing further outbreaks since 2017. The use of homologous vaccine should be considered in the countries still affected in order to eliminate the virus.
- Disengagement from LSD annual re-vaccination:
 - **Croatia**: cease of preventive vaccination as of 2018
 - **Bosnia and Herzegovina**: *cease of preventive vaccination as of 2019*
 - **Montenegro, North Macedonia and Kosovo***: cease of annual revaccination in the whole country as of 2020.
 - **Serbia**: Cease of annual revaccination of previously vaccinated adult cattle. Maintains vaccination for imported and new born animals.
- **LSD annual revaccination** continued in 2020 in **Bulgaria, Greece, Albania** and **Turkey** (homologous in Turkish Thrace and heterologous in Anatolia).

(* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence).

LSD epidemiological situation in Europe and neighbouring areas

Since 2017, no lumpy skin disease (LSD) outbreaks were reported in South-Eastern Europe.

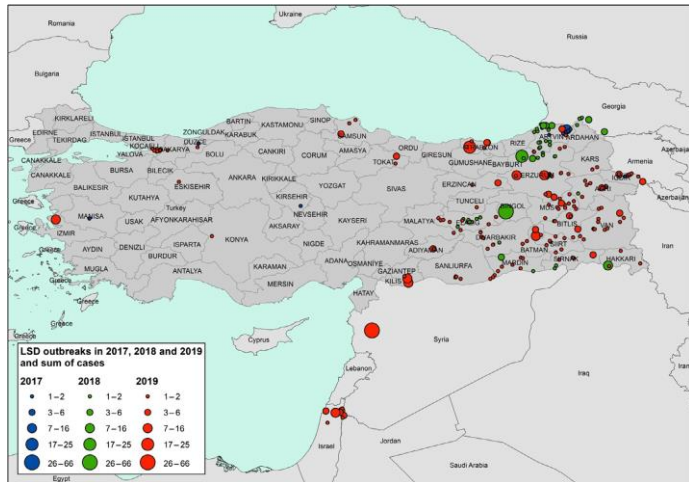
Outbreaks in Animal Disease Notification System (ADNS) from 2015 to 2021

COUNTRY	2015	2016	2017	2018	2019	2020	Total
GREECE	117	104	2				223
BULGARIA		217					217
TURKEY	487	106	14	46	180	5	838
NORTH MACEDONIA		117	4				121
SERBIA		225					225
MONTENEGRO		64					64
ALBANIA		250	494				744
KOSOVO*		46					46
Total	604	1129	514	46	180	5	2478

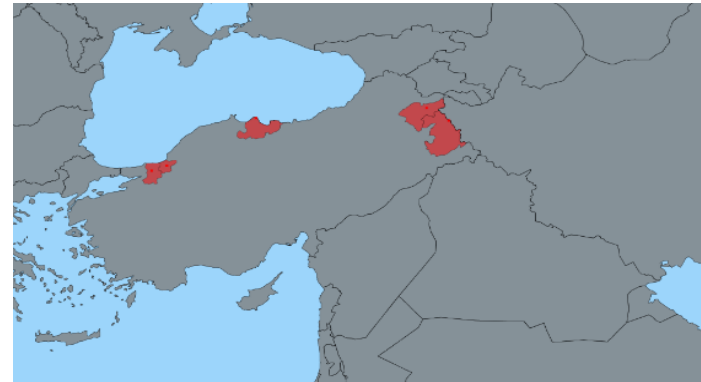
LSD in Turkey

In **2019**, 180 outbreaks were reported in Turkey, mostly in the eastern part of the country and mostly between April and October. Twenty outbreaks in western Turkey close to Thrace region and in Izmir opposite the Greek islands were reported.

In **2020**, 5 outbreaks were reported in Turkey in the eastern part of the country .



Outbreaks Turkey 1/01/2020 to 14/01/2021




Overview of LSD vaccination in South-East European countries


Overview of LSD vaccination in South-East European countries										
	Albania	Bosnia and Herzegovina	Bulgaria	Croatia	Greece	Kosovo*	Montenegro	North Macedonia	Serbia	Turkey
Years under Vaccination	2016	2017	2016	2016	2015	2016	2016	2016	2016	2013–current
	2017	2018	2017	2017	2016	2017	2017	2017	2017	
	2018		2018		2017	2018	2018	2018	2018	
	2019		2019		2018	2019	2019	2019	2019	
	2020		2020		2019				2020	
Type of Vaccines	Live homologous	Live homologous	Live homologous	Live homologous	Live homologous	Live homologous	Live homologous	Live homologous	Live homologous	Live heterologous (sheep pox strain, 3–5 times dose) in Anatolia. Live homologous in Turkish Thrace Region
Area of Vaccination	Whole country	High risk areas (border area with Serbia and Montenegro)	Whole country	Whole country	Whole country	Whole country	Whole country	Whole country	Whole country	Whole country

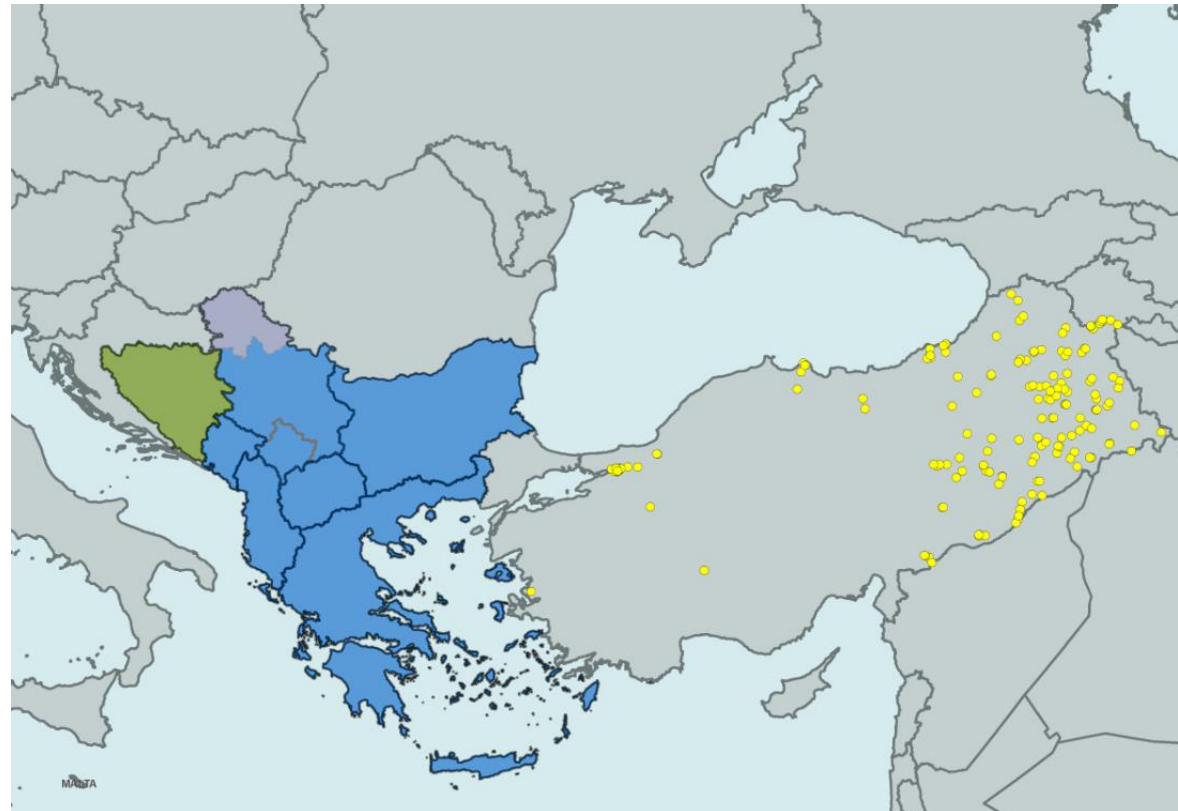
LSD vaccination in 2019

 Annual revaccination of all cattle (*homologous vaccines*)
Albania, Bulgaria, Greece, North Macedonia, Kosovo, Montenegro, Serbia (southern districts).*

 Vaccination of imported cattle and calves >6 mon. (*homologous vaccines*)
Serbia (northern districts).

 Cease of vaccination
Bosnia and Herzegovina.

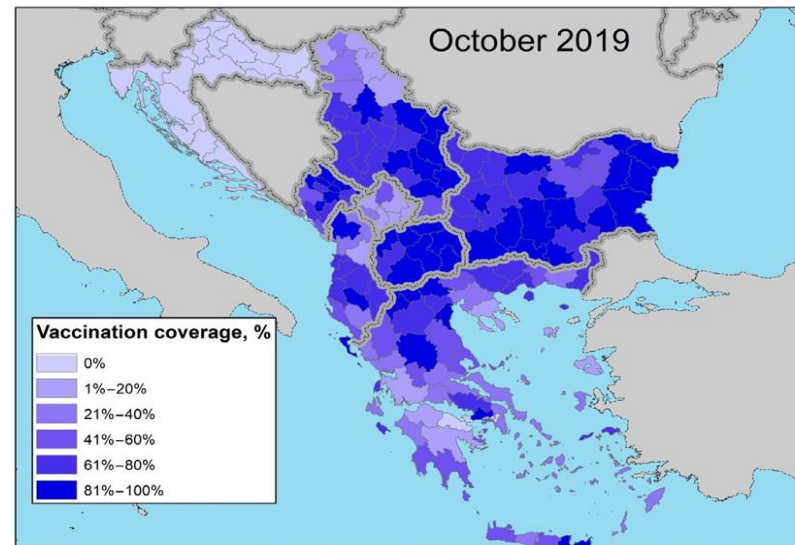
 LSD outbreaks
01 Jan – 31 Dec 2019
(ADNS).




0 outbreaks in 0 countries (excl. Turkey).

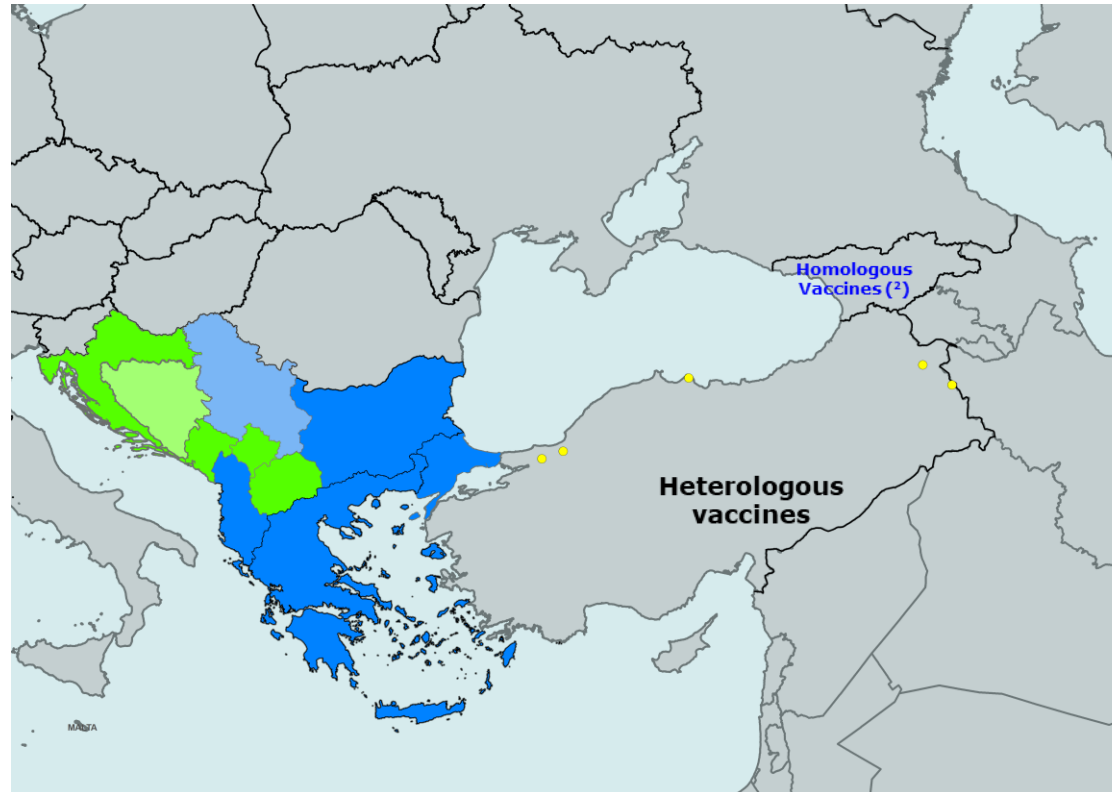
The level of the vaccination coverage in the area:

Proportion of immunised animals, (animals that received a vaccination in the last 12 months out of the total animals present) achieved in April and October 2019 (beginning and end of the vector season) in the Balkan region is displayed in the next Figure.



LSD vaccination and surveillance in 2020

-  Annual revaccination of all cattle (*homologous vaccines*) *Bulgaria, Greece, Albania, Turkish Thrace*¹.
-  Vaccination of imported cattle and calves >6 mon. (*homologous vaccines*) and surveillance plan co-funded by EU *Serbia*.
-  Vaccination ceased and surveillance plan co-funded by EU *Croatia, North Macedonia, Kosovo**, *Montenegro*.
-  Vaccination ceased *Bosnia and Herzegovina*
-  LSD outbreaks
01 Jan – 5 Oct. 2020 (ADNS)



0 outbreaks in 0 countries (excl. Turkey)

⁽¹⁾ EU support provided through IPA project (DG NEAR)

⁽²⁾ Replacement animals and high risk areas

European Union Lumpy Skin Disease Vaccine Bank 2016 -2017–2018-2019-2020 (up to September) grants

Year	Country	Doses granted
2016	Bulgaria, Greece , North Macedonia, Serbia, Kosovo*, Albania, Montenegro, Croatia	625.000
2017	Bosnia & Herzegovina, Montenegro, Greece, Albania, Kosovo*	325.000
2018	North Macedonia, Kosovo*, Montenegro, Greece, Albania, Georgia	876.000
2019	North Macedonia	150.000
	Kosovo*	190.000
	Montenegro	80.000
	Albania	250.000
2020	Albania	228.000
	Georgia	200.000
	Taiwan	10.000

2.934.000 doses of LSD vaccine (live-homologous) granted to date to 11 countries (EU + non EU MS)

Total Remaining capacity 2.331.000 doses (physical stock + contract availability for future orders)

Overview of LSD Surveillance activities in South-East European countries (EFSA report)

- LSD Surveillance (passive and active) within the “LSD exit strategy” in those countries/zones where LSD vaccination stopped are essential measures for early detection of the disease.
- Active surveillance should be conducted every 5 weeks in the at-risk period (April–October) targeting an expected prevalence of 0.042%, prevalence reached by the disease at 35 days after introduction.
- Active surveillance for proving disease freedom could be based on serological testing (ELISA) targeting 3.5% prevalence conducted on a sample of cattle herds randomly selected from the whole country, testing the animals not vaccinated.
- If this level of surveillance effort is not feasible, can be strengthened or partially replaced by adding systematic clinical examinations for LSD at live animal markets, pre-movement clinical checks and during ante-mortem examinations on animals to be slaughtered.
- These activities could be also combined with other surveillance programmes on the cattle population in place in the country.

Overview of LSD Surveillance activities in South-East European countries, 2000.

		Albania	Bosnia and Herzegovina	Bulgaria	Croatia	Greece	Kosovo*	Montenegro	North Macedonia	Serbia	Turkey
Passive Surveillance	Present or not	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Area of implementation	Whole country	Whole country	Whole country	Whole country	Whole country	Whole country	Whole country	Whole country	Whole country	Whole country
Active Risk based Surveillance	Present or not	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Area of implementation	Previous affected areas		The whole country	High risk area Konavle, Neretva	North Greece Islands opposite Turkey	The whole country	The whole country	The whole country	The whole country	-Thrace Region -10 km around outbreaks
	Clinical examination	Yes		Yes, In case of suspicion	Yes	Yes	Yes (2000)	Yes (2000)	Yes (2000)	Yes (2000)	Yes
	Serological tests	No		No	Yes	No	Yes (2000)	Yes (2000)	Yes (2000)	Yes (2000)	No
	Virological tests	No		Yes, In case of suspicion	Yes for the seropositive	Yes for the suspicions	No	Yes (2000)	Yes (2000)	Yes (2000)	No

Overview of LSD Active surveillance in the framework of other programs in South-East European countries, 2000.

	Albania	Bosnia and Herzegovina	Bulgaria	Croatia	Greece	Kosovo*	Montenegro	North Macedonia	Serbia	Turkey
Present or not	No	No	Yes	No	Yes	Yes	No	Yes	No	No
Context	–		TB prog. BT prog.	–	slaughter-houses Brucellosis prog. TB prog. LSD vacc. prog.	Brucellosis prog. TB prog.	–	TB prog. Brucellosis prog.	–	–
Area of implementation	–		border area (west-southern part) The whole country	–	Whole country	Whole country	–	Whole country	–	–
Clinical examination	–		Yes	–	Yes	No	–	Yes	–	–
Serological tests	–		No	–	No	Yes	–	Yes for the suspicions	–	–
Virological tests	–		Yes for the suspicions	–	Yes for the suspicions	Yes for the suspicions	–	Yes for the suspicions	–	–

EU SUPPORT FOR SURVEILLANCE /CONTROL MEASURES AGAINST LUMPY SKIN DISEASE (LSD)

- Surveillance and control in the framework of **EU regulations**. From April 2021 under the Animal Health Law.
- **EU co-financed programmes for Member States** in 2020 (DG SANTE): LSD vaccination in Bulgaria and Greece and LSD surveillance in Croatia.
- Surveillance Programmes, submitted and approved for **EU co-financing, by non – EU Member countries, in South East Europe, that have stopped LSD vaccination** as of 2020 (DG SANTE):
 - Kosovo*: 38.000 €.
 - Montenegro: 85.000 €.
 - North Macedonia: 183.000 €.
- **Surveillance and vaccination programmes**, submitted for EU co-financing, by non – EU Member countries, in South East Europe : Serbia: 870.000 € (360.000 € for vaccines).
- **Vaccination with LSD homologous vaccine in Turkish Thrace** (EU support provided through IPA project -DG NEAR) as well as heterologous vaccine in Anatolia + some monitoring /surveillance activities, all over the country.
- **LSD vaccine bank.**
- **European Union Reference Laboratory.**
- **EFSA Opinions- Reports on LSD** . <https://www.efsa.europa.eu/en/topics/topic/lumpy-skin-disease>.

EFSA scientific report

Based on mandate from EC: LSD epidemiological report IV: data collection and analysis (2020).

Main recommendations:

- To reduce the risk of further spread to South-Eastern Europe, homologous vaccine should be used in Turkey not only in Thrace but also in the entire country.
- When vaccination is stopped or becomes voluntary, in case of LSD re-emergence, a contingency plan and vaccine stockpiling, even on a regional basis, would be needed, in order to react quickly with emergency vaccination.
- Since the evidence suggests that *Stomoxys calcitrans* is the most important vector in LSD transmission in South-Eastern Europe, research should be performed about possible control of this vector.

Regional coordination on LSD (2020-2021)

Teleconference of the Standing Group of Experts on LSD in South-East Europe under the GF-TADs umbrella.

- 20 Feb. 2020

- ✓ confirmation for the vaccination plans in 2020.
- ✓ confirm the EU support with vaccine from EU LSD vaccine bank for Albania and Georgia.
- ✓ confirm EU support for LSD surveillance in South-East Europe for countries that submit LSD surveillance plan.

- 14 January 2021

- ✓ review epidemiological situation and implementation of 2020 vaccination and surveillance plans.
- ✓ discuss plans for 2021.

Concluding remarks

- **Calm period in South – East Europe** due to successful regional vaccination strategy since 2016.
- Mass vaccination of cattle against LSD using live homologous vaccines figures clearly as the most effective control policy.
- **Proper** implementation of **surveillance** plans **for early detection** in case of recurrence.
- Initial phase of LSD exit strategy has ran smoothly (no major problems reported todate).
- When vaccination is stopped, a **contingency plan** and **vaccine availability** would be needed, in order to react quickly with emergency vaccination.
- Systematic surveillance in line with the OIE rules, to confirm disease absence - ensure timely detection of any LSD recurrence.
- **EC ready to support South – East Europe** with sufficient capacity of the EU LSD vaccine bank.
- **Regional coordination and cooperation**, to continue.

Thank you



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