

# Standing Group of Experts on Lumpy Skin Disease (SGE LSD 11) in South-East Europe under the GF-TADs umbrella Meeting 10 February 2022

LSD epidemiological situation in Europe and neighbouring areas – Occurrence and vaccination. Current State of play (evolution since GF TADs – SGE LSD 10)

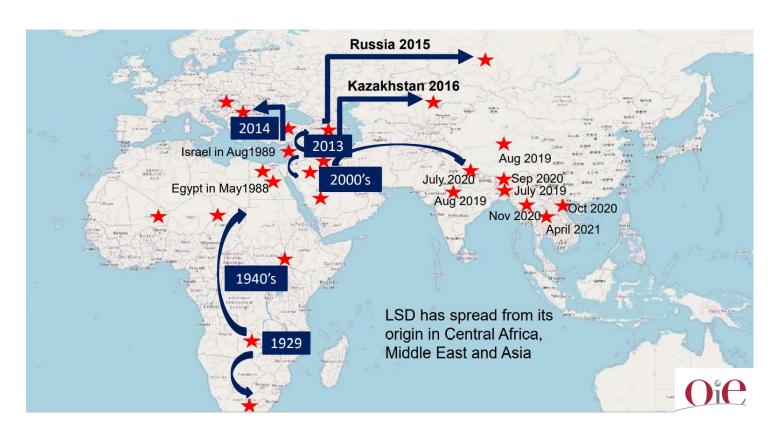
Rafael Olvera Porcel Animal Health Unit DG SANTE European Commission

#### **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).
- Legal EU framework for LSD
- Concluding remarks.



#### Chronology of reported LSD outbreaks (based on country report). OIE



The **first outbreak** in European Union territory confirmed: Greece on **21st of August 2015**. Vaccination campaign began on the 4th of September 2015. Last outbreaks in Greece 11/08/2017.

In Bulgaria the first outbreak of LSD was detected on 13th of April 2016 and last outbreak was confirmed on 1st of August 2016.

Since **11/08/2017**, **no lumpy skin disease (LSD)** outbreaks were reported in EU, LSD remains present in Turkey (Anatolia) and Russia.

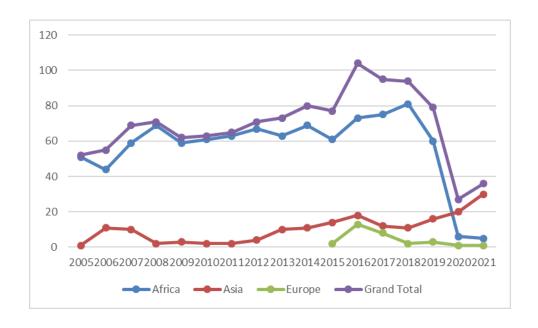


### LSD current state of play

- Since 2017, no lumpy skin disease (LSD) outbreaks were reported in South-East Europe.
- LSD outbreaks were reported in Turkey. Last confirmed outbreak on 3/3/2021.
- LSD continues to spread in Asia. Circulation of so called 'recombinant' LSDV strains.
- Mass vaccination regional campaign with homologous LSD vaccine continued for the sixth year in Bulgaria and Greece, preventing further outbreaks since 2017 with homologous vaccine.
- Most countries in South-East Europe have followed a policy of 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 until 30/6/2021 vaccination for imported and new born animals. Cease of preventive vaccination as of 2021.
- LSD annual revaccination continued in 2021 in Bulgaria, Greece, Albania (ending first quarter 2021) and Turkey (homologous in Turkish Thrace and heterologous in Anatolia).

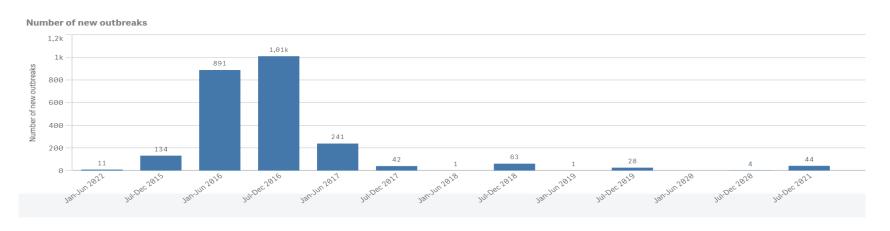
# **Evolution** of the **number of countries** reporting outbreaks to WAHIS-OIE. Consultation conducted in December 2021. Source: OIE-WAHIS.

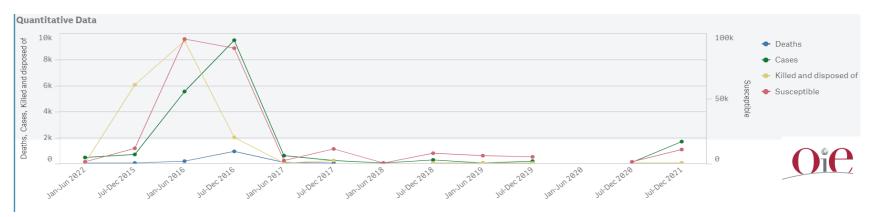
Region	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Africa	51	44	59	69	59	61	63	67	63	69	61	73	75	81	60	6	5
Asia	1	11	10	2	3	2	2	4	10	11	14	18	12	11	16	20	30
Europe											2	13	8	2	3	1	1
<b>Grand Total</b>	52	55	69	71	62	63	65	71	73	80	77	104	95	94	79	27	36





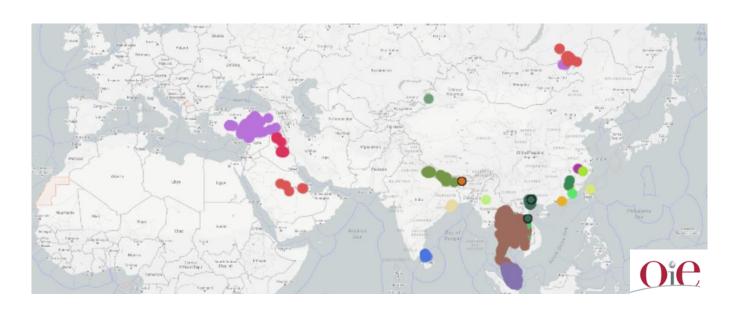
# LSD outbreaks from 2015 to 2022 in the Europe OIE Region. Consultation conducted in February 2022. Source: OIE-WAHIS.







Map showing outbreaks of infection with LSDV in 2021 in the Asia and Europe OIE Regions. Consultation conducted in February 2022. List of countries in Europe and Asia OIE Regions with LSD presence in 2021. Source: OIE-WAHIS.



#### List of countries in Europe and Asia OIE Regions with LSD presence in 2021

Bhutan

Cambodia

China (People's Rep. of)

Chinese Taipei

Hong Kong

India

Iraq

Laos

Malaysia

Mongolia

Myanmar

Nepal

Russia

Saudi Arabia

Sri Lanka

Thailand

Turkey

Vietnam



# Infection with LSDV outbreaks in South-East Europe (2015-2021)

Since 2017, no infection with lumpy skin disease virus outbreaks were reported in South-Eastern Europe. Data from Animal Disease Information System (ADIS).

COUNTRY	2015	2016	2017	2018	2019	2020	2021	Total
GREECE	117	104	2					223
BULGARIA		217						217
TURKEY	487	106	14	46	180	5	1	839
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	1	2479

Data until 10/02/2022

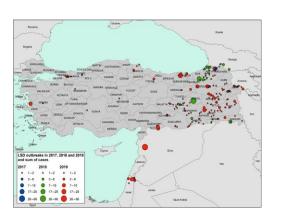


### LSD in Turkey

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.

In 2021, 1 outbreak were reported in Turkey in the eastern part of the country. (ADIS)



Outbreaks Turkey from 1/01/2020



Location of last outbreak (confirmed 03/03/2021)

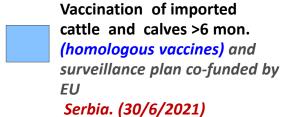




### LSD vaccination and surveillance 2021



Annual revaccination of all cattle (homologous vaccines) Bulgaria, Greece, Turkish Thrace<sup>1</sup>.

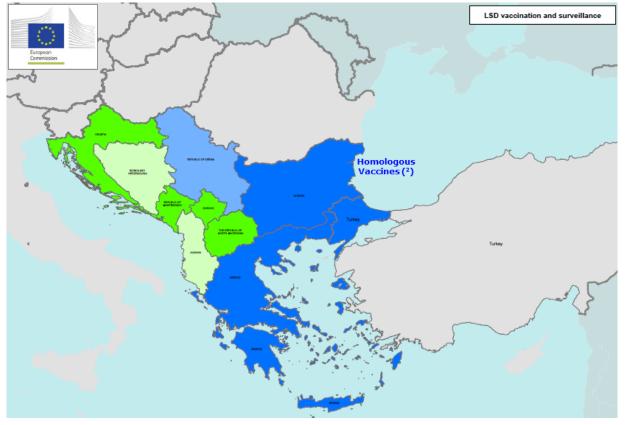


Vaccination ceased and surveillance plan co-funded by EU
Croatia, North Macedonia, Kosovo\*, Montenegro .

Vaccination ceased

Albania (first quarter 2021)

and Bosnia and Herzegovina



0 outbreaks in 0 countries (excl. Turkey until 03/03/2021)



## Overview of LSD vaccination in South-East European countries

	Albania	Bosnia and	Bulgaria	Croatia	Greece	Kosovo	Montenegro	North	Serbia	Turkey
		Herzegovina						Macedonia		
Years under	2016	2017	2016	2016	2015	2016	2016	2016	2016	2013–current
Vaccination										
	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	
	2021 (first Quarter)		2021		2020 2021				2021	
Type of	Live homologous	Live homologous	Live	Live	Live	Live	Live	Live	Live	Live
Vaccines			homologous	homologous	homologous	homologous	homologous	homologous	homologous	heterologous
Commercial	Lumpy Skin Disease	Lumpy Skin Disease	Lumpy Skin	Lumpy Skin	Lumpy Skin	Lumpy Skin	Lumpy Skin	Lumpy Skin	Lumpy Skin	Penpox-M
Names	(OBP)	(OBP) Lumpyvax	Disease (OBP)	Disease (OBP)	Disease (OBP)	Disease	Disease (OBP)	Disease (OBP)	Disease (OBP)	(PVCI)
	Lumpyvax (MSD)	(MSD)	Lumpyvax	Lumpyvax	Lumpyvax	(OBP)		Lumpyvax	Bovivax LSD-N	Poxdoll
			BovivaxLSD- N	(MSD)	(MSD)			(MSD)		(Dollvet)
										Poxvac
Area of	Whole country	High risk areas	Whole country	Whole	Whole	Whole	Whole	Whole	Whole country	Whole
Vaccination	,	(border area with	,	country	country	country	country	country	,	country
		Serbia and		,	,	,	,	,		,
		Montenegro)								

Source: EFSA



# European Union Lumpy Skin Disease Vaccine Bank 2016-2021 grants

Year	Cou	Doses granted			
2016	Bulgaria, Greece , North Maced Monteneg	625,000			
2017	Bosnia & Herzegovina Albania,	325,000			
2018	North Macedonia, Kosovo*, Mon	876,000			
	North Macedonia	150,000			
2019	Kosovo*	190,000	670,000		
2019	Montenegro	80,000	670,000		
	Albania				
	Albania	228,000			
2020	Georgia	200,000	438,000		
	Taiwan	10,000			
2021	Turkey	250,000	250,000		

3.184.000 doses of LSD vaccine (live-homologous) granted to date to 12 countries (EU + non EU MS)



#### **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).
- Active surveillance for proving disease freedom could be based on serological testing (ELISA) 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 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.



		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
ctive Risk based	Present or not	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Surveillance	Area of implementation	Previous affected areas		,	Konavle, Neretva	North Greece Islands opposite Turkey	The whole country	The whole country	The whole country	The whole country	-Thrace Region -10 km around outbreak
	Clinical examination	Yes		Yes, In case of suspicion	Yes	Yes	Yes (2021)	Yes (2021)	Yes (2021)	Yes (2021)	Yes
	Serological tests	No		No	Yes	No	Yes (2021)	Yes (2021)	Yes (2021)	Yes (2021)	No
	Virological tests	No		Yes, In case of suspicion	Yes for the seropositive	Yes for the suspicions	No	Yes (2021)	Yes (2021)	Yes (2021)	No

Source: EFSA



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

- EU co-financed programmes for Member States in 2021: 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 2021:
  - Kosovo\*.
  - Montenegro.
  - North Macedonia.
- Surveillance and vaccination programmes 2021, submitted for EU co-financing, by non–EU Member countries, in South East Europe: Serbia.
- Surveillance programmes 2022, submitted for EU co-financing, by non–EU Member countries are currently under evaluation: Kosovo\*, Montenegro, North Macedonia and Serbia.
- 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.



**Legal EU framework for LSD** 

#### Legal framework until 21 April 2021

Council **Directive 92/119/EEC** of 17 December 1992 introducing general Community measures for the control of certain animal diseases and specific measures relating to swine vesicular disease

Commission Implementing Decision (EU) 2016/2008, of 15 November 2016 concerning animal health control measures relating to lumpy skin disease in certain Member States (amended by Commission Implementing Decisions (EU) 2017/1178 & 2017/1460)

Commission Implementing Decision (EU) 2016/2009 of 15 November 2016 approving the vaccination programmes against lumpy skin disease submitted by the Member States

#### **ANIMAL HEALTH LAW**

Part III: Disease control measures.

<u>Delegated Regulation (EU) 2020/687</u> on disease control measures for category A, B and C diseases

#### **AHL** ARTICLE 71 (3)

Commission Implementing Regulation (EU) 2021/1070 of 28 June 2021 laying down special control measures for a limited period of time related to infection with lumpy skin disease virus (OJ 30.6.2021)



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#### RESTRICTED ZONES I AND II

'Restricted zone I' means a part of the territory:

- outside the area where infection with lumpy skin disease virus was confirmed;
- in which vaccination against infection with lumpy skin disease virus is carried out.

'Restricted zone II' means a part of the territory:

- which includes the area where infection with lumpy skin disease virus was confirmed;
- in which vaccination against infection with lumpy skin disease virus is carried out.



#### **PROHIBITION OF MOVEMENTS:**

The competent authority shall prohibit movements of the following consignments in restricted zones:

- bovine animals from restricted zone I and II;
- semen, ova and embryos of bovine animals from the restricted zones I and II;
- unprocessed animal by-products from bovine animals from restricted zones I and II. Milk, colostrum, dairy products and colostrum-based products from bovine animals intended for animal feed (only from restricted zones II).

By way of derogation, the competent authority may authorise the movements provided for in Chapter III in accordance with the conditions provided therein

#### **ANNEX II**

RULES FOR VACCINATION PLANS OF INFECTION WITH LUMPY SKIN DISEASE VIRUS



### **Concluding Remarks**

- > Calm period in South-East Europe due to succesful regional vaccination strategy since 2016.
- ➤ Mass vaccination of cattle against LSD using live homologous vaccines figures clearly as the most effective control policy.
- > 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.
- ➤ Characterization of new strains of the LSD virus, should be done including vaccine-related strains, in close collaboration with LSD Reference Laboratories.
- > EC ready to support South-East Europe with EU LSD vaccine bank.
- > Regional coordination and cooperation, to continue.



# Thank you



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