



## Purchase, short term storage and delivery of vaccines in the face of an outbreak **Case study**

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## Legal basis for vaccination against LSD

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1. Standards of Terrestrial Animal Health Code of the OIE
2. EU legislation
  - 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;
  - DIRECTIVE 2001/82/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to veterinary medicinal product
3. National legislation

## Legal basis for vaccination against LSD

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Within the EU, the vaccination against LSD only:

- in the event of serious epizootic diseases;
- as a supplement to control measures taken;
- subject of prior authorization by the Commission (*the decision by EC, in cooperation with MCs*).

All rules not specified in the EU legislative acts are arranged according to the Standards of Terrestrial Animal Health Code of the OIE

## Vaccination approach and strategy

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### The example of Bulgaria

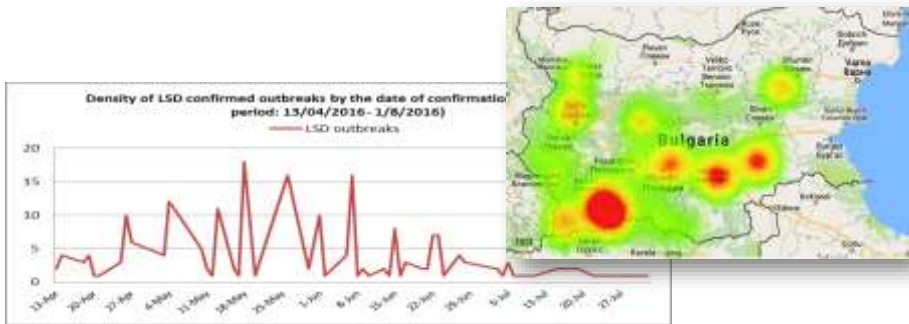
#### Main steps:

1. Decision to implement a vaccination strategy
2. Vaccine type to be used
3. Drafting a vaccination plan
4. Submission of the vaccination plan for approval by European Commission

# 1. Decision to implement a vaccination strategy

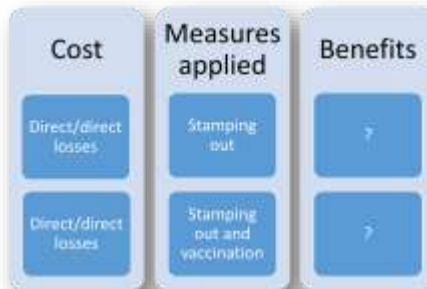
Factors regarding the affected zone:

- Evolution of the disease in the country; and neighbors: fast spreading; incursion in northern regions;
- growing number of regions affected; farms/ outbreaks
- The meteorological conditions (the presence, distribution and type of vectors) – period of season vector activity



# Evaluation of financial losses

- Control measures applied (different scenarios, possibility to eradicate the disease without a vaccination);
- an evaluation of the consequences of enforced movement restriction, ban for trade, export due to disease vs. the consequences of the special rules/restriction that to be enforced following the vaccination
- direct/indirect cost



- Stamping out with vaccination considered to be the most effective options for controlling the spread of LSD!

## 2. Vaccine type to be used

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Factors to be examined – regarding the vaccination strategy

- available vaccine on the market
- authorization for EU market
- the characteristics of each vaccine used which vaccines ensure a successful prevention?
- safety and efficacy of the vaccines?
- shelf life?

- Which vaccines ?

- Experience and lessons learned by other affected countries.
- homology vaccines provide better immunity (EFSA 'assessment')
- Purchasing procedures, price, doses available ?



subject of prior authorization by European Commission;

## 3. Drafting a vaccination plan

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Pre-factors considered regarding the vaccination strategy

- Density of bovine population -
- Animal husbandry (outdoor, commercial farms, pasture), biosecurity of farms
- Movement – inside the country (slaughtering, pastures, seasonal movement, etc.), trade, export
- 80 % of farms are backyards, without biosecurity measures applied
- Seasonal cattle migration only short distance pasture movements in spring-autumn
- Movement mainly for direct slaughter



Type of farming	Dairy	Beef	Total
Cattle population	364 319	414 545	778 864
Small holdings	35 288	19001	111295
Farms	46754	31169	77923

## Pre-factors considered regarding the vaccination strategy (2)

- the areas in which vaccination may or must be carried out (ring vaccination , blanket, only regions, etc)
- the duration of the vaccination campaign

main goal – to achieve sufficient herd immunity (at 80 % coverage) as soon as possible

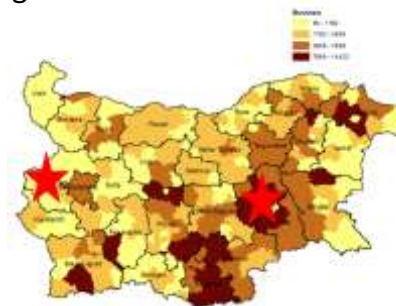
consideration on:

- the personal capability - staff needed to be involved (only official vets; private vets employed
- financial recourses needed
- slaughter sites to be established in the vaccinated areas – due to the special rules and movement restriction that will be imposed

## Pre-factors considered regarding the vaccination strategy (3)

- tender procedure for purchasing the sufficient number of vaccine doses;
- distribution;
- storage facilities.

### Logistics

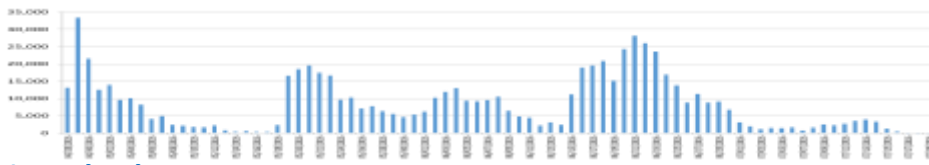


Map – two main facilities (storage vaccine in specified conditions)

## Pre-factors considered regarding the vaccination strategy (4)

Procedures for supervision of the use of the vaccines/and reporting

- Daily/ weekly report by regions
- Entering data in central database and its verification



Logistics

Образец справки вакцинации ЗЛЗ с ваксина ОВР LUMPYAIN DISEASE

Ваксинация Зарезен водостарен зероветит		ИСПЪЛНЕНИЕ ВАКСИНАЦИЯ В ОДВХ											
		ГОВЕДА						Ваксина					
Община	Палкани	Брой населени места в община	Брой изпитани животни в община в	Брой населени места в които е извършена ваксинация	Брой ваксинации за дози	Брой ваксинации извършени	% ваксинации от населениите	Получен и дон ваксина	Отчет за изработката дози ваксина (евиска здрене)	Разлика ваксина в мл (евиска здрене)	Отчетни опакотки (евиска седмично)	Необходимо количество ваксина	Ваксинация в приложението на дата
<b>Общо:</b>													

\* Ако има получени дози ваксина допълнително извън тези разпределени със Заповед да се опише откъде са получени.  
 \* Ако има неточност при получените дози ваксина моля да ги отразите в последните нецветени колони.  
 \* Ваксината се предоставя на РБЛ за увеличаване на ваксинацията на база седмичен план; След отчитане се предоставя следващо количество

**2016 Vaccination strategy in Bulgaria implemented:** 13

- 1<sup>st</sup> vaccination round** / 28 Apr – 05 May/ - **Ring vaccination** territory where LSD was confirmed and 20 km around - 150 000 doses OBP / from EU bank (Neetling strain) around the LSD outbreaks at that time;
- 2<sup>nd</sup> vaccination. round:** /19 May – 5 June/ - **expanding the regions covered by vaccination** - High risk areas - 275 000 doses Intervet (SIS type) used for the rest of South, North-western areas of Bulgaria;
- 3<sup>rd</sup> vaccination round:** 10 June – 15 July – **expanding to the whole territory of the country** - 350 000 doses OBP used for rest of Bulgaria; **100% vaccine coverage**

**2017 Vaccination strategy in Bulgaria** 14

according to:

- LSD situation in 2016, neighbor countries' situation, vaccination plan status
- To maintain the herd immunity and necessity to perform revaccination in BG
- Seasonal activity of the vectors
- Possibility for purchasing vaccine doses

Map - vaccination in Bulgaria, 2017

**December 2016 - March 2017** - 97150 OBP vaccine doses – newborn, traded bovines

**20 April – 30 May** - 207 500 vaccine doses - Lumpyvax;

**Outcomes expected** - 95-99% vaccine coverage in the specified regions



**Thank you!**



LSD outbreaks in 2017 (Source: ADNS)