Standing Group of Experts on Lumpy Skin Disease in Europe under the GF-TADs umbrella

Third meeting (LSD3) Istanbul, Turkey, 12-13 December 2016

GREECE Report Dr Chrysoula Dile & Dr Sotiria-Eleni Antoniou
1st wave of LSD (20 Aug - 15 Dec 2015)

1/10/2015 RU Kavala
≈ 42 post 1st outbreak
≈ 120 km distance

14/10/2015 RU Chalkidiki
≈ 1.5 month post 1st Outbreak
≈ 210 km distance

16/9/2015 RU Evros
27 post 1st outbreak
≈ 40 km distance

20/8/2015 RU Evros
For 27 days post 1st outbreak
≈ 25 km max distance

7/10/2015 Limnos Island
≈ 49 post 1st outbreak
≈ 120 km distance
2nd wave of LSD (Apr - Nov 2016)

- 23/05 RU Pella
- 16/6 RU Imathia
- 30/6 RU Florina
- 25/11/2016 Preveza
- 26/08 RU Larissa & Kozani
- 15/07/2016 RU Achaia
  ≈ 300 km distance

- 6/04 RU Serres
  Re-emergence

- 19/10/2016 Evros
- 13/06/2016 Limnos

Data SIO, NOAA, U.S. Navy, NGA, CDA, Image Landsat / Copernicus
Overview

117 outbreaks
7 Regional Units
20 Aug - 15 Dec (4 months)
24 out of 117 outbreaks: vaccinated herds suspicion was notified less than 28 days post vaccination
6080 animals culled

104 outbreaks
14 Regional Units (11 new)
6 Apr - 9 Nov (7 months)
Unvaccinated animals or Vaccinated but not immunized at the time of infection (except 1 herd)
~ 5700 animals culled
Vaccination Planning

- Vaccination Started: on 5/09/2015 RU Evros
  after first confirmation of LSD: 20/08/2015 RU Evros

- At the beginning around outbreaks in affected Regional Units
  Xanthi, Rodopi, Kavala, Chalkidiki,

- In October creation of buffer zone in free areas and progressive extension according to the availability of the vaccines
  1st Priority: Thessaloniki, Drama, Serres, Kilkis,
  2nd Priority: Imatia, Pella, Pieria

- In May when the disease crossed the buffer zone:
  The Vaccination of total mainland firstly and the islands later decided
# Vaccines Supplies

## Bovine Animal Population in Greece: 731,339 animals (33,462 herds)

<table>
<thead>
<tr>
<th>Doses</th>
<th>Central Vet. Authority</th>
<th>Local Vet. Authorities</th>
<th>Farmers</th>
<th>Total Doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>33.100</td>
<td>85.800</td>
<td>110.000</td>
<td>228.900</td>
</tr>
<tr>
<td>2016</td>
<td>628.000</td>
<td>91.700</td>
<td>105.154</td>
<td>824.854</td>
</tr>
<tr>
<td>Total Doses</td>
<td>661.100</td>
<td>177.500</td>
<td>215.154</td>
<td>1,053,754</td>
</tr>
</tbody>
</table>

| Contribution | 55% | 15% | 18% | 88% |

## European Commission: Contribution 12% of the total number of doses

<table>
<thead>
<tr>
<th>European Commission</th>
<th>2015</th>
<th>27/4/2016</th>
<th>14/7/2016</th>
<th>2/12/2016</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>50.000</td>
<td>50.000</td>
<td>50.000</td>
<td>150.000</td>
</tr>
</tbody>
</table>

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Different Stages of Vaccination Campaign

**Greek Mainland 41 Prefectures**

**Annual Revaccination for 2016**

- **9 prefectures**: in progress
  - Calves > 4 months
  - Unvaccinated animals for other MS

**First Vaccination during 2016**

- **9 Prefectures** *completed first vaccination*
  - in progress for calves > 4 months
  - unvaccinated for other MS

- **17 Prefectures** *in progress first vaccination*

- **6 Prefectures** Vaccination Started less than 2 months ago

*The Islands*: the vaccination will start in the following days
Vaccination Coverage

- 50-69% coverage
- 70-94% coverage
- 95-100% coverage
- Less than 50%

[Map showing different coverage levels across regions]
Data on Vaccination

Harmonization of Data on Vaccination and explanation

Estimation on the base of animals
- Animals Vaccinated once
- Animals Vaccinated twice
- Animals Vaccinated but not existed anymore (Killed, slaughtered)
- Calves < 4 months not vaccinated (coming from vaccinated animals)
- Unvaccinated animals

Date of start vaccination
- Start/End Date of first vaccination
- Start/End Date of annual vaccination
- Dates of calves vaccination
- Practical there is no an end date of vaccination

Coverage
- Bovine Population in Data bases is always bigger than the existing
- Not only based on vaccinated animals but also on calves coming from vaccinated animals
Challenge for the future

Effectiveness of Vaccination

Is the absence of outbreaks a verification of the absence of the Lumpy Skin Disease?

Subclinical Cases
Mild Clinical Signs not being observed
Animals not develop Immunity
Under notification
Acknowledgements

Many thanks to all colleagues of Veterinary Authorities of Orestias, Evros, Xanthi, Limnos, Rodopi, Kavala, Chalkidiki, Thessaloniki, Serres, Kilkis, Drama, Pella, Imathia, Pieria, Kozani

Special thanks to:

- **Achilleas Sachpatzidis** (Director, Directorate of Veterinary Medicine of the East Macedonia and Thrace Region)
- **Evaggelia Plevraki and Maria Topkaridou** (Veterinary Service of S.Evros)
- **Evaggelos Tsiamadis and Stefanos Moraitis** (Veterinary Service of Thessaloniki)
- **Konstantia Tasioudi, Eirini Agianniotaki, Peristera Iliadou** (NRL)
- **Thomas Alexandropoulos** (Chief Veterinary Officer)
- **Sotiria-Eleni Antoniou** (Head of the Department of Infectious and Parasitic Diseases)

Last but not least:

- The colleagues at DG SANTE of European Commission for their support
- The colleagues of Community Veterinary Emergency Team for their presence on the spot and contribution
- **Kris De Clercq** and **Coda- Cerva Laboratory**
- **International Atomic Energy Agency (IAEA)**, for training laboratory staff and providing reagents

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