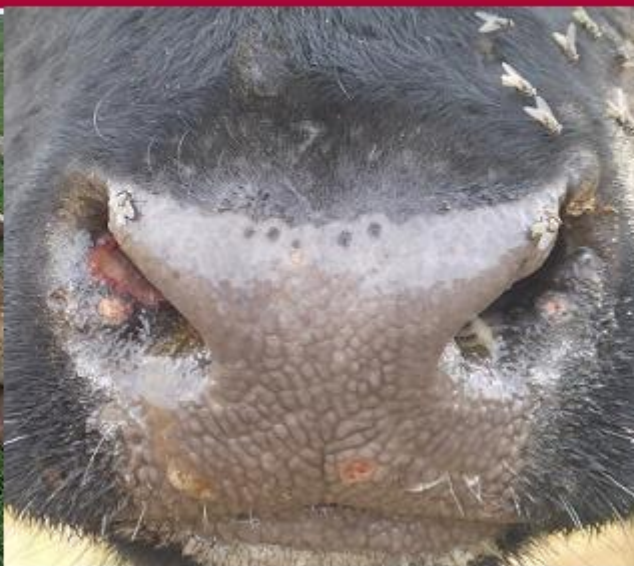




Food and Agriculture Organization
of the United Nations



Current FAO initiatives on LSD in the region

Daniel Beltran & Eran Raizman

Publications – Early warning messages

empres **watch** on LSD:

- November 2013- LSD in the Middle East
- September 2015- LSD in Europe



empres watch

VOL 29 November 2013 EMPRES-ANIMAL-HEALTH@FAO.ORG | WWW.FAO.ORG/AG/EMPRES.HTML

Emergence of lumpy skin disease in the Eastern Mediterranean Basin countries

Contributors: Sherylin Wainwright*, Ahmed El Idrissi*, Raffaele Mattioli*, Markos Tibbo*, Felix Njumei*, Eran Raizman*
 * Food and Agriculture Organization of the United Nations (FAO); * FAO Regional Office for the Near East (FAO-RNE)

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Animal Health (OIE).
 LSD was first reported in Africa, where it crippled the production potential of cattle and compromised vulnerable livelihoods on the continent. LSD moved beyond Africa in 1989 when Israel confirmed its first LSD outbreak. In subsequent years Bahrain, Kuwait, Oman, Yemen and the West Bank also reported LSD incursion. Lebanon and Jordan joined LSD-affected countries in 2012 and 2013, and most recently Turkey reported the disease in October 2013 (see Table 1).
 There is an imminent risk that LSD will (or has already) become endemic in some countries in the Middle East. Although LSD considering the area's substantial livestock population. Turkey maintains over 11.3 million heads of cattle. Iraq, Lebanon and the Syrian Arab Republic maintain 2.8 million heads, and the Islamic Republic of Iran maintains for approximately 8.5 million heads. Armenia, Azerbaijan and Georgia combined maintain 4 million heads.
 At-risk countries include the Russian Federation to the north and Bulgaria and Greece to the west. This is in line with the spread of other significant transboundary animal diseases (e.g. African swine fever, foot-and-mouth disease, sheep pox and goat pox) in the region. Moreover, capripoviruses

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Emergence of lumpy skin disease (LSD) in Europe

FAO contributors: Silvia Krastel, Julio Pinto, Caryll Lockhart, Ahmed El Idrissi, Eran Raizman

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on or a total ban of international trade of live animals and animal products (Gari *et al.*, 2001).
 LSD is endemic in many African countries, and is rapidly spreading throughout the Middle East, including Turkey (2013) and Central Asia (Azerbaijan in 2014).
 In August 2015, Greece reported two outbreaks of LSD in the Evros region along the border with Turkey. The source of the disease is likely to have originated from vectors spread from outbreaks reported in Turkey in the Edirne region in June 2015. In September 2015, the disease was also reported in the Russian Federation in Dagestan not far from the border with Azerbaijan. Outbreaks of LSD in free regions require immediate notification under the Terrestrial Animal Health Code of the World Organisation for Animal Health (OIE). Figure 1 shows the distribution of LSD outbreaks between 2008 and 2015.
 Poorly regulated movements of high numbers of animals, often associated with festivities represent a risk for the introduction

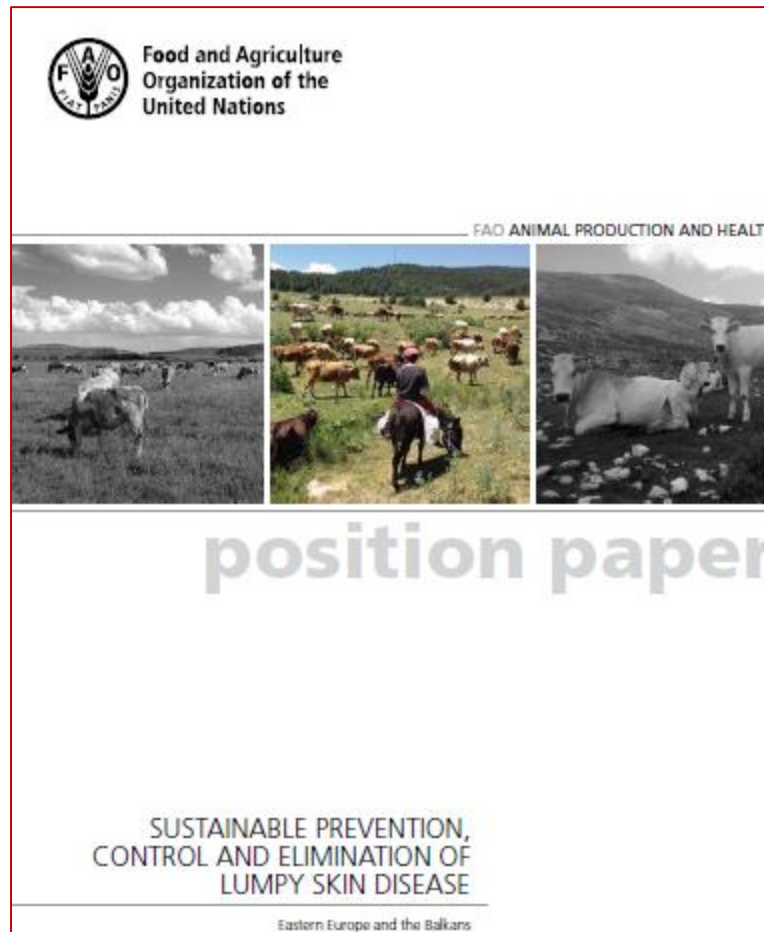
How can LSD be diagnosed?
 A basic diagnosis can be made when there is the presence of typical lesions on the skin and in the mouth of infected animals. However, there are other diseases that present in similar forms in cattle, which would require different methods of control and treatment from those for LSD. A definitive diagnosis can only be confirmed by submitting appropriate samples of skin lesions to a laboratory where the virus can be identified. Molecular diagnostic tests such as conventional and real-time polymerase chain reaction (PCR) assays are rapid and highly sensitive tests, and are widely used in veterinary diagnostic laboratories.

How is the disease transmitted?
 The main pathways for transmission are biting and blood-feeding arthropods, including *bitlin* flies and *mosquitoes* (Ali *et al.* 2015).

Publications – Position paper

Sustainable prevention, control and elimination of LSD

- Analysis of incursion risk
- Vaccines
- Movement Control
- Stamping Out
- Carcass Disposal
- Restocking
- Vector Control
- Laboratory support
- Options for combining vaccination, movement control and stamping out
- Areas of uncertainty



Publications - Monograph on LSD

- EMPRES 360 Monograph on LSD in the region - <http://www.fao.org/3/a-i7982e.pdf> (Nov. 2017)



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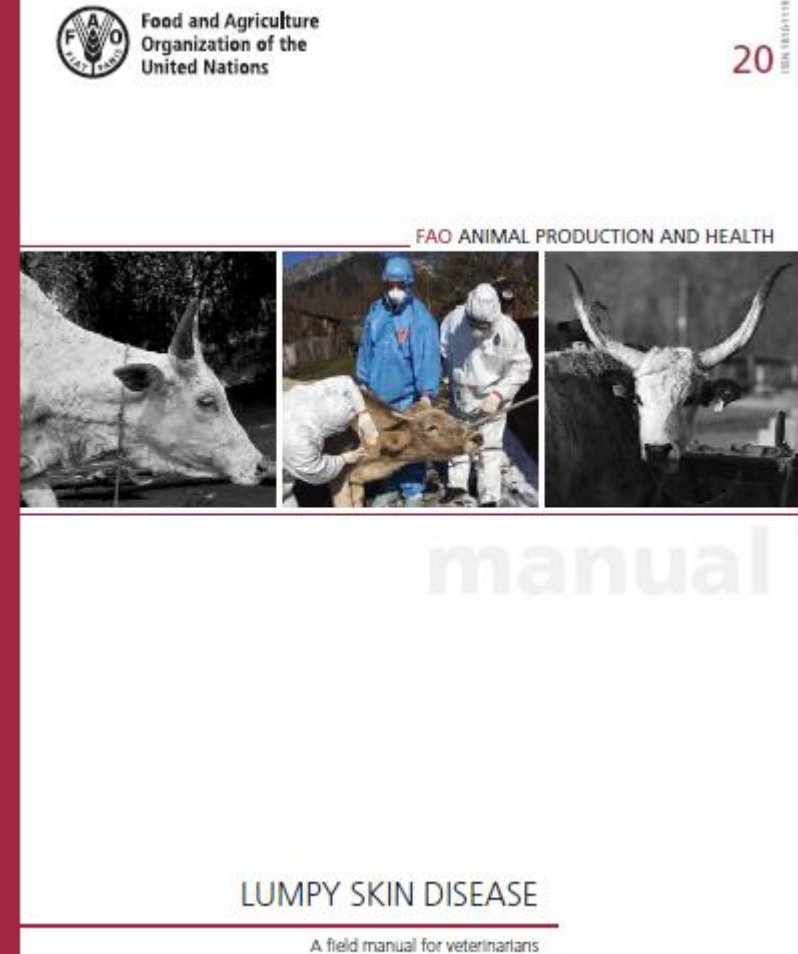
60| NEWS

The FAO response to the
threat of Lumpy Skin
Disease in the Balkans and
the Caucasus



Publications – *Field Manual on LSD*

- Europe-focused
- Audience: Private and official veterinarians (in the field and slaughterhouses), para-professionals and laboratory staff;
- Contents: Basic epidemiology, clinical recognition, sampling & shipping of specimens, and basics of LSD prevention and







Publications – *Template of LSF contingency plan*


- **LSD Emergency Vaccination Plan**
- **LSD Surveillance and Early Detection Guide**
- This set of documents:
 - Aims to aid VS in the development of their LSD contingency, vaccination and surveillance plans.
 - Translated into Bosnian, Romanian, Russian, Ukrainian.
 - Already applied in Georgia (in progress in Belarus, Moldova and Ukraine)

Publications – Awareness materials

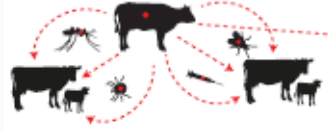
- A 60-second video on the early detection & notification of LSD and BT, and to improve on-farm biosecurity measures.
- Available in [Macedonian](#) and [Albanian](#).
- Now being adapted/translated into Bosnian, English, Romanian, Russian and Ukrainian
- [Repository of Leaflets and posters on LSD and other TADs:](#)
 - Editable
 - Available in different languages


İribuynuzlu mal-qaranın nodulyar dermatiti


Nodulyar dermatit iribuynuzlu mal-qaranın (inek, camuş) virus xəstəliyidir
İnsan nodulyar dermatit ilə xəstələnir!


Xəstəliyin kiçik məsafəyə ötürülmə yolları




Xəstəliyin uzun məsafəyə ötürülmə yolları







Dağdan heyvan




Xəstə heyvan




Yükəməli qana




Yükəməli meşki




Yükəməli sətlik



Virus




Şirə



Heyvanları uzun məsafəyə daşıyan qatır nəqliyyat


Xəstəliyin simptomları aşağıdakılardır:

- ✓ Qızdırma
- ✓ İştahsızlıq
- ✓ Dəriyə yumru formalı düyünlü səggi (nodullar)
- ✓ Gücləndirilmiş selik axması, gözlərin sulanması
- ✓ Burundan axıntı
- ✓ Şişmiş limfatik düyünlər



Prevensiya tədbirləri:
 Heyvanları və onların qaldığı yerləri həyətərdə aleyhinə işləyin

Milli Ərzaq Agentliyi yüksək risk zonaları və xəstəlik ocaqlarında nodulyar dermatit aleyhinə peyvəndləməni keçirir



Zəruri olduqda zəng edin:

Yerli baytar

5	
5	

Qaynar xətt:
15 01; 247 01 01

Milli Ərzaq Agentliyi

Capacity building

- Practical training on vector surveillance & taxonomy (LSD-focused) (June 2016, Bulgaria)
- *Ad-hoc* LSD expert meeting (July 2016, Serbia)
- Regional workshops on LSD prevention and control (Balkans & Caucasus)



Capacity building – Cascade training for field vets

- North Macedonia, Ukraine
Belarus and Moldova
- Developed in close
collaboration with
Veterinary Agencies
- To improve field detection,
prevention and control of
LSD (+ bluetongue)



Project on *LSD risk mitigation and control in Georgia*

- Assessment of the situation
- Technical guidance on LSD control plan
- Development of a LSD contingency plan
- Training on LSD epi, risk based surveillance, outbreak investigation and control
- Training on LSD laboratory diagnosis
- Develop, print and distribute posters and leaflets



İribuynuzlu mal-qaranın nodulyar dermatiti

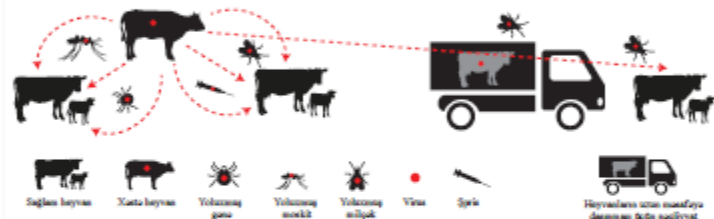
Nodulyar dermatit iribuynuzlu mal-qaranın (inək, camuş) virus xəstəliyidir

İnsan nodulyar dermatit ilə xəstələnir!



Xəstəliyin kiçik məsafəyə ötürülmə yolları

Xəstəliyin uzun məsafəyə ötürülmə yolları



Xəstəliyin simptomları aşağıdakılardır:

- ✓ Qızdırma
- ✓ İştahasızlıq
- ✓ Deridə yumru formalı düyümlü səpə (nodullar)
- ✓ Gücləndirilmiş selik axması, gözların sulanması
- ✓ Burundan axıntı
- ✓ Şişmiş limfatik düyünlər



Prevensiya tədbirləri:

Heyvanları və onların qaldığı yerləri haşaratlar aleyhinə işləyin

Milli Ərzaq Agentiyi yüksək risk zonaları və xəstəlik ocaqlarında nodulyar dermatit aleyhinə peyvəndləməni keçirir



Zəruri olduqda zəng edin:

Yerli baytar

5	_____
5	_____

Qaynar xətt:
15 01; 247 01 01

Milli Ərzaq Agentiyi

Mailing lists

- RVF
- ASF
- LSD

If you want to be added, email daniel.beltranalcrudo@fao.org

2nd Update on lumpy skin disease activities at FAO - Message (HTML)

FILE MESSAGE

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To Manager
Team Email

Quick Steps

Move

Assign Policy

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Mark Unread

Categorize

Editing

Zoom

Zoom

Wed 3/7/2018 5:58 PM

BeltranAlcrudo, Daniel (REUT)

2nd Update on lumpy skin disease activities at FAO

To

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i You forwarded this message on 3/7/2018 5:59 PM.

Dear Colleagues,

We would like to update you about the new FAO initiatives/news since the January 2018 update (see below). Please click in the hyperlinks for further information:

- FAO has started a **Technical Cooperation Project (TCP)** to address preparedness for LSD in Belarus, Moldova and Ukraine. Activities are expected to start in the coming months;
- FAO has **shipped copies of the LSD Manual** to countries in the Balkans. Additional copies will be shipped to Central Asian and Eastern Europe at risk countries in the coming days;
- A **manual on RVF surveillance** is now available on-line. Rift Valley fever may be the next cattle disease following the steps of LSD into the region;
- FAO organized a **Training on participatory epidemiology principles and techniques in Georgia** applied to ruminants between September and December 2018, and developed a ruminant surveillance system, which integrates participatory disease surveillance and current on-going surveillance activities.

Within the Joint FAO/IAEA program, the following activities have been conducted:

A photograph of two black cows in a field of tall, dry grass. The cow in the foreground is facing left, and the one behind it is also facing left. The text "Thank You for your attention" is overlaid in white, bold font across the middle of the image.

Thank You for your attention