



**Ministry of Agriculture  
Veterinary and Food Safety Directorate**

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# **2014 Eradication Programme for Sheep and Goat Brucellosis CROATIA**

**Standing Committee on Plants, Animals and Food  
and Feed (SCoPAFF)**

**June 2015**



# SHEEP AND GOAT BRUCELLOSIS HISTORY

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- Last outbreak of sheep and goat brucellosis in Croatia was in 2013<sup>th</sup>
  - sheep herd in Lika-senj county
    - herd was not regularly tested (high risk municipality in which testing for brucellosis was mandatory)
    - Communication with human epidemiology at local level (the owner got sick)
    - herd was depopulated
- Last outbreaks before 2013 -> 2010 (Lika-senj, and Split-dalmatia counties), 6 outbreaks
- 2004 – 2008: sporadically (Lika-senj; Split-dalmatia; Karlovac county)
- Problem mostly based on illegal movements... (herds depopulated)



# SHEEP AND GOAT BRUCELLOSIS HISTORY

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## Testing strategy before 2014

- Laboratory investigation of **all reported abortions** in sheep and goats (abortion reporting was mandatory)
- **Mandatory testing of male animals** before use for breeding or introduction into the herd
- Before 2012 - testing has been performed in **municipalities with high risk** because of previous outbreaks (2006 - 2010)
- Granting of officially free statuses started in 2012 – for all dairy and mixed sheep and goat herds
- **2012 – 2013** -> about 80.000 animals have been tested, both years



- For the first time whole sheep & goat population in Croatia was under the programme (600.000 sheep, 70.000 goats), about 20.000 herds
- Maintenance of OF status in previously OF herds (dairy and mixed herds tested in 2012 and 2013)
- **Granting OF status for all remaining herds**
- **1<sup>st</sup> test in autumn 2014** (September – December)
- **2<sup>nd</sup> test ongoing** (April – September 2015)
- Laboratory investigation of all reported abortions





# MAIN MEASURES IN 2014

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- Raising awareness among owners about sheep and goat brucellosis and importance of reporting abortions – distribution of educational materials to owners during testing in 2013 and 2014
- Premovement testing in the whole country – animals have to be tested within 30 days prior to movement (except between OF herds)

MINISTARSTVO POLJOPRIVREDE  
UPRAVA ZA VETERINARSTVO I  
SIGURNOST HRANE  
SEKTOR ZA ZAŠTITU ŽIVOTINJA  
**BRUCELOZA OVACA I KOZA**

Bruceloza ovaca i koza je ukorjenjena u Mediteranskoj regiji, ali javlja se u drugim dijelovima svijeta.

Kod oboljelih ovaca i koza se javljaju sljedeći znakovi bolesti:

- pobačaj!
- zaostajanje posteljice
- upale u genitalnim organima muških i ženskih životinja
- upale u zglobovima (epididimitis)
- upale koje se javljaju i upale zglobova

**UZROČNIK SE IZLUČUJE:**

- ISCJETKOM IZ MATERNICE
- MLJEKOM

Najznačajnije širenje infekcije odvija se u vrijeme pobačaja ili normalnog poroda zaražene životinje jer se velika količina bakterija nalazi u posteljici, fetalnoj tekućini i iscjetku iz maternice.

S obzirom na važnost otkrivanja i sprečavanja širenja bruceloze ovaca i koza Uprava za veterinarstvo i sigurnost hrane Ministarstva poljoprivrede provodi:

**Program nadziranja i iskorjenjivanja bruceloze ovaca i koza u Republici Hrvatskoj u 2014.g.**

Program nadziranja i iskorjenjivanja uzimanje uzoraka krvi od ovaca i koza starijih od 6 mjeseci u Republici Hrvatskoj s ciljem otkrivanja i iskorjenjivanja bruceloze. Uzorci krvi će se laboratorijski pretraživati u laboratorijima Hrvatskog veterinarskog instituta.

**Nacionalni referentni laboratorij za brucelozu je:**  
Hrvatski veterinarski institut - Zagreb  
Laboratorij za bakterijske zoonoze i molekularnu dijagnostiku bakterijskih zoonoza  
Savska cesta 143, pp 183, 10 000 Zagreb

**CILJ PROVEDENJA PROGRAMA:**

- otkrivanje i iskorjenjivanje bruceloze ovaca i koza
- zaštita zdravlja ljudi
- ostvarivanje uvjeta za dodjelu statusa „Stado službeno slobodno od bruceloze (*B.melitensis*)“
- krajnji cilj je ostvariti status cijele Republike Hrvatske kao zemlje službeno slobodne od bruceloze (*B.melitensis*)

Ostvarenje krajnjeg cilja, statusa zemlje službeno slobodne od bruceloze ovaca i koza (*B.melitensis*) važno je s zdravstvenog i ekonomskog stajališta, jer se podiže zdravstveni status populacije ovaca i koza u

Brucelozu ovaca i koza uzrokuje bakterija *Brucella melitensis*. Ova bakterija je iznimno patogen za ljude i uzrokuje bolest koja se često naziva Malteška groznica. Malteška groznica je jedna od najozbiljnijih bolesti koje se prenose s životinja na ljude (zoonoza).



# RESULTS IN 2014

	Total herds	Tested (%)	Positive herds	Total animals	Tested (%)	Positive animals
2014	20 176	15605 (77,3 %)	25 (0,12 %)	670 372	462 891 (69,05 %)	30 (0,004 %)

Laboratory investigation of abortions:

- Number of reported abortions: 395
- Bacteriologically investigated samples: 104
- *Brucella sp.* was not isolated



# RESULTS IN 2014

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- All animals positive on **RBT** have been retested (**CFT**)
- In case that more than 5 % of animals in the herd were positive on RBT, whole herd tested with CFT
- All animals positive on CFT -> **culled and sampled for bacteriological investigation**



# RESULTS IN 2014

Location of **CFT positive herds** :



**25 herds**  
**30 animals**  
(29 sheep and 1 goat)



<b>County</b>	<b>Number of animals tested in the herd</b>	<b>CFT positive animals</b>	<b>County</b>	<b>Number of animals tested in the herd</b>	<b>CFT positive animals</b>
<b>Sisak Moslavina County</b>	<b>90</b>	<b>2</b>	<b>Zagreb county</b>	<b>97</b>	<b>1</b>
	<b>20</b>	<b>1</b>		<b>14</b>	<b>1</b>
	<b>28</b>	<b>1</b>			<b>414</b>
	<b>10</b>	<b>1</b>	<b>Osijek baranja County</b>	<b>117</b>	
	<b>15</b>	<b>1</b>		<b>Vukovar srijem County</b>	<b>63</b>
	<b>5</b>	<b>1</b>	<b>10</b>		<b>1</b>
	<b>5</b>	<b>2</b>	<b>129</b>		<b>1</b>
<b>Lika senj county</b>	<b>76</b>	<b>1</b>	<b>85</b>		<b>1</b>
	<b>146</b>	<b>1</b>		<b>114</b>	<b>2</b>
	<b>359</b>	<b>1</b>	<b>Virovitica podravina County</b>		
<b>Požega slavonia county</b>	<b>9</b>	<b>1</b>	<b>Bjelovar bilogora County</b>	<b>41</b>	<b>1</b>
	<b>10</b>	<b>2</b>		<b>110</b>	<b>1</b>
	<b>18</b>	<b>1</b>	<b>Zadar county</b>		
	<b>6</b>	<b>1</b>			



# PROGRAMME IN 2014

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- All measures are financed from the state budget (except premovement testing)
- Sampling performed by authorised veterinarians
- Laboratory testing performed by the Croatian veterinary institute (CFT – only in NRL)
- Cost of sheep & goat brucellosis programme in 2014  
**2.3 mil €**



# OFFICIALLY FREE HERDS

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- December 31<sup>st</sup> 2014
  - **720 OF herds (dairy herds)**, tested in previous years (2012, 2013, 2014)
  - All other herds are **in the process** (2<sup>nd</sup> test is ongoing, under 2015 programme)... interval 6 – 12 months between 2 tests

## **2015 (and 2016)**

- On December 31 2015, at least 80% of herds should be able to get OF status
- Additional efforts to increase testing coverage
- **Continuing education and communication** with the owners



# TASK FORCE MEETING - 2015

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- **June 17th – 18th, Split, Croatia**
- **Brucellosis subgroup... TF team of experts**

**Thank you for your  
attention!**