Meeting of the Ministers of Agriculture and Food From South Eastern Europe in relation to Bluetongue disease

**Epidemiological situation in Republic of Kosovo**

Dr. Valdet Gjinovci  
Chief Executive Officer  
Food and Veterinary Agency  
Kosovo  
25th, January 2017, Podgorica, Montenegro
2001 First appearance of bluetongue in Kosovo

- 2001 first clinical cases seen in sheep in August
- Cases distributed across five municipalities and clearly related to an epizootic involving neighbouring countries
- Clinical signs included pyrexia, facial oedema, nasal discharge and coronitis
- Mortality low
- Although cattle and goats occur in affected municipalities, clinical signs were confined to sheep
- Samples sent in September 2001 to Institute for Animal Health, Pirbright, UK were confirmed positive for BTV9
• No clinical BT was seen in Kosovo during the summers of 2002, 2003 or 2004

• No BT vaccine was used in Kosovo in 2001 or after
Serological investigation of first outbreak

• ELISA serology for BT was introduced in the Kosovo Veterinary Laboratory

• 328 serum samples from cattle, sheep and goats collected in January 2001 and tested for BT antibodies were all negative, suggesting that appearance of clinical cases in summer 2001 was first incursion of BTV into Kosovo

• Annual serological surveys of 12 to 15 month old cattle undertaken during 2002, 2003 and 2004

• Study provided evidence of continuing presence of BTV in Kosovo in each of 2001, 2002 and 2003 in decreasing prevalence

Investigations into the vector for BT in Kosovo

• Using a light trap, *Culicoides* samples were collected weekly from October 2004 until the end of 2006 and speciated

• In the summer months, samples contained *C. Obsoletus* complex and *Pulicaris* complex, but not the competent vector of bluetongue – *C. imicola*

• *No Culicoides* were detectable for four and a half months during winter

• BERISHA, B. *et al* (2010). Entomological research on the vectors of bluetongue disease and the monitoring of activity of *Culicoides* in the Prishtina region of Kosova. Veterinaria Italiana, 46, 431-437
The results of the two published studies indicated that BT could persist in Kosovo in the absence of its recognized vector and over-winter in the general absence of *Culicoides*
2014 Second appearance of bluetongue in Kosovo

- First clinical cases of BT seen in sheep in August in Novo Berde municipality
- Presence of **BTV serotype 4** confirmed at Animal Health Laboratory, Pirbright, UK
- Bluetongue spread across Kosovo – see map
- 152 deaths reported
• No clinical cases of BT have been reported in Kosovo since 2014

• No BT vaccine was used in Kosovo in 2014 or after
Serological investigation of second outbreak

- **Objective:** to detect evidence of continuing circulation of BT virus by detecting sero-conversion of young cattle
- **Survey design:** EU Reg 1266/2007 was followed
- 1,252 samples from 6 to 18 month old cattle from 281 villages were collected in September/October 2016 and tested for BTV antibody
- The older cattle could have been exposed to BTV infected *Culicoides* during 2015 and 2016, the younger ones only in 2016
- All were too young to have been exposed to the epizootic in 2014
Results of serology
• Despite lack of clinical cases, sero-positive cattle were found in all five of the geographic zones of Kosovo, meaning that BTV was circulating throughout Kosovo at some time during the summers of 2015 and 2016
• Prevalence of sero-positive cattle was higher in the south east (10.8%) than in the north west (4.3%)
Conclusions

• There have been two epizootics of bluetongue in Kosovo separated by 13 years.
• Clinically affected ruminants were sheep though clinical signs were usually mild and mortality was low.
• After both epizootics, BT virus appears to have circulated during the following years without the appearance of clinical signs.
Bluetongue measures to be implemented in Kosovo
Background

- There have been two epizootics of BT in Kosovo separated by 13 years.
- Clinically affected ruminants were sheep though clinical signs were usually mild and mortality was low.
- Economic impact of these epizootics caused by BTV9 and BTV4 have been slight.
- No vaccinations against BT have been given in Kosovo.
- Capability for clinical surveillance has been developed in the field.
- Capability for sero-surveillance has been developed in the field and in the Kosovo Food & Veterinary Laboratory.
Considerations for policy makers in Kosovo

• The two epizootics have not had a big economic or social impact

• BT is not a zoonosis

• Not vaccinating against BT has allowed the conduct of informative sero-surveillance

• Procurement and storage of BT vaccine against the two serotypes experienced for emergency preparedness for a future epizootic will not protect if a different serotype is involved
Preferred policy before a BT epizootic

• Maintain public and professional awareness of clinical signs of BT and the obligation to report suspicions of the disease
• ‘Horizon scanning’ world and regional situation with regard to BT and assessment of the risk of it re-entering Kosovo
• Emergency preparedness through ability to activate the general contingency plan for transboundary diseases prepared in Kosovo
Preferred policy in the face of a BT epizootic

• Quarantine farms and regions where BT is expected or diagnosed
• Ban farm to farm and farm to market movements of ruminant livestock from farms and regions in quarantine
• Ban movement of ruminant livestock in quarantine to slaughter except to slaughter within an infected area and only under licence
• Undertake sampling and dispatch of appropriate samples to a reference laboratory for sero-typing
• Be prepared to order appropriate vaccine for vaccination in the face of an outbreak if it proves to be economically damaging and/or is part of a regional strategy
• Continue passive and targeted surveillance and sero-surveillance activities
Thank you for our attention!