



Ministry of Agriculture

Bluetongue control strategy in Hungary

SCoPAFF
6 May, 2015



Incursion in 2014

At 23rd September 2014 two outbreaks has been reported from Romania, Caras-Severin county.

The surveillance zone reached Csongrád and Békés county in Hungary.

Measures applied in the surveillance zone :

- Movement restriction
 - Enforced surveillance based on a risk assesment:
 - Blood samples were taken for serological and virological test with 95% confidence and 5% prevalence in both parts of surveillance zone
 - Weekly midge trapping in both parts of surveillance zone
 - Vaccination is not allowed
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Incursion in 2014

- Two PCR positive cattles in two herds have been found in Csongrád county at 14th October
 - Protection and surveillance zones were established and measures applied in accordance with Directive 200/75 and Regulation 1266/2007:
 - Vaccination is not allowed
 - Movement restriction and control
 - Enforced surveillance based on a risk assesment:
 - Blood samples were taken for serological and virological test with 95% confidence and 5% prevalence from every 2000 km² area in restricted zones
 - Weekly midge trapping in every county in restricted zones
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Incursion in 2014

- Between 14th October and 2nd December in 30 holdings of 5 counties have been found PCR positive ruminants
 - New outbreaks were reported and the restricted zones modified
 - The PCR positive animals were culled or slaughtered
 - In the area located within a radius of 1 kilometer around the PCR positive holdings terrestrial disinsection and treatment of breeding sites were carried out
 - In the holdings located within a radius of 3 kilometers around the PCR positive holdings blood samples were taken for serological and virological test with 95% confidence and 5% prevalence
 - In the holdings located within a radius of 20 kilometers around the PCR positive holdings all susceptible animals were clinically examined and treated with authorised insecticides/repellents
 - Based on midge trapping, temperature parameters and laboratory results start of vector free period was defined and reported at 3rd December
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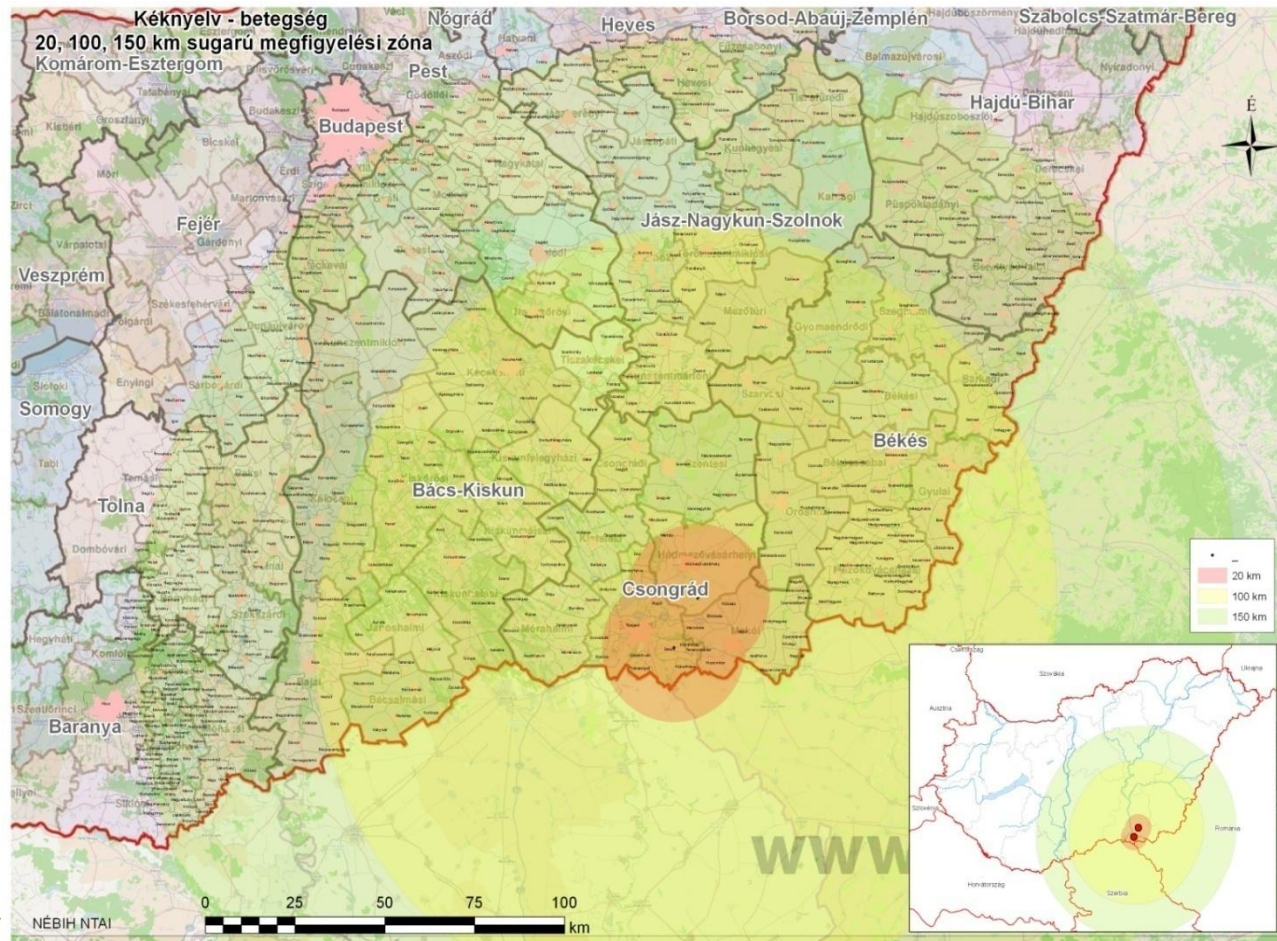
Circulation of BTV in 2014

- Between 14. 10. 2014. and 05. 12. 2014. in the frame of surveillance 4400 ELISA and 9010 PCR tests were carried out in the NRL
 - Number of recent infections (PCR positive but seronegative laboratory results) between 15. 10. 2014. and 31. 12. 2014.:
 - 15. 10 – 31. 10. **23**
 - 01. 11 – 15. 11. **17**
 - 16. 11 – 30. 11. **5** (last one at 18th November)
 - 01. 12 – 31. 12. **0**
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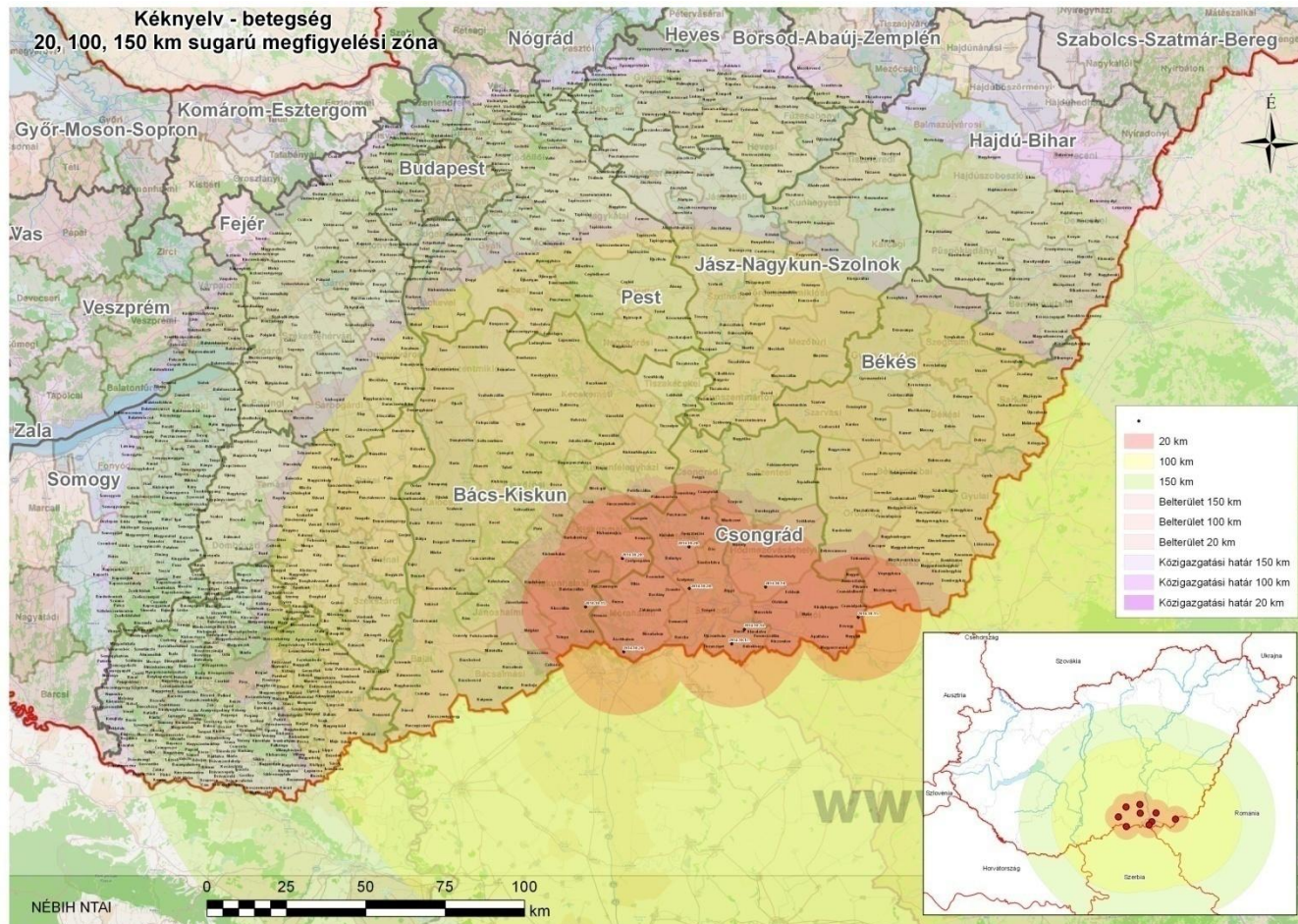
Spreading of BTV in 2014 – 14. 10.





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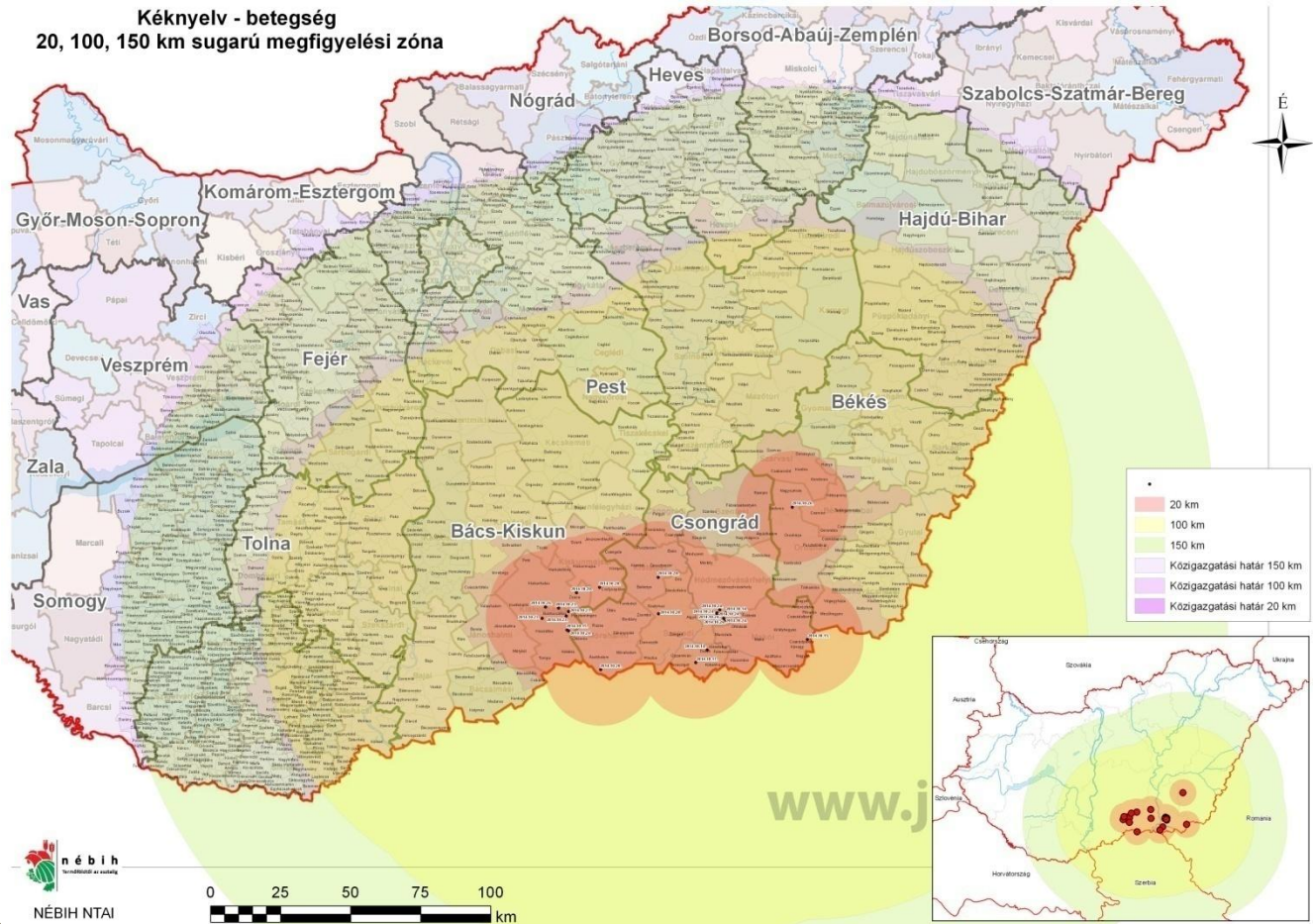
Spreading of BTV in 2014 – 20. 10.





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Spreading of BTV in 2014 – 29. 10.

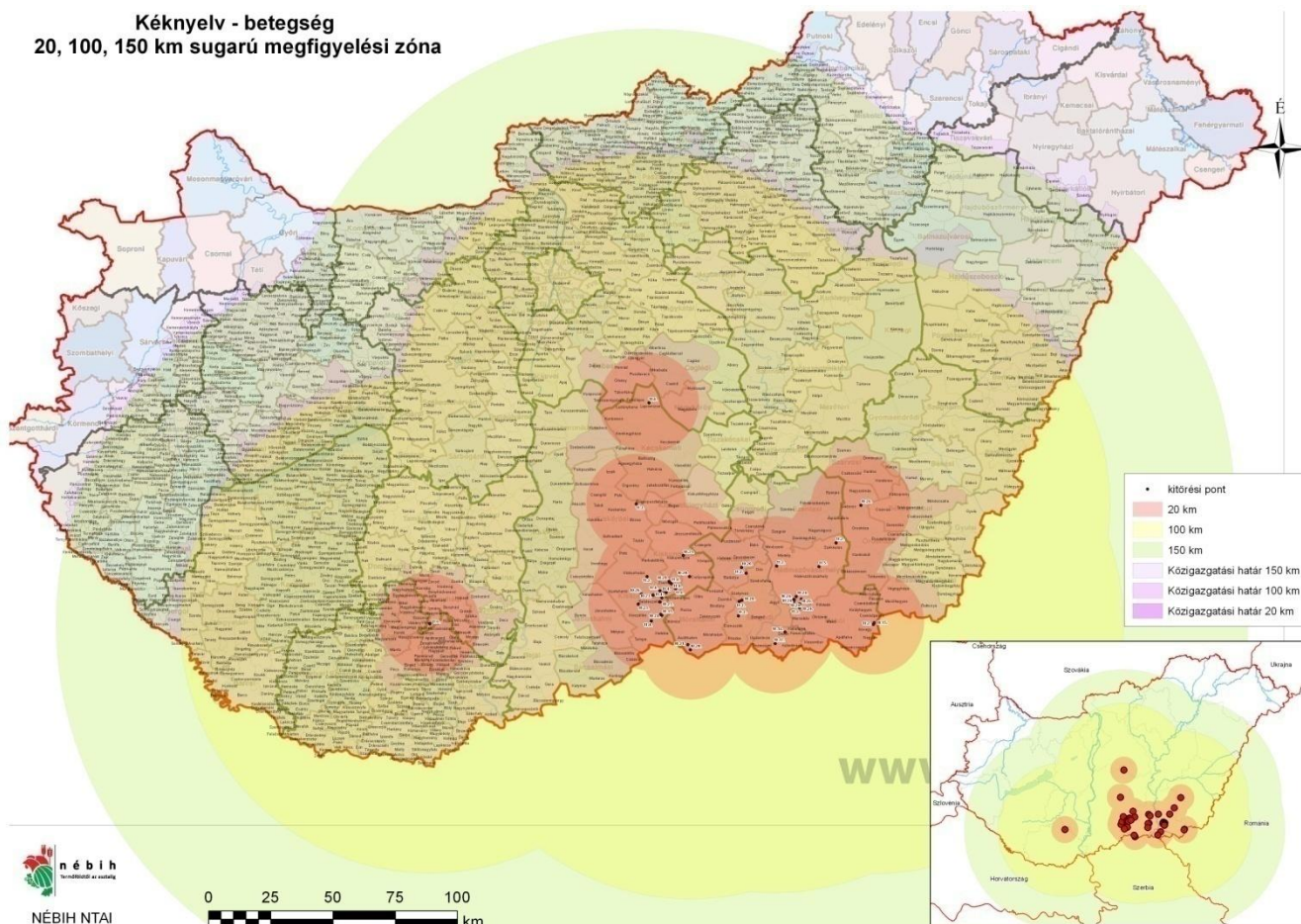




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Spreading of BTV in 2014 – 07. 11.

Kéknyelv - betegség
20, 100, 150 km sugarú megfigyelési zóna

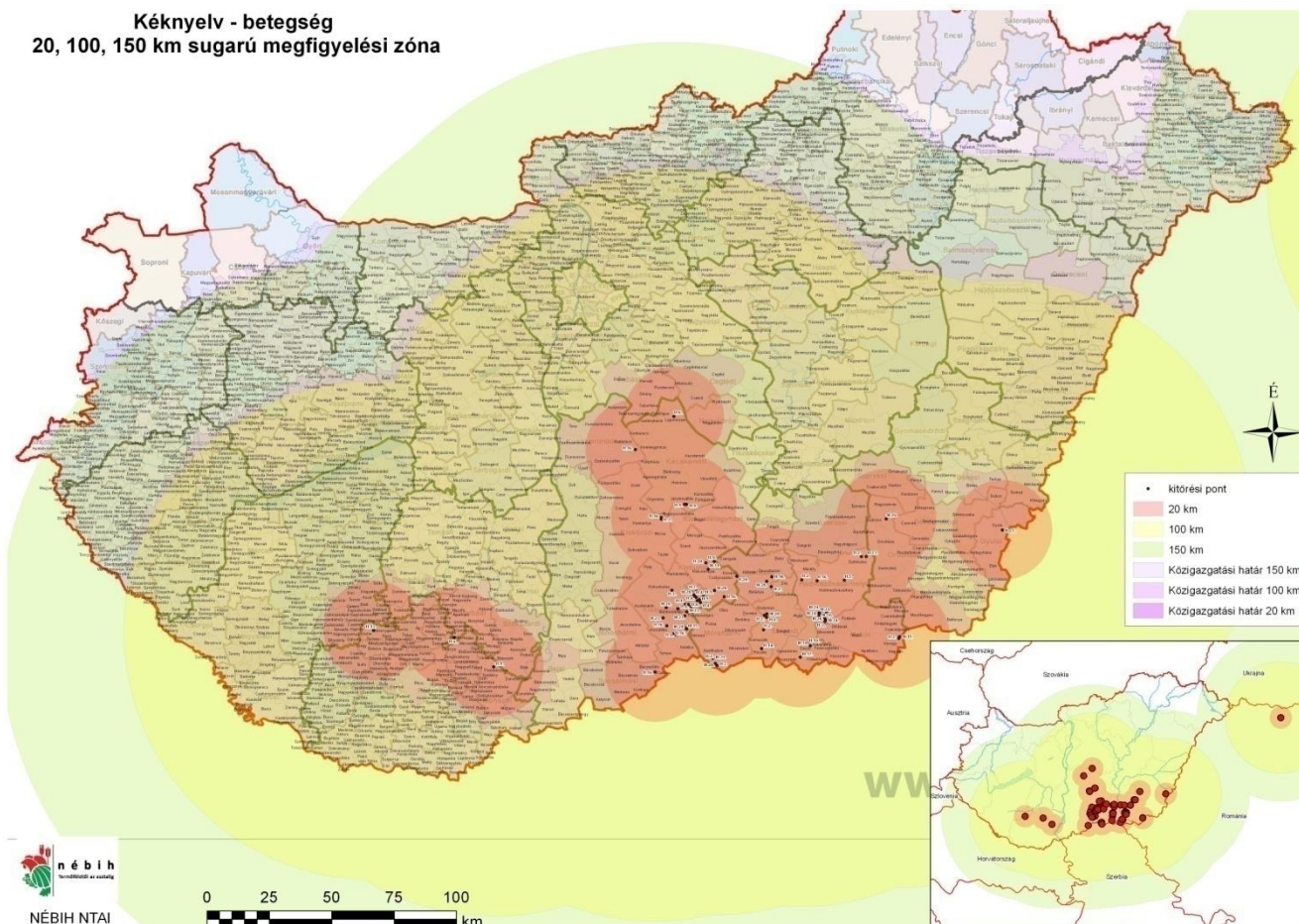




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Spreading of BTV in 2014 – 23. 11.

Kéknyelv - betegség
20, 100, 150 km sugarú megfigyelési zóna





Conclusions

- The spreading could not be stopped but slowed and reduced *mainly due to the culling/slaughtering of viropositive animals* until the vector free period.
 - In accordance with Article (6) of Directive 2000/75/EC in case of confirmation of an outbreak the official surveillance must be extended to the holdings *within a 20 kilometers radius* around the infected holding(s).
 - According spreading data new outbreaks occurred typical *in the 20 kilometers zones* or so *close to them* that the zones were in connection with each other.
 - In favour of stopping the spreading direct control measures must be associated with vaccination of domestic ruminants.
 - Risk based surveillance (taking blood samples for serological and virological test with 95% confidence and 5% prevalence from every 2000 km² area in all counties 4 times in the year) must be continued in 2015.
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Surveillance in 2015



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County	Nr. Of sampling units in counties	Nr.of samples in 2015
Baranya	2	472
Bács-Kiskun	4	944
Békés	3	708
Borsod-Abaúj-Zemplén	3,5	826
Csongrád	2	472
Fejér	2	472
Győr-Moson-Sopron	2	472
Hajdú-Bihar	3	708
Heves	2	472
Jász-Nagykun-Szolnok	3	708
Komárom -Esztergom	1	236
Nógrád	1	236
Pest (és Budapest)	3,5	826
Somogy	3	708
Szabolcs-Szatmár-Bereg	3	708
Tolna	2	472
Vas	1,5	354
Veszprém	2,5	590
Zala	2	472
TOTAL	46	10856



Conclusions

- 2.100.000 domestic ruminants are kept in Hungary (1.200.000 sheeps and goats and 900.000 cattles)
 - 2/3 of susceptible animals are kept in the 100 kilometers zone
 - Vaccination strategies:
 - mass vaccination of all susceptible animals in the country during the vector free period (3.000.000 doses of BTV-4 vaccine),
 - mass vaccination of all susceptible animals in the protection zone during the vector free period (2.000.000 doses of BTV-4 vaccine),
 - vaccination of all susceptible animals in the newly established 20 kilometers zones around new outbreaks in 2015 (can be implemented rapidly and effectively at the same time of clinical examinations)
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Conclusions

- Difficulties occurred in purchasing (vaccine was not available in quantities required in sufficient time) and financing the required amount of vaccine. *As our knowledge still doesn't exist the required amount of vaccine on the market and subvention available for mass vaccination.*
 - Except 7 cases in 2014 new outbreaks occurred typical in the 20 kilometers zones demarcated around former ones in accordance with Article (6) Directive 2000/75/EC or so close to them that the zones were in connection with each other.
 - Considering the spreading data and difficulties Hungary is planning to carry out *mandatory* vaccination in 20 kilometers zone around new outbreaks confirmed in 2015 and *to continue applying direct control measures* in association with vaccination.
 - *Voluntary* vaccination is allowed in the whole restricted zone (in surveillance zone only with inactivated vaccine)
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Thank you for your attention!
