Vector-borne Diseases, activities in Republic of North Macedonia

WOAH Regional Seminar

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Angela Grujovska, DVM

National animal health legislation

- Law on Veterinary Health (Official Gazette No. 113/07, 24/11, 136/11, 123/2015, 154/2015 and 53/2016) and corresponding bylaws.

At the moment, FVA is working on adoption of new national animal health legislation in line with the EU Reg. 429/2016 with accompanying Delegated and Implemented acts.

- Law on food safety (Official Gazette No. 157/2010) certain authorization of the Director dealing with Animal Health issues.
- Annual Order for Animal Health that is subject to adoption and publication on annual basis. This legal act regulates diseases preventive and control measures which will apply in the current year.

The list of diseases may vary depends of the epidemiological situation in the country.



Institutional framework and competent authority

Food and Veterinary Agency

Food and Veterinary Agency is an independent body of the state administration with the capacity of a legal entity, which is responsible for performing tasks in the field of food and animal feed safety, implementation, control, supervision and monitoring of veterinary activities in the field of animal health care, their welfare and veterinary public health.

Department for animal health and welfare of animals

Responsible for the process of policy making in field of animal health and welfare of animals, identification and registration of animals and their movements, monitoring of epidemiological situation in the country and worldwide of the contagious diseases in animals as well as zoonoses, data analysis concerning animal health status, notification of animal diseases, drafting primary and secondary legislation, programme

Department for inspection and supervision

Official veterinarians, Local Units, control of implementation of legislative measures

The Private Veterinary Practices (PVP) witch are authorized to carry out certain animal health protection measures in the field of animal health

Veterinary laboratory-Faculty of Veterinary Medicine Skopje



Country Regionalization



Priority vector borne disease

According to the epidemiological situation in the country and risk of introduction as well as protentional of spread

- Blue Tongue
- West Nile Disease
- Leishmaniosis
- Crimean-Congo Hemorrhagic Fever



Blue tongue disease

Programme for control and eradication of blue tongue disease, (104/07)

Annual Order for Animal Health

Passive surveillance (clinical surveillance)

Screening with Infection with bluetongue virus, detection of antibodies

Last occurrence of blue tongue disease

- 2020, serotype 4, ovine caprine animals
- 2024, serotype 8, ovine caprine animals

Corresponding measures undertaken



Entomological surveillance-Culicoides

In 2021, vector traps have been placed in 14 different risk-based locations in the country.

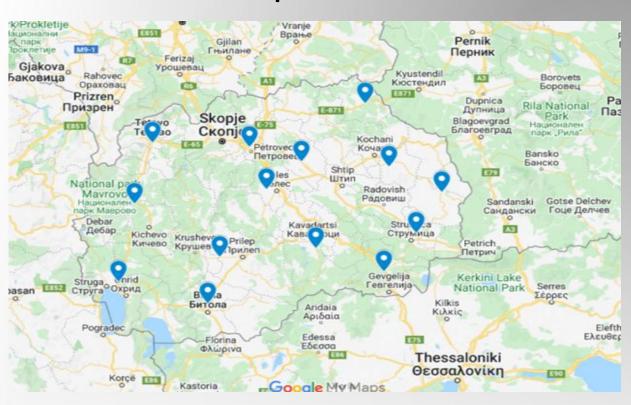
Entomological monitoring of presence, dynamics of emergence, geographical distribution, analysis of collected insect vectors as well as virological testing for the presence of bluetongue virus in the population of vectors of the genus Culicoides.

The presence of the following C. obsoletus/scoticus, C. imicola, C. pulicaris, C. punctatus и C. newsteadiwas determined in the examined samples.

Laboratory within the Faculty of Veterinary Medicine, Skopje



Locations where 14 UV light traps have been placed



West Nile Fever

- Annual Order for Animal Health short provisions for examination in poultry and equid animals
- Decision to conduct surveillance to assess the prevalence of Equine infectious anaemia and West Nile fever
- Surveillance with a diagnostic test to determine antibodies for the presence of the disease within surveillance programme for Avian Influence for poultry
- Human cases, Data from Public Health Institute

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Human cases	2	3	0	6	7/1	0	3	3	3	5/1



Laboratory data, WNF

Year	Species	PCR	ELISA	Total	Positive	Positive
				tested	PCR	ELISA
2020	Poultry	2	/	2	0	1
	Equids	0	59	59	/	0
2021	Poultry	0	873	873	0	40
	Equids	0	376	376	1	33
2022	Poultry	0	0	0	/	0
	Equids	0	29	29	0	0
2023	Poultry	1	0	1	0	0
	Equids	0	59	59	0	0



Crim Congo hemoragical fever

- In the ten-year period 2015-2024, 6 individual cases were registered in humans
- During 2024, 3 laboratory-confirmed cases of Crimean-Congo hemorrhagic fever were reported in the age group of 29-68 years, from Kriva Palanka, Skopje and Delčevo
- One human death was registered in 2023
- 2023, active surveillance of the location for ticks, due to positive human cases
- Measures accordingly



Laboratory data, CCHF

2023	Diagnostic assay	Total tested	PCR Positive	Diagnostic assay	Total tested	ELISA Positive
Sheep and goat	PCR	17	0	ELISA	17	10
Ticks	PCR	25	0	ELISA	/	/

Leishmaniosis

- Annual Order for Animal Health
- All stray dogs that have been collected and temporarily placed in shelters, are tested for leishmaniasis with accredited method
- Euthanasia for positive stray dogs, for owner dogs possibility for medical treatment
- Human cases, Data from Public Health Institute

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Human cases	4	5	9	12	3	6	2	9	1	4



Laboratory data, Leishmaniosis

Canine leishmaniosis								
Year	Diagnostic assay	Total tested	Positive	Prevalence				
2020	IFAT	1410	109	7,73 %				
2021	IFAT	2265	145	6,4 %				
2022	IFAT	2706	123	4,54 %				
2023	IFAT	3398	173	5,09 %				
2024	IFAT	2905	75	2,58%				



Country needs regarding VBD surveillance and control

- Integrated program for surveillance, control programme between human and veterinary sector
- Sharing surveillance data and Joint outbreak investigation
- Entomological surveillance
- Increasing the passive surveillance
- Awareness campaign
- Improvements of biosecurity measures
- Improving cooperation and collaboration with stakeholders and relevant institutions, ccoordination and reporting meetings

THANK YOU FOR THE ATTENTIONE