



**State veterinary service
under the Ministry of agriculture and the environment of Turkmenistan**

**Policy dialogue of the Central Asian Regional Economic Cooperation in
Central Asia under the regional program to combat and prevent
transboundary animal diseases**

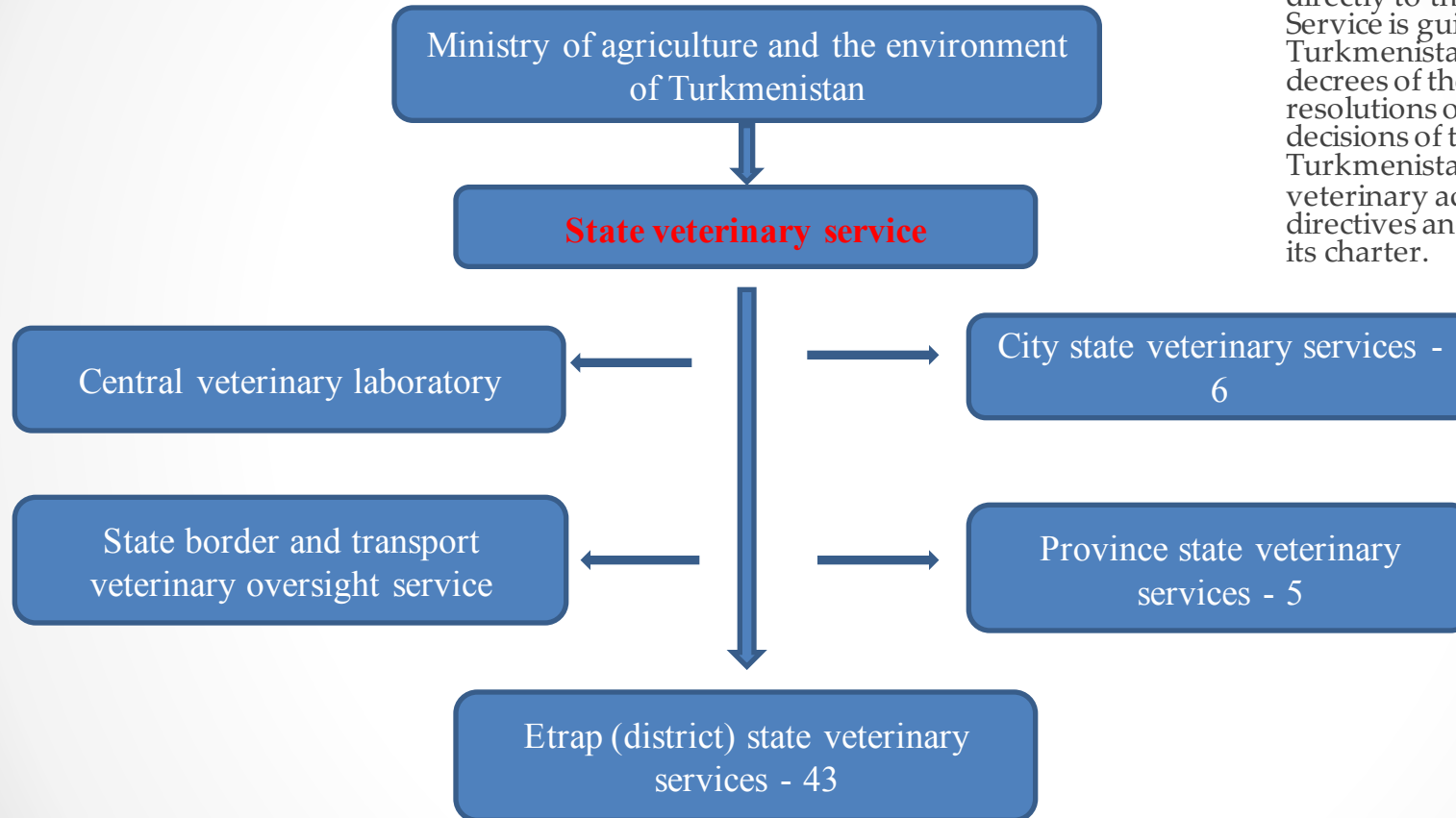
Nursultan, April 23-25 2019

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THE STRUCTURE OF THE STATE VETERINARY SERVICE

- ▶ The state veterinary service is reporting directly to the MAWR. In its activities, the Service is guided by the Constitution of Turkmenistan, laws of Turkmenistan, decrees of the President of Turkmenistan, resolutions of the Majlis of Turkmenistan, decisions of the Cabinet of Ministers of Turkmenistan, law of Turkmenistan "On veterinary activities", orders, instructions, directives and other regulatory acts, and its charter.



Legislative framework



In 1996 the Majlis passed the law
“On veterinary activities”

The second edition was adopted by the Majlis of Turkmenistan No 143-V
dated

- 8 November 2014.
- On March 29 2012 the President of Turkmenistan issued a decree No 12203 “To improve the organization of veterinary activities” with the aim to improve the veterinary services for agricultural animals, thereby reorganizing the state veterinary service, which fell under the jurisdiction of the Ministry of agriculture of Turkmenistan.

Epizootic situation in the country

- Turkmenistan has more than 2 million heads of cattle, 17 million heads of small cattle, 126 thousand camels and more than 17 million birds and poultry. To ensure the country's protection from infectious diseases, a 30 kilometer buffer cattle-free zone was established along the southern borders (with Iran, Afghanistan). The territory of Turkmenistan is located in a special risk zone for the introduction of acute infectious diseases, thus the State Veterinary service of Turkmenistan has developed and pursues a comprehensive program for the prevention of infectious, invasive and non-communicable diseases of animals and birds.



List of diseases subject to mandatory notification in the OIE

WAHIS system

- Order No 85-O dated November 19 2015 of the Ministry of agriculture and water resources of Turkmenistan:
- In case of an outbreak of dangerous diseases from the OIE list an Urgent notification is to be sent to the OIE using the WAHIS system.
- In case of positive laboratory results, one should perform the activities on the basis of the order "On the list of especially dangerous diseases" of the Chief state veterinary inspector of Turkmenistan No 85-O dated November 19 2015, and these diseases are subject to mandatory notification to the OIE. List of especially dangerous diseases:
 - 1. Anthrax
 - 2. Rabies
 - 3. Foot and mouth disease.
 - 4. Small cattle plague.
 - 5. Cattle catarrhal fever.
 - 6. Cattle rhinotracheitis.
 - 7. Sheep scrapie.
 - 8. Camel plague.
 - 9. Horse glanders.
 - 10. Horse epizootic lymphangitis.
 - 11. Horse covering disease.
 - 12. African equine plague.
 - 13. Swine plague.
 - 14. Dog and cat toxoplasmosis.
 - 15. Bird plague and false plague.
 - 16. Bird ornithosis.
 - 17. Avian flue.
 - 18. Equine infectious anemia.
 - 19. Infectious equine encephalomyelitis.

ANNUAL REPORT IN OIE ON THE STATE OF ANIMAL HEALTH IN Turkmenistan in 2018

Oie-listed Diseases	Occurrence	Serotype (s)	New outbreaks	Total outbreaks	Species	Control Measures	Official vaccination	Measuring units	Susceptible	Cases	Deaths	Killed and disposed of	Slaughtered	Vaccination response to the outbreak (s)
Rabies (Domestic and Wild)	+	No	9	9	***	*Sd		Animals	...	...	...	...	...	...
					bov	M Te V	9474	Animals	78	2	0	2	0	70
					can	M Te V Car	76 607	Animals	1090	10	5	5	0	820
					cml	M Te V	5030	Animals	800	1	0	1	0	760
					equ	M Te V	320	Animals	...	...	...	...	...	...
					o/c	M Te V	1356	Animals	...	...	...	...	...	...
					fel	V Cr	1648	Animals	...	...	...	...	...	...
					fau	M Te		Animals	...	2	0	2	0	...
Brucellosis (Brucella abortus) (Domestic)	+0	No	1	1	bov	*M Te Tsu AZ		Animals	1958	215	0	210	5	230
Brucellosis (Brucella metitensis) (Domestic)	+	No	1	3	cml	M Te V	5922	Animals	...	...	...	...	...	...
					o/c	*M Te GSu TSu A V	1 214 461	Animals	3320	771	0	0	771	1210
Echinococcus granulosus (Infection with) (Wild)	+?0	No	2	2	fau			Animals	...	1	0	0	0	0
Sheep pox and goat pox (Domestic)	+	No	1	1	o/c	*M Te V	16 900	Animals	750	245	157	0	0	600

2. OIE-listed diseases absent in Turkmenistan during the reporting period or never reported

Diseases	Date of last occurrence	Species	Control Measures	Official Vaccination
Anthrax (Domestic)	20/09/2005	***	* M Te	...
		Bov	V	351 137
		Cml	V	27 613
		Equ	V	5379
		o/c		1 170 888
		sui		1630
Anthrax (Wild)	20/09/2005	fau	* M Te	
Aujeszky's disease (Domestic and Wild)	-	***	* M Te	
Bluetongues (Domestic and Wild)	0000	***	* M Gsu	
Brucellosis (Brucella suis) (Domestic and Wild)	-	***	* M Te	
Echinococcus multilocularis (Infection with) (Domestic)	12/12/2010	***	* M Gsu	
Equine encephalomyelitis (Domestic and Wild)	-	***	* M Te	
Foot and mouth disease (Domestic)	-	***	* M Te GSu	
		bov	V	429 415
		o/c	V	127 877
Foot and mouth disease (Wild)	-	fau	* M Te Gsu	
Paratuberculosis (Domestic)	-	***	* M Te	
Paratuberculosis (Wild)	-			
Q fever (Domestic)	-	***	* M Te	
Q fever (Wild)	-			
Rinderpest (Domestic and Wild)	0000	***	* Qf M Te	
Rift Valley fever (Domestic and Wild)			* M Te	

ANNUAL REPORT IN OIE ON THE STATE OF ANIMAL HEALTH IN Turkmenistan in 2017

Oie-listed Diseases	Occurrence	Serotype (s)	New outbreaks	Total outbreaks	Species	Control Measures	Official vaccination	Measuring units	Susceptible	Cases	Deaths	Killed and disposed of	Slaughtered	Vaccination response to the outbreak (s)
Rabies (Domestic and Wild)	+	No	3	14	***	*		Animals	...	...	...	...	...	...
					bov	M Te S V	6814	Animals	261	5	0	5	0	255
					can	M Te S V Cr	98 517	Animals	230	13	1	5	0	224
					equ	M Te S V	33	Animals	25	4	0	2	0	23
					o/c	M Te V	1423	Animals	...	...	...	...	...	...
					fel	V Cr	541	Animals	...	...	...	...	...	...
					cml	V	1820	Animals	...	...	...	...	...	...
					fau			Animals	34	3	0	1	0	0
					cap			Animals	...	3	...	...	...	...
					lep			Animals	...	1	...	...	...	...
Brucellosis (Brucella abortus) (Domestic)	+()	No	2	2	bov	* M Te Tsu S Z V	1275	Animals	324	1	0	0	1	323
					cml	M Te V	1856	Animals	...	...	...	...	...	...
					o/c			Animals	687	3	0	0	3	684
Brucellosis (Brucella melitensis) (Domestic)	?		o/c	* M Te GSu Tsu S V	1022706	Animals						
Equine piroplasmosis	+	No	1	1	equ	* M Te Gsu Qi T Cr Cn Vsu		Animals	2631	171	0	0	0	0

2.

2. OIE-listed diseases absent in Turkmenistan during the 2017 reporting period or never reported

Diseases	Date of last occurrence	Species	Control Measures	Official Vaccination
Anthrax (Domestic)	20/09/2005	***	* MTe	...
		bov	V	699 049
		cml	V	45 420
		equ	V	4896
		o/c	V	3 863 490
		sui	V	3788
Anthrax (Wild)	20/09/2005	fau	* MTe	
Aujeszky's disease (Domestic and Wild)	-	***	* M Te	
Bluetongues (Domestic and Wild)	0000	***	* M Gsu	
Brucellosis (Brucella suis) (Domestic and Wild)	-	***	* M Te	
Echinococcus granulosus (Infection with) (Domestic)	12/2010	***	* MGSu	
Echinococcus multilocularis (Infection with) (Domestic)	12/12/2010	***	* M GSu	
Foot and mouth disease (Domestic)		***	* M Te Gsu	
		bov	V	469 426
		o/c	V	624 592
Foot and mouth disease (Wild)		fau	* M Te Gsu	

Brucellosis



- (brucellosis) – infectious disease that affects mammals and is caused by the Brucella family bacteria. Manifests itself in many animals through abortions and afterbirth retention, orchitis, birth of inviable offspring and infertility. Due to its social danger, brucellosis is included in the list of quarantine diseases.

Especially dangerous infection



- Brucellosis is considered an especially dangerous infection which may emerge among animals in the form of separate diseases, epidemics with natural focality, characterized by rapid spread and acute course of the disease. The danger of brucellosis is also in the fact that in the majority of cases it is latent, symptomless, or the signs are not common.

Prevention and control of brucellosis used in Turkmenistan

- - Prevention and control of brucellosis are carried out on the basis of close cooperation between the state veterinary and sanitary-epidemiological services of Turkmenistan. A set of preventive measures aimed at preventing the disease of animal brucellosis is being applied in order to destroy the reservoir and the source of the pathogen. These include:
- - Continuous monitoring of livestock animals and the identification of patients using serological reactions;
- - Immediate isolation and slaughter of sick animals, which is carried out in a special room;
- - Vaccination of susceptible animals;
- - Prohibition of the export of sick animals and their products;
- - Removal from the herd of animals suspected of having brucellosis. Before being sent for slaughter, they are grazed on specially allocated pastures or kept in separate premises; - Daily cleaning and disinfection is carried out with a 3% solution of caustic soda, a 2% pharmaceutical solution, or 20% bleach of water, watering equipment, milk cans.
- - Also, for the prevention of brucellosis, manure, feces and afterbirth are burnt or deeply digged, having previously been filled with their bleach;
- - The litter on which the delivery took place is burned and the place is disinfected with lime;
- - Meat obtained during the slaughter of positively reacting animals is transferred to the trading network only after a veterinary and sanitary examination, milk is used only boiled or pasteurized at 70 ° C for 30 minutes, but it is forbidden to give the calves.
- - Skin and wool are disinfected by treatment with antiseptics. Attendants in the area of the natural focus of the disease receive protective clothing and receive instructions on how to prevent infection. Hands are periodically treated with antiseptics, smoking and eating in livestock buildings is prohibited.

Diagnostic studies

Brucellosis diagnostic studies take place in the Central veterinary laboratory and in the province veterinary laboratories of Turkmenistan.

4 methods of brucellosis detection are used:

- 1) RBR - Rose-Bengal reaction
- 2) AR - agglutination reaction
- 3) CCR - Complement coupling reaction
- 4) LCR - Long-term complement coupling reaction

The brucellosis diagnosis in animals is based on the following:

- findings of bacteriological, serological, molecular/genetic and allergic studies taking into account the epizootic data and clinical symptoms of the disease.

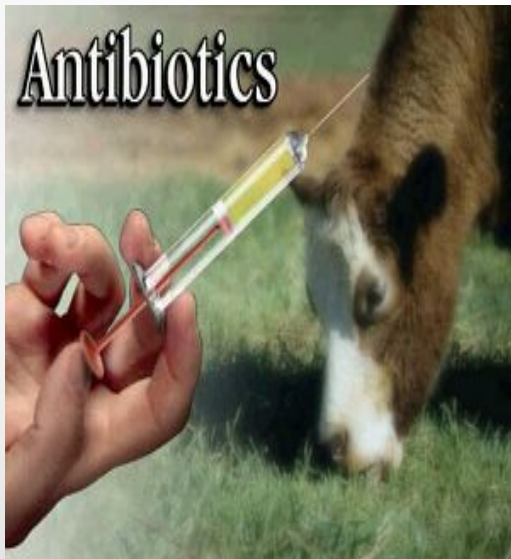
In diagnosing brucellosis the following needs to be taken into account:

- various agent types are pathogenic:
- clinical symptoms of brucellosis in animals are not common.



Treatment

- The main role in the treatment of brucellosis belongs to antibiotics, symptomatic and general energizers. Despite the progress in recent years, in some cases the cure is only an illusion because in a chronic situation the methods in use are not sufficiently effective.



Inter-agency program 2016-2020

- Turkmenistan performs surveillance, and should a suspicion arise regarding an infectious disease, there is a fast response task force to confirm diagnosis and eliminate the disease. The task force consists of:
 - - a specialize of the epizootic department
 - - laboratory specialist
 - - local veterinarian
- In 2016 the commission approved an Inter-agency program on wellbeing from diseases affecting both humans and animals for 2016-2020.
- It envisages a number of preventive measures against brucellosis, rabies, anthrax, listeria and other infectious diseases.
- There is also a management instruction on activities to prevent brucellosis in agricultural animals, approved by the Chief veterinary inspector of Turkmenistan and agreed with the Minister of agriculture of Turkmenistan in 2015.

Joint activities with the sanitary and epidemiological service

- There are joint activities to combat and prevent brucellosis with the sanitary and epidemiological service of the Ministry of health of Turkmenistan. There are also joint training activities, working meetings to raise the awareness about the disease and the emergency plan of actions.

Consequences of brucellosis

- In a enterprise, Brucellosis inhibits breeding due to abortions, birth of inviable offspring and infertility of infected animals. The losses from brucellosis are exacerbated by the need to perform quarantine and sanitary activities (milk pasteurization, separate keeping of groups of animals, disinfection of the premises, diagnostic studies of the animals etc.). These measures make normal economic activities of an enterprise more difficult and require significant financial resources.

Diagnostic studies of large and small cattle and camels

The state veterinary service conducts active brucellosis surveillance. Every six months blood samples are taken for brucellosis screening according to the annual plan

Diagnostic studies		
	2017	2018
Large cattle brucellosis	195,081	204,026
Small cattle brucellosis	162,031	143,545
Camel brucellosis	8828	8526
Camel trypanosomiasis	1798	1071
Small cattle dictyocaulosis	15,358	18,377
Small cattle monesiosis	24,038	27,397
Large cattle facyllosis	33,488	34,146
Small cattle facyllosis	33,469	33,474
Small cattle haemonchosis	1390	1572
Small cattle infectious epidemitis	1769	3310
Large cattle trichomoniasis	834	479
Large cattle vibriosis	608	323
Large cattle tuberculosis	58,727	2539

Brucellosis information (Abortus)Jan-Dec 2018

Province	Serotype(s)	New outbreaks	Total outbreaks	Species	Family name	Latin name	Measuring units	Susceptible	Cases	Deaths	Killed and disposed of	Slaughtered	Vaccination in response to outbreak(s)
Chardzhou	No	1	1	bov			Animals	300	5	0	0	5	230
Whole country	No	...	...	bov			Animals	1658	210	0	210	0	0

Brucellosis information (Melitensis) - Domestic Jan.-Dec.2018

Province	Serotype(s)	New outbreaks	Total outbreaks	Species	Family name	Latin name	Measuring units	Susceptible	Cases	Deaths	Killed and disposed of	Slaughtered	Vaccination in response to outbreak(s)
Mary	No	1	3	o/c			Animals	1000	741	0	0	741	250
Whole country	No	...	...	o/c			Animals	2320	30	0	210	30	960

Brucellosis information (Abortus) - Domestic Jan-Dec 2017

Province	Serotype(s)	New outbreaks	Total outbreaks	Species	Family name	Latin name	Measuring units	Susceptible	Cases	Deaths	Killed and disposed of	Slaughtered	Vaccination in response to outbreak(s)
Chardzhou	No	2	2	bov			Animals	324	1	0	0	1	323
Whole country	No	...	...	bov			Animals	687	3	0	0	3	684

Vaccination of animals in Turkmenistan

The State Veterinary Service under the Ministry of Agriculture and Environmental Protection of Turkmenistan draws up an annual anti-epizootic plan of measures against the fight against infectious and non-infectious diseases in farm animals. For the prevention of infectious animal diseases, the State Veterinary Service purchases vaccines on a tender basis. The Russian Federation is the main supplier of vaccines for Turkmenistan against infectious animal diseases.

Vaccination against especially dangerous diseases is extremely important for border regions. Depending on the duration of the vaccine, vaccination is carried out once or twice a year. Vaccination is carried out only by qualified personnel.

Vaccination is under the control of the Government of the country.

The emergency anti-epizootic commission oversees the implementation of unplanned anti-epizootic measures aimed at preserving epidemiological well-being. The commission includes the chairman-deputy chairman of the Cabinet of Ministers, members of the heads of relevant ministries and departments (Ministry of Agriculture, Ministry of Defense, Ministry of Health, Ministry of Internal Affairs, Ministry of Education, etc.)

Farmer awareness

Specialists of state veterinary services at the regional and local levels conduct farmer awareness activities on an annual basis:

- describing the nature of the diseases, how they spread, and what are the possible consequences for the farmers and local communities and the importance of prevention and early diagnosis;
- main zoosanitary procedures to be taken by the farmers on a daily basis
- main clinical symptoms that may warn the farmer of the possible emergence of some diseases.
- Contact details of persons to contact in case of a rare occurrence of disease.



Import and transit of goods and animals in Turkmenistan

- By issuing permits to import animal products and live animals, the State veterinary service requires compliance with the conditions and requirements according to the IOE code as per article 8.4 taking into account the status of animal populations of the exporting country.

Future plans

- Development of a joint national program for the control and supervision of brucellosis jointly by the sanitary-epidemiological service.
- Equipping veterinary laboratories with modern diagnostic equipment complying with international standards,
- Get Freedom Status from OIE Brucellosis.
- Improve efficacy and surveillance of brucellosis.
- Organization of simulative trainings on especially dangerous animal diseases for field veterinarians with the participation of international experts.



Waiting from a CAREC regional platform for prevention and control with transboundary animal diseases

- Provided technical assistance on the development of a national program for the prevention and control of transboundary animal diseases.
- Assistance in the International Accreditation of Veterinary Laboratories
- Assistance in equipping veterinary laboratories with modern diagnostic equipment that meets international standards.
- Invitations of international experts for training / seminars / trainings for veterinary laboratory specialists on certification and accreditation of ISO 17025-2017, as well as new diagnostic methods.
- Organization of simulation training with the prevention and control of transboundary animal diseases for field veterinarians with the participation of international experts,
- Organize study visits for veterinary specialists to enhance professional skills and exchange experience with developed countries with great experience and potential in the veterinary direction..

THANK YOU FOR
ATTENTION!

