

EVALUATION OF THE HEALTH OF LIVESTOCK WORKERS AS A RESULT OF CLINICAL EXAMINATION

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**Key words:** health of workers, animal husbandry, medical examination.

**Таянч сўзлар:** ишчи хизматчилар соғлиғи, чорвачилик, тиббий кўрик.

**Ключевые слова:** здоровье работающих, животноводство, диспансеризация.

The health of the working class of the population is the main wealth of the state and is an indicator of the potential power of the society. In order to assess the health of livestock workers, they are subjected to an in-depth medical examination on the basis of order No. 200 of 2012 of the Ministry of Health of the Republic of Uzbekistan.

ЧОРВАЧИЛИК КОМПЛЕКС ИШЧИ ХИЗМАТЧИЛАРИ СОҒЛИФИГА ТИББИЙ КЎРИК НАТИЖАСИДА БАҲОЛАШ

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Аҳолининг ишлайдиган қатламининг соғлиғи давлатнинг асосий бош бойлиги бўлиб, жамиятнинг патенциал кудратининг индикатори ҳисобланади. Чорвачилик хўжалиги ишчи хизматчилар соғлиғига баҳо бериш мақсадида уларни Ўзбекистон республикаси соғлиғини сақлаш вазирлигининг 200 сонли буйруғи асосида чуқурлаштирилган тиббий кўриқдан ўтказилади.

ОЦЕНКА СОСТОЯНИЯ ЗДОРОВЬЯ РАБОТНИКОВ ЖИВОТНОВОДСТВА В РЕЗУЛЬТАТЕ ДИСПАНСЕРИЗАЦИИ

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Здоровье рабочего класса населения является основным богатством государства и является показателем потенциальной силы общества. С целью оценки состояния здоровья работников животноводческих ферм они проходят углубленный медицинский осмотр на основании приказа №200 от 2012 года Министерства здравоохранения Республики Узбекистан.

**The purpose of the study:** to develop measures for the early detection and rehabilitation of diseases among workers working in livestock farms as a result of clinical examination.

**Materials and methods:** 160 employees of the limited liability company "BUKHORA AGROKLAster CHORVA" located in the Karavulbazar district of the Bukhara region underwent an in-depth clinical examination based on the order number 200 of the Ministry of Health of the Republic of Uzbekistan.

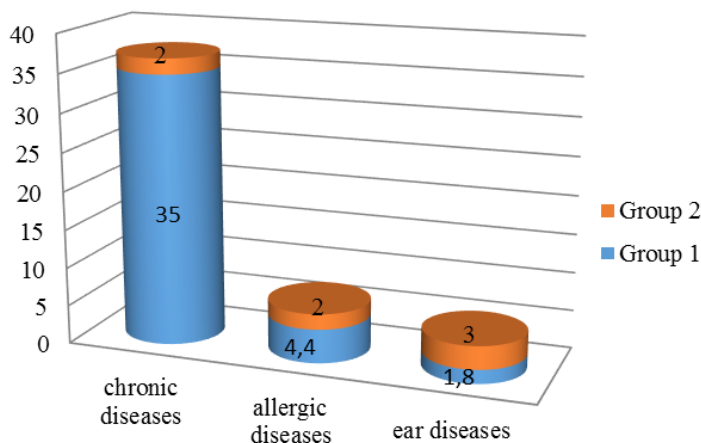
**Research results:** As a result of the medical examination, it was observed that the lor organs were registered in them. (-54.6±4.6 percent in the first group, 47.4±4.2 percent in the second group, r<0.05). Diseases of the larynx are shown in Figure 1.

The relationship between the diseases of the larynx organs and the length of service among complex workers is presented in Figure 2 .

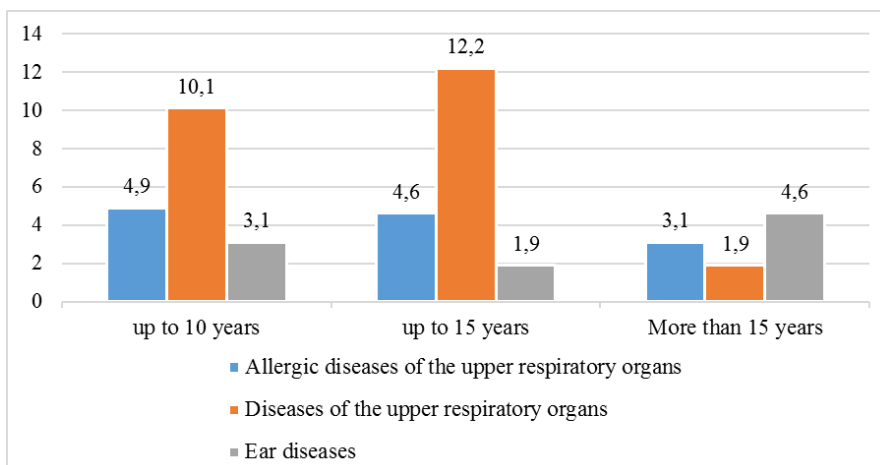
As can be seen from the figures in the table, the level of chronic diseases of the upper respiratory organs is inextricably linked with the length of service of employees. But there is a decrease in allergic diseases, which can be explained by the body's adaptation to this condition with an increase in work experience.

As a result of the analysis, the indicators showed that the allergic work experience of the upper respiratory organs is related.

As a conclusion , it should be noted that more than 50 percent of the examined workers had respiratory tract pathologies, and one third had upper respiratory tract



1 fig. Prevalence of diseases of the larynx in workers-servants of the livestock complex (percentage).



2 fig.

allergies (2 figure).

As a result of medical examinations, it was found that peripheral nerves and musculoskeletal system diseases were diagnosed at a high level.

It is known from the literature sources that physical stress leads to pathology of muscles and peripheral nerves [2]. In our country, injuries of the peripheral nerves of the back and upper limbs were observed.

1 table.

**Prevalence indicators of diseases of the peripheral nervous and musculoskeletal systems (in % terms).**

T/r	Diseases		Professional groups	
			1 group p =100	2 groups p =90
1	Bone and joint diseases	Polyostechandrosis	4.0±2.10	5.8±2.12
		Shoulder-scapular priorosis	18.7±3.7	11.2±3.12
		Shoulder epicondylosis	28.4±4.9	22.6±4.9
2	Vertebrogenic radiculopathy and muscle-reflex diseases	Lithuania	18.2±3.09	5.4±2.14
		Cervicalgia	28.4±4.6	22.6±4.9
		Thoracalgia	6.8±2.0	5.6±1.90
		Radiculopathy	1.6±1.0	1.1±1.20
3	Neuromuscular diseases of the hand	Vegetomyalgia	3.6±1.9	0
		Vegetosensor polyneuropathy	10.6±2.8	0
4	Registration of peripheral nerve and musculoskeletal diseases		40.1±3.65	59.2±4.4

Note: Significance is  $p < 0.05$ .

1 table shows the prevalence of diseases of the peripheral nerves and musculoskeletal organs among workers-servants of the livestock complex.

Muscular-reflex osteochondrosis of the spine (lumbargia, neuralgia, thoracalgia) was noted in most cases in workers engaged in heavy physical labor and bending, lifting and moving heavy loads. 38.6±3.80% prevalence of these pathologies in the workers of the 1st group, 18.4±3.60% in the 2nd group was determined,  $r < 0.05$ .

It is noteworthy that the peripheral vegetative-vascular pathologies of the hand are recorded at a high level (17.4 percent). This condition is the initial stage of vegetomalgia or vegetative-vascular polyneuropathy. It should be noted that in most cases (72.1 percent) such changes were detected in workers of group 1, where physical pressure on the hand takes place under low temperature conditions.

The first group is characterized by injuries of the muscles, pre-articular tissues, vegetative part of the peripheral and nervous system in the workers working in the main occupations. In workers who take care of dairy cows and beef cattle, the pathology of the regional part of the hand, including periarticular, trophic, vascular, neural, muscle injuries, is more common. Veterinary workers develop myofascial pain syndrome in the form of nerve branch injury and shoulder nerve injury. The formation of complex pathology of the muscular-nerve vessel in workers can be recognized as an occupational disease or professional disease.

When analyzing therapeutic diseases, there is a characteristic feature of the structure of

2 table.

**Indicators related to the prevalence of chronic somatic diseases among workers-servants of livestock complexes (%).**

Group	Experience	Gastrointestinal diseases						Cardiovascular diseases			Vegetative nervous system	Chronic bronchitis	Other pathologies
		Cholecystitis	Gallstone disease	Pancreatitis	Gallbladder muscles	Wound diseases	Total	Arterial hypertension	Neurocirculatory dystonia	Total			
1st group p=95	up to 10 years	3.9	0.6	0.5	2.1	0.5	28.0	0.6	1.1	17.1	9.1	0.6	2.9
	up to 15 years	0.6	1.4	0.6	0.7	-		0.5	2.4		0.5	1.2	0.6
	More than 15 years	3.9	2.1	4.2	2.2	2.9		8.2	3.6		9.8	3.6	1.5
	Total	8.5	2.2	4.8	4.6	3.6		8.9	8.3		19.4	4.4	12.6
2nd group p=75	up to 10 years	1.0	-	-	1.1	-	-	1.3	1.1	12.4	3.8	-	-
	up to 15 years	1.1	-	-	-	-	-	1.3	1.1		-	-	-
	More than 15 years	2.9	-	2.2	1.2	1.1	-	5.2	2.9		7.6	2.1	1.1
	Total	4.9	-	2.2	2.2	1.1	12.1	6.7	4.9		12.1	2.1	8.6

chronic diseases in production departments and storage buildings in livestock complex.

2 table shows the prevalence of chronic somatic diseases among livestock workers.

Gastrointestinal pathology is at the main place in the 1st group of workers-servants of the complex (28.0±3.5). They occur twice as often (12.4±1.4 percent, r<0.05).

Among diseases of the gastrointestinal system, cholecystitis is the most common (8.5 and 4.9 percent), and pancreatitis (4.8 and 2.2 percent) and stomach and intestinal ulcers accounted for 3.6 percent.

Gallstone diseases were detected by UST method and accounted for 2.2 percent.

19.4±3.1 percent of vegetative nervous system disease was detected among the workers of the main group (1st group), 12.1±2.6% among the 2nd group.

According to the data of world scientists, the main cause of diseases of the cardiovascular system (arterial hypertension, ischemic heart disease) is the pathology of the vegetative nervous system.

Diseases of the cardiovascular system were 17.1±2.6 in the first group and 12.4±2.1% and in the second one. The higher the age level, the higher the incidence of arterial hypertension was found. Also, this disease was noted to be high in workers with long years of work experience (8.9 and 6.7 percent).

Among the bronchial lung diseases, the prevalence of chronic bronchitis was found to be higher (4.4 and 2.1 percent).

In some workers, chronic bronchitis was observed with respiratory failure, in others with asthmatic syndrome.

The comparative analysis of the level of danger and the level of production-related diseases in terms of the etiological share of workers' diseases is presented in 3 table. It shows that all mentioned pathologies are moderately related to production process.

3 table.

**The share of etiological risk to the health of workers and employees of the livestock complex and production.**

Diseases	Risk assessment		
	Relative risk RR	Etiological share EF percent	Dependency level
Allergosis of upper respiratory organs	1.5	35.2	Average
Peripheral nerve and musculoskeletal diseases	1.8	44.1	Average
Diseases of the gastrointestinal system	1.6	30.6	Average
	1.9	41.8	Average

We used the method of correct standardization (98) in the analysis of the main diseases of livestock complex workers. This method allows to compare clinical examination results and self-assessment of workers' health.

### Conclusions.

During the work in modern animal husbandry complexes, physical, chemical factors of production and harsh working conditions have a complex effect on workers. Hygienic evaluation of the working conditions is based on above mentioned factors and corresponds to class 3.1-3.2. The subjective attitude towards the working conditions and its character of the part of the workers corresponds to the objective assessment of the work environment and labor process production factors.

In the survey of the social questionnaire, some workers were not satisfied with their monthly salary and the severity of the working conditions. A low level of healthy lifestyle was formed among workers: some workers do not engage in physical activity, the others work in their personal garden in their free time, consequently, they do not have an active rest.

As a result of the medical examination, diseases of the larynx organs, including allergies of the upper respiratory organs, and pathology of the peripheral nerves and musculoskeletal organs are noted in 10% of workers. As a result of the analysis, it was proved that these diseases are directly related to high production level ( $r < 0.05$ ).

The formation of workers' health in modern animal husbandry complexes is primarily influenced by working conditions, secondly by socio-economic factors, and thirdly by lifestyle.

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