



# TIBBIYOTDA YANGI KUN

Ilmiy referativ, marifiy-ma'naviy jurnal







AVICENNA-MED.UZ





10 (72) 2024

## Сопредседатели редакционной коллегии:

#### Ш. Ж. ТЕШАЕВ, А. Ш. РЕВИШВИЛИ

Ред. коллегия:

М.И. АБДУЛЛАЕВ

А.А. АБДУМАЖИДОВ

Р.Б. АБДУЛЛАЕВ

Л.М. АБДУЛЛАЕВА

А.Ш. АБДУМАЖИДОВ

М.А. АБДУЛЛАЕВА

Х.А. АБДУМАДЖИДОВ

Б.З. АБДУСАМАТОВ

М.М. АКБАРОВ

Х.А. АКИЛОВ

М.М. АЛИЕВ

С.Ж. АМИНОВ

Ш.Э. АМОНОВ

Ш.М. АХМЕЛОВ

Ю.М. АХМЕДОВ

С.М. АХМЕДОВА

Т.А. АСКАРОВ

М.А. АРТИКОВА

Ж.Б. БЕКНАЗАРОВ (главный редактор)

Е.А. БЕРДИЕВ

Б.Т. БУЗРУКОВ

Р.К. ДАДАБАЕВА

М.Н. ДАМИНОВА

К.А. ДЕХКОНОВ

Э.С. ДЖУМАБАЕВ

А.А. ДЖАЛИЛОВ

Н.Н. ЗОЛОТОВА

А.Ш. ИНОЯТОВ

С. ИНДАМИНОВ

А.И. ИСКАНДАРОВ

А.С. ИЛЬЯСОВ

Э.Э. КОБИЛОВ

A.M. MAHHAHOB

Д.М. МУСАЕВА

Т.С. МУСАЕВ

М.Р. МИРЗОЕВА

Ф.Г. НАЗИРОВ Н.А. НУРАЛИЕВА

Ф.С. ОРИПОВ

Б.Т. РАХИМОВ

Х.А. РАСУЛОВ

Ш.И. РУЗИЕВ

С.А. РУЗИБОЕВ

С.А.ГАФФОРОВ

С.Т. ШАТМАНОВ (Кыргызстан)

Ж.Б. САТТАРОВ

Б.Б. САФОЕВ (отв. редактор)

И.А. САТИВАЛДИЕВА

Ш.Т. САЛИМОВ

Д.И. ТУКСАНОВА

М.М. ТАДЖИЕВ

А.Ж. ХАМРАЕВ

Д.А. ХАСАНОВА

А.М. ШАМСИЕВ А.К. ШАДМАНОВ

н.ж. эрматов

Б.Б. ЕРГАШЕВ

Н.Ш. ЕРГАШЕВ

И.Р. ЮЛДАШЕВ

Д.Х. ЮЛДАШЕВА

А.С. ЮСУПОВ Ш.Ш. ЯРИКУЛОВ

М.Ш. ХАКИМОВ

Д.О. ИВАНОВ (Россия)

К.А. ЕГЕЗАРЯН (Россия)

DONG JINCHENG (Китай)

КУЗАКОВ В.Е. (Россия)

Я. МЕЙЕРНИК (Словакия)

В.А. МИТИШ (Россия)

В И. ПРИМАКОВ (Беларусь) О.В. ПЕШИКОВ (Россия)

А.А. ПОТАПОВ (Россия)

А.А. ТЕПЛОВ (Россия)

Т.Ш. ШАРМАНОВ (Казахстан)

А.А. ЩЕГОЛОВ (Россия) С.Н ГУСЕЙНОВА (Азарбайджан)

Prof. Dr. KURBANHAN MUSLUMOV(Azerbaijan)

Prof. Dr. DENIZ UYAK (Germany)

## ТИББИЁТДА ЯНГИ КУН НОВЫЙ ДЕНЬ В МЕДИЦИНЕ NEW DAY IN MEDICINE

Илмий-рефератив, маънавий-маърифий журнал Научно-реферативный, духовно-просветительский журнал

### УЧРЕДИТЕЛИ:

БУХАРСКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ ИНСТИТУТ ООО «ТИББИЁТДА ЯНГИ КУН»

Национальный медицинский исследовательский центр хирургии имени А.В. Вишневского является генеральным научно-практическим консультантом редакции

Журнал был включен в список журнальных изданий, рецензируемых Высшей Аттестационной Комиссией Республики Узбекистан (Протокол № 201/03 от 30.12.2013 г.)

### РЕДАКЦИОННЫЙ СОВЕТ:

М.М. АБДУРАХМАНОВ (Бухара)

Г.Ж. ЖАРЫЛКАСЫНОВА (Бухара)

А.Ш. ИНОЯТОВ (Ташкент)

Г.А. ИХТИЁРОВА (Бухара)

Ш.И. КАРИМОВ (Ташкент)

У.К. КАЮМОВ (Тошкент)

Ш.И. НАВРУЗОВА (Бухара)

А.А. НОСИРОВ (Ташкент)

А.Р. ОБЛОКУЛОВ (Бухара)

Б.Т. ОДИЛОВА (Ташкент)

Ш.Т. УРАКОВ (Бухара)

10 (72)

2024

www.bsmi.uz https://newdaymedicine.com E: ndmuz@mail.ru

Тел: +99890 8061882

октябрь

Received: 20.09.2024, Accepted: 02.10.2024, Published: 10.10.2024

#### UDC 613.62:63:616-084

## WORKING CONDITIONS AND OCCUPATIONAL INCIDENCE OF AGRICULTURAL WORKERS

Mansurova Malika Khasanovna https://orcid.org/0000-0002-2658-1347

Bukhara State Medical Institute named after Abu Ali ibn Sina, Uzbekistan, Bukhara, st. A. Navoi.1 Tel: +998 (65) 223-00-50 e-mail: info@bsmi.uz

#### ✓ Resume

Modern working conditions in the main branches of agricultural production, the degree of harmfulness and danger of unfavorable factors in the working environment has been established, and an assessment of the occupational risk to the health of agricultural workers has been given. The indicators and structure of occupational morbidity are presented, the main measures to ensure safe working conditions and preserve the health of agricultural workers are determined.

Keywords: dangerous working conditions, professional risk, professional morbidity, indicators, structure, preventive measures.

#### УСЛОВИЯ ТРУДА И ПРОФЕССИОНАЛЬНАЯ ЗАБОЛЕВАЕМОСТЬ РАБОТНИКОВ СЕЛЬСКОГО ХОЗЯЙСТВА

Мансурова Малика Хасановна <a href="https://orcid.org/0000-0002-2658-1347">https://orcid.org/0000-0002-2658-1347</a>

Бухарский государственный медицинский институт имени Абу Али ибн Сины, Узбекистан, г. Бухара, ул. А. Навои. 1 Тел: +998 (65) 223-00-50 e-mail: info@bsmi.uz

#### √ Резюме

Современные условия труда в основных отраслях сельскохозяйственного производства, установлена степень вредности и опасности неблагоприятных факторов рабочей среды, дана оценка профессионального риска для здоровья работников сельского хозяйства. Пред616-086ставлены показатели и структура профессиональной заболеваемости, определены основные мероприятия по обеспечению безопасных условий труда и сохранению здоровья работников сель ского хозяйства.

Ключевые слова: опасные условия труда, профессиональный риск, профессиональная заболеваемость, показатели, структура, профилактические мероприятия.

## QISHLOQ XOʻJALIGI XODIMLARINING MEHNAT SHAROITLARI VA KASBIY KASALLANISH DARAJASI

Mansurova Malika Xasanovna <a href="https://orcid.org/0000-0002-2658-1347">https://orcid.org/0000-0002-2658-1347</a>

Abu Ali ibn Sino nomidagi Buxoro davlat tibbiyot instituti, Oʻzbekiston, Buxoro, st. A. Navoiy. 1 Tel: +998 (65) 223-00-50 e-mail: info@bsmi.uz

#### ✓ Rezyume

Qishloq xoʻjaligi ishlab chiqarishining asosiy tarmoqlarida zamonaviy mehnat sharoitlari, mehnat muhitidagi noqulay omillarning zararlilik va xavflilik darajasi belgilab berildi, qishloq xoʻjaligi xodimlarining sogʻligʻiga kasbiy xavf-xatar baholandi. Kasbiy kasallanish ko'rsatkichlari va tuzilmasi keltirilgan, qishloq xoʻjaligi xodimlarining xavfsiz mehnat sharoitlarini ta'minlash va sog'lig'ini saqlash bo'yicha asosiy chora-tadbirlar belgilab berilgan.

Kalit so'zlar: xavfli mehnat sharoitlari, kasbiy xavf, kasbiy kasallanish, ko'rsatkichlar, tuzilma, profilaktika choralari.



#### Relevance

At the moment, the kishlok cell is considered as part of the system of professional risk management, ensuring sanitary and epidemiological well-being and maintaining the health of employees, which occurs among working people. However, there is not enough work devoted to assessing the health risks of individual professional groups of agricultural workers, which makes it difficult to develop priority measures for health and promotion, as well as social protection of this contingent of workers.

The results of their own socio-hygienic and medico-physiological studies and analysis of literary data showed that agricultural workers in the process of work affect a wide range of harmful production factors [2,3]. For specific professions, factors are different, varying in degrees, duration of exposure, and are determined by the network characteristics of agricultural labor (Table 1).

Assessment of working conditions based on the degree of harmfulness and danger of factors of the production environment, the severity and intensity of the labor process made it possible to classify the conditions agricultural labor is harmful to Grades 1, 2 and 3 (grade 3.1, grade 3.2, grade 3.3). According to the biological factor, working conditions in livestock can be dangerous as a result of the appearance in the workplace of pathogenic microorganisms — pathogens of extremely dangerous infections (Grade 4) (Table 2).

Harmful working conditions can be risk factors for the development of general and professional diseases of agricultural workers, which are temporary and in some cases lead to a permanent loss of their working capacity [1, 5].

In the in-depth medical examination of agricultural workers in the clinic of occupational diseases of the Research Institute of Occupational Hygiene, the main place in the morbidity structure of mechanical operators was determined to be occupied by diseases of the peripheral nervous system (lumbalgia, lumbosacral radiculopathy, vegetative-sensory polyneuropathy), cardiovascular pathology, chronic nonspecific lung diseases, diseases of the gastrointestinal tract [9].

Livestock workers, in addition to diseases of the cardiovascular system, digestive organs, movement and female genital organs, are characterized by a high prevalence of diseases of the neuromuscular apparatus, peripheral nervous system. Pig workers are more likely to suffer from myocardiopathy associated with focal infection and chronic tonsillitis. Poultry is dominated by diseases of the upper respiratory tract and skin infections [8].

Vegetative diseases, hypertension and diseases of the peripheral nervous system are characteristic of plant growers. When using pesticides, heart muscle diseases, chronic coronary insufficiency, diseases of the gastrointestinal tract, including liver and biliary tract, are more common. In conditions of increased dust, it is characteristic to get sick with nonspecific lung diseases [9].

While studying the causes of temporary disability, it was found that acute chronic (acute stage) respiratory diseases occupy the leading position in cases of disability.

Classification of working conditions of workers working in agricultural Sox according to the degree of harmfulness and danger, acute respiratory infections (tracheobronchitis, pharyngitis, tonsillitis), influenza, pneumonia, exacerbation of chronic nonspecific lung diseases: chronic bronchitis, bronchial asthma. In the overall structure of disability-causing disorders, respiratory pathology accounts for 4.2 disabilities per 44.2 employees and 38.4 disabilities per 5.7 days.

The next most common causes of temporary disability in agricultural workers are diseases of the peripheral nervous system and musculoskeletal system. They represent a disability of 4.2 per 14.7 employees and 219.8 per 100 employees for 65.9 days.

This pathology is most often detected in livestock breeders (39.6).3.4 cases and 166.6). 21.8 100 days per employee). However, the longest term of temporary disability depends on

It is listed in machine operators due to nosological forms that require long-term restorative treatment (sciatica, neuritis, spinal osteochondrosis with radicular syndrome, arthritis, etc.).).

The third place in the structure of temporary disability is occupied by diseases of the skin and subcutaneous tissue:

dermatoses, allergic dermatitis, skin infections (8.5). 0.3 cases and 71.1) 7.3 100 days per employee), which is listed with the largest frequency among machine operators.

Diseases of the digestive system (gastrointestinal tract, liver and gallbladder) average 1.3 per 7.4 employees and 52.7 days and 100 days per 199.4 employees.



Table No. 1 Harmful and dangerous factors of working conditions in agriculture

	factors of working conditions in agriculture
Name of the industry, type of work, profession	it is the main factor that forms harmful working conditions
Field farming (fruit and vegetable growers)	Mineral dust (tuprok); the use of pesticides and agrochemicals in the air during pollution, insolation; meteorological effects on conditions; physical violence; magnetic conditions; space movement; logic and patterns of pollution
Restoration of livestock farms (livestock,	unfavorable microclimate (changes in air temperature ,high humidity,
livestock, livestock and mechanized farms),	draft); air pollution of the workplace. gaseous mixtures-animal waste,
poultry farm, quarantine point, windproof point, sanitation, fire fighting, cow feeding	decomposition feces and nutrient residues (ammonia, hydrogen sulfide, carbon dioxide, mercaptans, amines, ketones, aldehydes, sulfur dioxide, etc.); organic dust with a mixture of mineral dust, which can include antibiotics, enzymes, proteins and other drugs, disinfectants; microbial air pollution of the workplace (white and gold staphylococci, hemolytic streptococci, salmonella, rods of protein and intestinal microflora, fungi, etc.); increased noise level; insufficient lighting of workplaces; physical loads when performing operas and manually moving weights; uncomfortable and compulsive working poses; long transitions
Grazing livestock (shepherds, animal guides)	insolation; meteorological conditions of exposure; physical violence; magnetic conditions; space movement; logic of regime change
Dehkanchilik House (fruits and vegetables of etishtiruvchilar)	air temperature and humidity decrease; exposure to chemicals with pollution (carbon monoxide, nitric oxide, formaldehyde, toyinmagan, hydrocarbons, pesticides, agrochemicals, disinfectants and alkalis.); bacterial contamination by usalar and aeronautics; operations for forcible displacement of solids; inconvenient and dangerous operations for environmental pollution; cleaning operations wastewater treatment operations; wastewater treatment operations
Work in portable agricultural techniques (machinists of agricultural production,	The presence of pesticides and agrochemicals in the air of the workplace with a mixture of dust (grain, cotton, etc.); air pollution with exhaust gases (carbon monoxide, formaldehyde, acrolein, nitric oxide, etc.); unfavorable microclimate conditions; increased noise level; general vibration; local
tractor drivers)	vibration; forced working condition
Agricultural machinery repair workshops (master adjusters for machine and tractor park maintenance)	microclimate discomfort; air pollution with harmful chemicals (carbon monoxide, nitric oxide, formaldehyde, unsaturated hydrocarbons, gasoline, organic solvents, etc.); increased noise level; general vibration; adequate lighting of workplaces; physical exertion during the execution of operas and manual movement of weights, uncomfortable and forced workplaces, risk of injury
Storage and processing of agricultural products (cleaning machine machinists, streamers, warehouse and elevator workers)	insolation; exposure to meteorological conditions; unfavorable internal microclimate; organic dust with mineral (soil) mixture, grain dust; increased noise level; general vibration, local vibration; insufficient illumination of workplaces; manual operations and physical exertion when carrying heavy loads; unfavorable and forced working positions
Feed preparation workshops and feed warehouses (feed cookers, feed preparation workshops operators)	unfavorable microclimate; high humidity; drafts; contamination of the workplace with organic dust with a mineral (soil) mixture containing antibiotics, enzymes, protein and other preparations; increased noise level; insufficient lighting of the workplaces; manual movement of physical exertion and weights during operations, inconvenient and forced workplaces
Storage and use of pesticides and agrochemicals (workstations and centralized seed treatment units)	unfavorable microclimate; contamination of the workplace with pesticides and agrochemicals; exposure to meteorological conditions; air pollution with exhaust gases; heating the microclimate in cabins; increased noise level; general vibration; local vibration; forced working condition and physical exertion; irrational working modes and rest

Diseases cardiovascular system (coronary heart disease, hypertension, atherosclerosis, vegetative vascular dystonia, etc.) An average of 1.1 jobs per 4.2 employees and 100 jobs per 48.9 7.5 days. This pathology is noted on the staff of different professional groups at approximately the same frequency.

Among cattlemen and greenhouses, the average incidence of temporarily disabled female genitals is 0.9 workers for 4.3 years and 55.5 workers for 3.7 days for 100. High rates (5.1 cases and 81.0 days) are



recorded among greenhouses of protected soil.

The nature of the diseases that cause temporary disability has been found to have certain relationships with the working conditions of the workers. Thus, workers with industrial contact with harmful chemicals, dust, gases (poultry houses, greenhouses, milkers, mechanizers) are 2.5—3 times more likely to develop allergic skin and respiratory diseases, acute respiratory infections, exacerbation of chronic diseases.bronchopulmonary system. Workers who are exposed to vibration, noise and physical exertion (tractor drivers of agricultural production) working in abnormal working and recreational conditions are more likely to suffer from diseases of the peripheral nervous system, neuromuscular and musculoskeletal system. Temporary disability in workers experiencing nervous and emotional stress (livestock operators) is mainly associated with cardiovascular disease. [11].

The Bukhara region has the highest rate of occupational diseases among other sectors of agricultural production — 47.5% of the total in the region. The number of employees with certain occupational diseases was 01.01.2006 people in 1470. At the same time, the number of primary occupational diseases has increased by 18% over the past five years. An unfavorable fact is the rejuvenation of the contingent of diagnosed people, which was initially established by qualified specialists. Patients under 50 years of age make up 43.4% of the number of primary patients. In recent years, there has been an increase in the number of people with occupational diseases from 34.7% in 2011 to 52.3% of the total number of Occupational patients in 2015, which may be the result of not sending patients to the Occupational Diseases Clinic on time. [10].

In 2015, the structure of occupational diseases of agricultural workers in the region was presented as follows: 28.8% — chronic brucellosis, 27.3% — diseases of the peripheral nervous system, 14.4% - vibration disease, 12.9% — respiratory diseases, 8.7% — diseases of the musculoskeletal system, 6.5%-neuritis auditory nerves and 1.4% — other diseases. The main contingent of patients are mechanizers and animal breeders.

An analysis of the occupational disease of agricultural workers, taking into account the effects of autumn kish, showed that diseases in the genesis of which professional factors may be involved, were recorded in young and middle-aged people with more than 10 years of experience in the main profession. According to the observations of many years of research, this period is enough to form an occupational pathology [4].

The results of complex medical and hygienic research made it possible to substantiate the algorithm and develop a system of measures aimed at managing professional risk and maintaining the health of Agricultural Workers (figure).

The main measures to reduce professional risk to the health of agricultural workers can be:

- -organizational and technical measures that take into account the modernization of equipment that is a source of harmful factors (noise, vibration, the release of dust and harmful substances into the air of the workplace, thermal radiation, etc.):
- improvement of technological processes and implementation of complex automation and mechanization of all production processes;
- the provision of employees with certified personal protective equipment, their issuance must be carried out taking into account working conditions in accordance with national and industrial standards;
- regulation of the time of contact with harmful and dangerous factors through the introduction of rational labor and rest regimes;
- timely implementation of industrial control over compliance with sanitary rules and implementation of sanitary and anti-epidemic (preventive) measures;
- certification of workplaces according to working conditions, followed by certification of work in labor protection;
- improving labor security in organizations (timely training and training of safe methods and techniques of work, the organization of Labor security classes equipped with modern technical means for active training, improving the qualifications of persons responsible for Labor security, etc.);
- the operation of medical offices, psychological assistance rooms, sports grounds and halls at enterprises, the introduction of production Gymnastics, providing seasonal prevention of respiratory diseases according to the available methods, etc.;
- optimization of the work of urban district organizations when sending individuals working in harmful working conditions to specialized medical institutions to identify the first signs of occupational diseases;
- medical and preventive measures, including timely preliminary and periodic medical examinations in medical institutions and professional pathology centers that help to identify occupational pathology early; timely referral of persons suspected of professional disease to professional pathology Centers for

examination of the connection of the disease with the profession; registration of Occupational pathology and dispensary control. Disabled health; timely treatment and medical rehabilitation of persons with work-related and occupational diseases in specialized clinics and vocational centers.

Particular attention should be paid to issues related to professional selection and professional orientation. Their necessity is confirmed by the fact that the results of work are mainly determined by such characteristics as the ability to work in time — deficit conditions under the influence of harmful factors of the production environment-increased dust, noise and vibration levels, temperature discomfort, monotony, etc. During professional selection, it is important to take into account the state of Health and the level of physical development of employees.

#### Conclusion

- 1. The formation of an attitude towards a healthy lifestyle among the villagers is an important task. Especially among the younger generation, it is necessary to develop knowledge and skills in a healthy lifestyle.
- 2. Thus, working conditions in the production of agriculture are characterized by microclimate discomfort, air pollution of the workplace with harmful chemicals and dust, increased noise and vibration levels in the workplace, static loads, an unfavorable stagnant state, nervous and emotional tension. According to the degree of deviation of the level of factors of the production environment and the labor process from hygienic standards, working conditions are harmful to levels 1, 2 and
- 3. Then, the countryside is characterized by unfavorable microclimatic conditions, unfavorable chemicals and environmental pollution, unfavorable chemicals and environmental pollution. Ambient and labor temperature temperature of hygienic factors rationing of hugs in the room, working conditions of 1, 2 and 3 degrees of damage. The biological factor is the presence of a pathogen of a microorganism-there is a risk of infection with the pathogen as a result of animal labor and high-risk conditions (4th class). 2. Uncomfortable working conditions in rural areas, ischilaring complications as a risk factor, related to production and occupational diseases of development of olib keladi, breathing problems, Tink movements, peripheral nervous disorders, diseases, breathing problems diseases, Base movement system diseases take the leading place. Occupational risks of reduction and risk reduction include precautionary measures (hygienist, organizer, technician, medic, prevention and prophylaxis).) harmful factors affecting rocks of the Old World or reduce large agro-industrial enterprises affecting the time of the New World League and occupational diseases of reduce

#### LIST OF REFERENCES:

- 1. Бакиров А.Б. Гигиенические и профпатологические проблемы регионов Сибири. Новокузнецк, 1998; С. 65-69.
- 2. Новикова Т.А., Варшамов Ё.А., Виниченко Н.В., Неумолотова Т.Н. Охрана труда в Саратовской области. //Информационно-аналитический материал. Вып. 2. Саратов, 2004; С. 14-18.
- 3. Сергеева С.В., Волохова И.В., Толчинская И.С. // Мед. труда. 2003;11:4-7.
- 4. Спирин В.Ф., Варшамов Ё.А. // Мед. труда. 2003;11:1-4.
- 5. Mansurova MKh. Epidemiological and etiological aspects of leptospirosis //Web of Scientist: International Scientific Research Journal 2022;3(2/4):223-227.
- 6. Mansurova MKh., Nazarov JS.E. Features of clinical manifestation of brucellosis //New Day in Medicine. Bukhara, 2021;1(33):184-189.
- 7. Быков В.Л. Сперматогенез у мужчин в конце XX века /В.Л. Быков //Проблемы репродукции. 2000;1:6-13.
- 8. Manasova GM, Zhumaeva ZZh, Manasova IS. Epidemiological state of endocrine diseases. The role and place of innovative technologies in modern medicine //Proceedings of the 66th Annual Scientific and Practical Conference of the T.G. Abu Ali ibn Sino with international participation. November 23rd. 2018; S 169-170.
- 9. Manasova IS, Academicia An International Multidisciplinary Research Journal. Features of labor of workers in agro-industrial labor 10.5958 \ 2249-7137.2020.01622.5 .c.958-962.
- Manasova IS, Academicia An International Multidisciplinary Research Journal. Analysis of working conditions by parameters of the physiological state of workers cotton plant 10.5958 / 2249-7137.2020.01634.1
- 11. Kasimov HO, Manasova IS, Nazarov SE, Jumaeva ZJ, Nurova ZH. Occupational hygiene in field farming //International Journal of Psychosocial Rehabilitation. Great Britain. 2020;9:3830-3838.

Entered 20.09.2024

