



 Research Article

OCCUPATIONAL DISEASES IN INDUSTRIAL ENTERPRISES: CAUSES, TYPES AND PRINCIPLES OF PREVENTION

Journal Website:
<http://sciencebring.com/index.php/ijasr>

Copyright: Original content from this work may be used under the terms of the creative commons attributes 4.0 licence.

Submission Date: October 01, 2022, **Accepted Date:** October 05, 2022,

Published Date: October 09, 2022

Crossref doi: <https://doi.org/10.37547/ijasr-02-10-01>

Meliboyev Ilhomjon Abdruraxmon O'g'li

Assistant, Department Of Oil And Oil Gas Processing Technologies, Fergana Polytechnic Institute, Fergana, Uzbekistan

ABSTRACT

The article deals with occupational diseases, issues of diagnostics and prevention of occupational diseases, factors that have a negative impact on health, a system of various measures aimed at reducing the risk of occupational diseases, slowing down the development of existing diseases, reducing the risk of injuries at work, and ways to prevent them.

KEYWORDS

Prevention, occupational disease, production, health, labour protection, periodical medical examination, harmful factor, dangerous factor treatment-prophylactic.

INTRODUCTION

As labour protection includes a complex of laws, socio-economic, organizational, technical, hygienic, and preventive measures aimed at ensuring the human ability to work, health and safety in the work process, it means that citizens'

labour protection in all aspects of the conditions for making it should be created at the level of demand [1,2].



Measures to reduce occupational diseases in industrial enterprises, preparation or purchase of devices and devices protecting workers from various harmful substances, installation of air exchange and air conditioning systems, re-equipment of old types, methods of general air exchange instead of blocking the place where substances are separated, the aspiration method, the use of improved machines, the installation of devices that monitor the condition and composition of the air, etc. are examples [3,4,5].

Protecting and strengthening the health of working employees is an important task of state importance [6-13].

Health is not only the absence of diseases but also a high level of physical and mental endurance. The state of labour activity has an important place in health care. therefore, the improvement of working conditions and the prevention of occupational diseases have a significant impact on economic development in our Republic: important legal documents aimed at ensuring the safety and health of working conditions in all areas of industry, transport and agriculture - The Constitution of the Republic of Uzbekistan, the Law on "Sanitary control in the Republic of Uzbekistan", "The main rules of health protection of the population in the Republic of Uzbekistan" and others confirm our opinion [14-17].

MATERIALS AND METHODS

The main causes of occupational morbidity are:

- The imperfection of technological processes;

- Constructive shortcomings of means of labour;
- Imperfect jobs;
- Imperfect plumbing installations;
- Non-use, absence or imperfection of personal protective equipment;
- Violation of safety regulations and industrial sanitation;
- Professional contact with an infectious agent;
- Deviations from technological regulations.

Types of occupational diseases

The Convention of the International Labour Organization (ILO) N 121 of 1964 established the List of Occupational Diseases for the first time. In 1980, the 66th International Labour Conference updated this List. However, there is still no generally accepted and unified classification of occupational diseases. Each country - a member of the International Labour Organization - establishes its own list of occupational diseases and determines measures for the prevention and social protection of victims [18-21].

In the Russian Federation, there is a List of occupational diseases approved by the order of the Ministry of Health and Social Development of Russia dated April 27, 2012, N 417n. This list is the main document that is used in establishing the diagnosis of an occupational disease, its connection with the work or profession performed, in resolving issues of examination of working capacity, medical, social and labour rehabilitation, as well as in considering issues related to compensation for damage caused to an employee by damage to health. The specified list

of occupational diseases includes diseases that are recognized exclusively or mainly by exposure to harmful, hazardous substances and production factors [22-29].

The most common types of occupational diseases are:

- Diseases (intoxication) caused by exposure to chemical factors with a primary lesion of the respiratory system, blood system, nervous system, hepatobiliary system, kidneys and urinary tract;
- Diseases caused by exposure to industrial aerosols;
- Diseases caused by exposure to physical factors;
- Diseases associated with physical overload and overstrain of individual organs and systems;
- Diseases caused by the action of biological factors;
- Allergic diseases;
- Neoplasms.

Depending on the level and duration of exposure to harmful substances and factors, there are:

- Acute occupational diseases;
- Chronic occupational diseases.

Acute occupational diseases (poisoning) include forms that develop suddenly, after a single (during no more than one work shift) exposure to harmful and dangerous production factors, the intensity of which significantly exceeds the MPC and MPD.

Chronic occupational diseases include such forms of diseases that have arisen as a result of prolonged exposure to harmful, hazardous substances and production factors.

Chronic should also include immediate and long-term consequences of occupational diseases (for example, persistent organic changes in the central nervous system after carbon monoxide intoxication), some diseases that developed long after the cessation of work in contact with adverse production factors (late silicosis, berylliosis, papilloma of the bladder etc.), as well as diseases in the development of which an occupational disease is a background or risk factor (for example, lung cancer that has developed against the background of asbestosis, silicosis or dusty bronchitis).

Prevention of occupational diseases

The main preventive measures for the prevention of occupational diseases are:

- Ensuring safe working conditions and preventing accidents;
- The use of effective individual and collective protective equipment;
- Monitoring of working conditions and health of employees;
- Organizational, technical, sanitary and hygienic and administrative measures to minimize the impact of a damaging agent on workers;
- conducting professional selection and examination of professional suitability;

- Conducting sanatorium-resort and end ecological rehabilitation of persons from high-risk groups;
- Conducting preliminary and periodic medical examinations (examinations) of employees;
- Application of technological measures for the mechanization and automation of production;
- Carrying out general health-improving, general strengthening measures aimed at hardening the body and increasing its reactivity;
- Compliance with personal hygiene requirements;
- Providing workers with milk and therapeutic and preventive nutrition;
- Provision of sanitary and medical and preventive services for employees.

Periodic medical examination of workers and employees ensures periodicity established by law, the conditions under which they perform their work or activities. The periodicity of the medical examination depends on the time required to observe changes in the health of the employee, the purpose of the medical examination, and in some cases, the age of the person undergoing the medical examination.

For example, underage workers are required to undergo a medical examination every year until they turn 18. Young workers in hazardous work are required to undergo a medical examination every year until they reach the age of 21.

At the same time, in some types of work, it is necessary to quickly determine the health of the employee and to check his suitability for work

before starting each work activity. For this, a pre-flight or pre-duty medical examination is conducted. These can be included in the type of regular medical examination [3].

Along with the above-mentioned medical examinations, extraordinary (unplanned) medical examinations can be conducted. A medical examination is carried out mainly by employers or at the request of employees and in accordance with medical recommendations to determine the presence of occupational diseases.

Medical examinations of employees can be divided into two groups:

Group I - medical examinations conducted to check the occupational fitness of workers and prevent occupational diseases.

The following must pass such examinations:

- Persons working in heavy work and under the influence of harmful and unpleasant factors of working conditions (including workers in underground conditions);
- Workers in work related to the movement of vehicles;
- Children under 18, etc

Group II - medical examinations conducted to protect the health of the population, ensuring sanitary-epidemiological safety (preventing the development and spread of infectious diseases).

The following must undergo such medical examinations:

- Employees of the food industry and catering establishments;
- Workers in the field of plumbing and drinking water supply;
- Employees working in treatment-prophylactic and children's institutions;
- Other institutions, etc

The preventive direction of occupational pathology is carried out first of all through periodical medical examinations of persons working in harmful and unfavourable working conditions.

Initial periodic medical examinations are aimed at not employing persons who have one or another change in the organs and systems of the body and are not allowed to work under the influence of harmful occupational factors [1]. Such examinations are primarily aimed at the prevention of occupational diseases and rational employment, taking into account the health of the worker entering the production. that is, it is aimed at determining the medical regulation of allowing occupations related to the influence of harmful factors, and is one of the conditions that create preventive measures, therefore, it is necessary to take into account the following:

- Compliance with personal protective measures;
- Full implementation of measures covering biological and physiological methods of prevention;
- Quality pre-employment medical examination;

- Control of the quality of the preliminary medical examination before employment;
- A new approach to a healthy lifestyle for employees, and demand for healthy working conditions. teach to pay attention to one's health;
- Activation of sanitary-rescue works;
- Teaching medical staff measures to adopt a healthy lifestyle for primary prevention.

To carry out the above-mentioned measures, it is necessary to create a mechanism that ensures and controls their implementation, as well as mandatory participation of the administration of enterprises in the implementation of measures aimed at preventing occupational diseases and dual (employer and employee) obligations. it is appropriate to complete the indicated legal documents [6,7].

It is recommended to separate the following groups to carry out differentiated dispensary control when drawing up a final report after a periodical medical examination.

Dispensary groups:

D1 - persons without the influence of harmful factors and unpleasant working conditions.

D2 - persons who are likely to develop occupational diseases.

D3 - patients with occupational diseases.

Dispensary control groups are organized taking into account the character of individual pathological signs or factors affecting their co-



occurrence and the nature of the pathology they cause. Among the preventive measures, timely identification of the group at risk of developing occupational diseases and carrying out a socialization program for their treatment is of great importance in maintaining the health of the working population. Patients with occupational diseases are included in group D3 and their dispensary control is carried out according to the special order of the Ministry of Health.

At the same time, it is necessary to consider and remember the following:

All patients should be taken to the dispensary as soon as the occupational disease is detected, including in cases where the initial clinical manifestations of the disease are minimal.

Patients with occupational diseases, regardless of whether they are working or retired, must always be treated and monitored by a dispensary.

The principles of dispensary monitoring of patients are determined by the form and course of occupational diseases.

In order to prevent the exacerbation of occupational diseases and the addition of complications, it is necessary to treat all patients with clearly expressed forms of occupational diseases in the clinic of occupational diseases every year.

The correct placement of patients with occupational diseases into work, which is considered a component of patient rehabilitation

in the dispensary control system, is of particular importance.

CONCLUSION

Several technical and sanitary-hygienic measures are taken to prevent heat-related illness and reduce overheating in the workplace. For this, heat-insulating materials, cooling and air exchange devices and special personal protective equipment are used.

In order to prevent frostbite, it is necessary to provide employees with special clothes, warm shoes, and nutritious hot food, and at the same time, they should be allocated special rooms for warming up and resting.

People working in low-temperature conditions must be medically examined.

When solving the issues of medical labour expertise, it is necessary to base on the degree of expression of the process developed due to laser rays and the effectiveness of the implemented treatment measures.

REFERENCES

1. Gendler, S. G., Tumanov, M. V., & Levin, L. Y. (2021). Principles for selecting, training and maintaining skills for safe work of personnel for mining industry enterprises. Natsional'nyi Hirnychiy Universytet. Naukovyi Visnyk, (2), 156-162.
2. Назирова, П. М., Курбанова, У. С., & Усмонов, Н. Б. (2020). Особенности



- обработки озоном некоторых видов плодов и овощей для их долгосрочного хранения. *Universum: химия и биология*, (6 (72)), 6-9.
3. Tumanov, M. V. (2021). Principles for selecting, training and maintaining skills for safe work of personnel for industry enterprises. *Scientific Bulletin of National Mining University*, (2).
4. Mukhtarovna, N. R., Makhmudjonovna, A. M., & Botiraliyevich, U. N. (2021). Analysis of factors determining the export potential of vine and wine growing in the republic of uzbekistan. *Euro-Asia Conferences*, 1 (1), 313-315.
5. Skotnicka-Zasadzień, A. G. K. B. Innovation and Optimization of the Occupational Health and Safety Management System in a Selected Industrial Enterprise–A Case Study. *Innovation Management, Entrepreneurship and Sustainability* 2018, 347.
6. Mukhtarovna, N. R., & Botiraliyevich, U. N. (2021). Study of the Influence of Processing on the Safety of Fruit and Vegetable Raw Materials. *European Journal of Agricultural and Rural Education*, 2(6), 43-45.
7. Shukhratovna, K. S., & Sultanovna, F. N. (2020). Learning Bioavailability Of “Diabderm” Ointment With Method Of “In Vitro”. *The American Journal of Medical Sciences and Pharmaceutical Research*, 2(10), 151-155.
8. Mukhtarovna, N. R., Makhmudjonovna, A. M., & Botiraliyevich, U. N. (2021, January). Analysis of factors determining the export potential of vine and wine growing in the republic of uzbekistan. In *Euro-Asia Conferences* (Vol. 1, No. 1, pp. 313-315).
9. Мухаммадиева, З. Б., & Бердиева, З. М. (2020). Пищевая безопасность CO2-экстрактов из растительного сырья. *Universum: химия и биология*, (4 (70)), 8-12.
10. Бердиева, З. М. (2020). Способы обучения учащихся решению химических задач. *Достижения науки и образования*, (6 (60)), 4-8.
11. Атоев, Э. Х., & Бердиева, З. М. (2021). Изучение устойчивости комплексных соединений металлов с некоторыми фосфорорганическими лигандами. *Universum: химия и биология*, (10-2 (88)), 6-8.
12. Goncharova, N. I., Raxmanov, B. K., Mirzaev, B. K., & Xusainova, F. O. (2018). Properties of concrete with polymer additives-wastes products. *Scientific-technical journal*, 1(2), 149-152.
13. Sh, K. S. (2022). Development of the composition of the anti-inflammatory collection “Diabderm”. *Редакційна колегія*, 22.
14. Фозилов, С. Ф., Бердиева, З. М., Рузиева, К. Э., Киёмов, Ш. Ф., & Норова, М. С. (2014). Математическое моделирование низкотемпературных свойств синтезированной депрессорной присадки на дизельное топливо. *Молодой ученый*, (8), 57-59.



15. Axmedov, B. M. (2022). Knauf Insulation is Effective Isolation. *Central Asian Journal of Theoretical and Applied Science*, 3(6), 298-302.
16. Safarova, D. T., Madrakhimov, S. N., Nazarova, Z. A., & Khusenova, S. S. (2022). Study of import-substituting drugs of hypertensive action based on medicinal plants. *Asian journal of pharmaceutical and biological research*, 11(1).
17. Adilhodzhaev, A., Igamberdiev, B., Kodirova, D., Rakhmonov, O., & Marufjonov, A. (2020). Assessment of the potential of composite gypsum binder bricks as an alternative to traditional wall materials in Uzbekistan. *European Journal of Molecular & Clinical Medicine*, 7(2), 1884-1889.
18. Бердиева, З. М. (2019). Виды химических реакций и связей. *Academy*, (12 (51)), 7-9.
19. Adilhodzhaev, A., Igamberdiev, B., Kodirova, D., Rakhmonov, O., & Marufjonov, A. (2020). Assessment of the potential of composite gypsum binder bricks as an alternative to traditional wall materials in Uzbekistan. *European Journal of Molecular & Clinical Medicine*, 7(2), 1884-1889.
20. Бердиева, З. М., & Гафурова, Г. А. (2015). Химические проблемы экологии в пищевой промышленности и пути их решения. *Молодой ученый*, (9), 453-455.
21. Dekhkanov, S. A. (2020). Перспективы развития внешне экономической деятельности объединенных арабских эмиратов и республики узбекистан: современные реалии, инновации и стратегии развития. *Theoretical & Applied Science*, (4), 926-929.
22. Кодирова, Д. Т., Омонова, М. С., Тожимамадова, М. Ё., & Убайдуллаева, С. Б. (2022). Физико-химические процессы при получении магнизиальных вяжущих из доломитов шорсу. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2(5), 1243-1247.
23. Sabirovich, I. A., Bazarov, A. A., & Sodiqovna, O. M. (2022). Study of the Distribution and Physico-Chemical Properties of Deep Groundwater in Some Areas of the Altiaryk and Besharik Districts of the Fergana Region and Their Rational Use. *Eurasian Journal of Engineering and Technology*, 5, 120-124.
24. Ташланова, Н. Д. (2018). Формирование навыков при выполнении самостоятельных работ студентов в высших учебных заведениях. *Мировая наука*, (4), 238-240.
25. Кодирова, Д. Т., Мирсалимова, С. Р., Умаралиева, М. Ж., Абидова, М. А., & Нурматова, З. Н. К. (2020). Изучение процесса получения азотно-фосфорных удобрений разложением кызылкумских фосфоритов азотной кислотой. *Universum: технические науки*, (3-2 (72)), 57-59.
26. Sabirovich, I. A., Bazarov, A. A., & Sodiqovna, O. M. (2022). Study of the

- Distribution and Physico-Chemical Properties of Deep Groundwater in Some Areas of the Altiaryk and Besharik Districts of the Fergana Region and Their Rational Use. Eurasian Journal of Engineering and Technology, 5, 120-124.
27. Ташланова, Н. Д. (2018). Эффективное использование игровых технологий в процессе обучения. Форум молодых ученых, (4), 1419-1421.
28. Омонова, М. С. (2020). Сельскохозяйственные науки определение степени зараженности семян хлопчатника афлотоксином в 1 в период их хранения. Интернаука, (26-1), 75-77.
29. Джураева, Д. Д. К., & Бердиева, З. М. (2016). Культурное наследие как фактор развития человеческого потенциала (на примере Узбекистан). Ученый XXI века, 25.

