

OCCUPATIONAL DISEASES AND THE CAUSES OF THEIR OCCURRENCE

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Abstract. This article discusses the causes of occupational diseases in production, which are caused by exposure to dust, gases, noise and vibrations in the workplace, as well as changes in air temperature, pressure and humidity. It is considered that the long-term impact of adverse factors in production on the human body can lead to the development of occupational diseases, which can lead to temporary or permanent loss of working capacity.

Key words: Biological factors, physical factors, toxico-chemical factors, regulatory conditions, occupational pathology, medical examination, radiological factors, infrared and ultraviolet rays, electromagnetic waves, ultrasound, ionization, acute poisoning.

ПРОФЕССИОНАЛЬНЫЕ ЗАБОЛЕВАНИЯ И ПРИЧИНЫ ИХ ВОЗНИКНОВЕНИЯ

Аннотация: В данной статье рассматриваются причины профессиональных заболеваний на производстве, вызванных воздействием пыли, газов, шума и вибрации на рабочем месте, а также изменениями температуры, давления и влажности воздуха. Рассматривается, что длительное воздействие неблагоприятных факторов производства на организм человека может привести к развитию профессиональных заболеваний, способных вызвать временную или постоянную потерю трудоспособности.

Ключевые слова: Биологические факторы, физические факторы, токсикохимические факторы, нормативные условия, профессиональная патология, медицинское обследование, радиологические факторы, инфракрасные и ультрафиолетовые лучи, электромагнитные волны, ультразвук, ионизация, острое отравление.

ISHLAB CHIQARISH KASALLIKLARI VA ULARNING KELISH SABABLARI

Anotatsiya: Ushbu maqolada ishlab chiqarishda kasb kasalliklari ish joylaridagi havoning changlanishi, gaz, shovqin va tebranishlar ta'siridan hamda havo harorati, bosimi, namligini o'zgarib turishi natijasida paydo bo'ladi. Ishlab chiqarishdagi nomaqbul omillarning kishi organizmiga uzoq muddat ta'sir etishi oqibatida ishchi kasb kasalligiga chalinishi natijada ish qobiliyatini vaqtincha yoki butunlay yo'qotishi mumkin ekanligi haqida muloxazalar kiritilgan.

Kalit so'zlar: Biologik omillar, fizik omillar, toksiko-kimyoviy omillar, me'yoriy shart-sharoit, prospatologiya, tibbiy ko'rik, radiologik omillar, infraqizil va ultrabinafsha nurlar, elektromagnit to'lqinlar, ultratovush, ionlashtirish, o'tkir zaharlanish.

INTRODUCTION

Occupational diseases are illnesses that are directly related to working conditions, factors of the production environment, or the labor process itself. They usually develop as a result of long-term exposure to harmful factors (chemical, physical, biological, and psychophysiological).

Main Features and Characteristics:

1. Occupational specificity:

The development of the disease is directly related to a specific profession or type of production activity.

2. Impact of harmful factors:

The occurrence of occupational diseases is caused by harmful workplace factors such as dust, noise, vibration, chemical substances, radiation, psychological stress, and others.

3. Long-term exposure:

Most occupational diseases do not develop suddenly but arise as a result of prolonged exposure (months or years) to harmful factors.

4. Importance of medical examinations:

Pre-employment and periodic medical examinations are essential for early detection and prevention of occupational diseases.

Occupational diseases are always associated with specific harmful occupational factors and are characteristic of work performed under such conditions. These diseases occur several times more frequently compared to other working conditions. When assigning temporary disability or disability pensions, diseases listed in the List of

LITERATURE REVIEW

Occupational Diseases approved by Resolution No. 249 of the Cabinet of Ministers of the Republic of Uzbekistan dated May 11, 1994, and the list approved by Order No. 300 of the Ministry of Health of the Republic of Uzbekistan dated June 6, 2000, are considered occupational diseases. [1].

METHODOLOGY

If an employee contracts a disease listed in these documents, it is recognized as an occupational disease even if the employee worked in a profession or production process not explicitly mentioned. Not only the listed diseases but also their complications and direct consequences are considered occupational diseases.

Classification of Occupational Diseases

1. Diseases caused by biological factors

2. Diseases resulting from physical overload
3. Diseases caused by physical factors
4. Diseases caused by industrial aerosols and dust
5. Diseases caused by toxico-chemical factors

Employees work within a labor collective, and according to labor legislation, appropriate working conditions must be ensured. Despite this, various diseases still occur among workers of different professions. Adverse factors affecting the human body manifest in several forms: chemical substances (lead, mercury, manganese, benzene, chromium, beryllium, and others), industrial dusts (silicon, coal), physical factors (intense noise, vibration, radioactive and ionizing substances, infrared and ultraviolet radiation, electromagnetic waves, ultrasound, excessive temperature, high relative humidity, atmospheric pressure), and biological factors (microbes, viruses).

The list of hazardous and harmful substances mentioned is provided in Appendix 1 of the Regulation approved by Order No. 200 of the Ministry of Health of the Republic of Uzbekistan dated July 10, 2012.[2]

Prevention of Occupational Diseases

Preventive measures include health improvement programs conducted at enterprise medical facilities, provision of special preventive nutrition, careful monitoring of working conditions, and mandatory pre-employment and periodic medical examinations.

In studying, diagnosing, and treating occupational diseases, special attention must be paid to medical ethics and deontology.

Ethics is one of the oldest branches of philosophy and studies morality, its development, essence, and governing principles.

Deontology, derived from the Greek word *deontos* (duty, obligation), refers to a system of professional ethical norms and standards of conduct.[3]

Medical deontology is considered the “heart” of medicine and the wisdom of a healer. Ethical and deontological issues in occupational medicine often arise even before the development of occupational diseases. These issues may appear during the initial medical examination when a worker first applies for employment. > Anvarjon: Applicants often ask physicians about hazardous substances used in production and their potential effects on health.

Protective equipment, regular safety measures, periodic medical examinations, proper nutrition, rest schedules, and avoiding alcohol and tobacco significantly improve workers' health.

Awareness of workplace hazards increases workers' attention to their personal health. While this promotes early detection of occupational disease symptoms, it may also lead some individuals to incorrectly attribute unrelated health issues to occupational factors. Workers diagnosed with occupational diseases are granted various legal benefits, including disability payments and compensation for health damage caused by employer negligence.

Occupational Pathology

In occupational pathology, errors in making an initial diagnosis are unacceptable. Establishing a causal link between the disease and the profession is crucial. Workers suspected of having occupational diseases must be referred to occupational pathologists and, if necessary, to specialized national centers.

Medical examinations are conducted in accordance with Order No. 200 of the Ministry of Health of the Republic of Uzbekistan (July 10, 2012) and Article 214 of the Labor Code.

Pre-employment medical examinations identify conditions incompatible with occupational hazards and recommend suitable workplaces. Periodic examinations ensure systematic health monitoring and early detection of adverse changes.

Personal Hygiene and Working Conditions

Personal hygiene is essential for maintaining health and work capacity. Cleanliness, regular handwashing, proper nutrition, and balanced work-rest schedules are fundamental requirements.

Working conditions are defined as the combination of production and labor process factors affecting health and performance. These include work intensity, posture, psychological stress, physical exertion, and environmental conditions.

Posture-Related Occupational Diseases

ANALYSIS AND RESULTS

Diseases caused by prolonged or uncomfortable working postures include flat feet (common among loaders, textile workers, bakers), spinal deformities (scoliosis), varicose veins, thrombophlebitis, hernias, and reproductive health disorders. Preventive measures include mechanization, ergonomic furniture, physical exercise, and microbreaks.

Certain professions involving excessive use of specific muscles may cause occupational neuroses. Wind instrument musicians and glass blowers may develop occupational emphysema, while teachers and singers may suffer from chronic laryngitis. Fine-detail work under poor lighting strains vision, potentially leading to myopia.

Occupational Hazards

Occupational hazards are divided into three groups:

1. Poor organization of labor: nervous system overload, prolonged static posture, excessive strain on sensory organs
2. Production-related hazards: physical, chemical, biological, and radiological factors
3. Work environment hazards: inadequate ventilation, lighting, space, and air circulation

CONCLUSION

Exposure to occupational hazards can result in severe diseases, loss of work capacity, and even death. Examples include benzene poisoning affecting blood formation, vibration disease, silicosis among miners, and varicose veins from prolonged standing.[4]

Industrial Injuries and Occupational Diseases

Violations of safety and sanitary regulations lead to injuries, poisoning, and occupational diseases. Injuries are classified into three types: work-related, indirectly work-related, and non-work related. Employers bear responsibility for work-related injuries and compensation.

Acute occupational poisoning occurs within a single workday, while chronic poisoning results from long-term exposure and may lead to occupational diseases. Such incidents are often caused by organizational and technical failures at industrial enterprises.

REFERENCES USED

1. "Labor Code". Collection of Legislative Acts of the Republic of Uzbekistan. – Vol.: 2005 , No. 37-38.
2. " Regulations on the investigation and accounting of industrial accidents and other types of damage to the health of employees." Resolution of the Cabinet of Ministers No. 286, 06.06.1997, -T.: 1997.
3. Sh.M.Mirziyoyev. On the strategy of actions for the further development of the Republic of Uzbekistan . 07.02.2017 , PF-4947. <https://nrm.uz>
4. Method of assessment of working conditions and attestation of jobs according to working conditions. Developed by the Ministry of Labor and the Ministry of Health, No. 247, 28.05.1996, T.: 1996.
5. New edition of the Law "On Labor Protection" September 22, 2016
6. "Student Response Systems". Teaching at Mizzou: A Guide for New Faculty, Graduate Instructors and Teaching Assistants website. Retrieved 4 March 2005 from: <http://teachandlearn.missouri.edu/guide/chapters/activelearning.htm> .
- Law " On Industrial Safety of Hazardous Production Facilities ". Collection of Legislative Acts of the Republic of Uzbekistan. –Vol.: 2006, No. 39.
9. Special course on labor protection. Textbook. Yuldashev OR-T.: " Thought wing ", 2015.- 330 p.
10. Occupational hygiene Iskandarova G,T Tashkent " Ijad -Pr