

ГОСУДАРСТВЕННОЕ УЧРЕЖДЕНИЕ ОБРАЗОВАНИЯ
«УНИВЕРСИТЕТ ГРАЖДАНСКОЙ ЗАЩИТЫ
МИНИСТЕРСТВА ПО ЧРЕЗВЫЧАЙНЫМ СИТУАЦИЯМ
РЕСПУБЛИКИ БЕЛАРУСЬ»

**ОБЕСПЕЧЕНИЕ БЕЗОПАСНОСТИ
ЖИЗНЕДЕЯТЕЛЬНОСТИ:
ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ**

*Сборник материалов
XV международной научно-практической конференции молодых ученых*

7-8 апреля 2021 года

В двух томах

Том 2

Минск
УГЗ
2021

УДК 614.8.084
ББК 38.96
О-13

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Обеспечение безопасности жизнедеятельности: проблемы и перспективы :
О-13 сб. материалов XV международной научно-практической конференции молодых
ученых.: В 2-х томах. Т. 2. – Минск : УГЗ, 2021. – 424 с.
ISBN 978-985-590-119-9.

В сборнике представлены материалы докладов участников XV международной научно-практической конференции «Обеспечение безопасности жизнедеятельности: проблемы и перспективы», состоявшейся 7-8 апреля 2021 года.

Материалы сборника посвящены: обеспечению безопасности жизнедеятельности; пожарной безопасности и предупреждению техногенных чрезвычайных ситуаций; лесным природным пожарам и борьбе с ними; современным технологиям ликвидации чрезвычайных ситуаций; научно-техническим разработкам в области аварийно-спасательной техники и оборудования; гражданской защите; радиационной безопасности и экологическим аспектам чрезвычайных ситуаций; правовым, образовательным и психологическим аспектам безопасности жизнедеятельности; практике профессиональной иноязычной коммуникации.

Издание предназначено для курсантов (студентов), слушателей магистратуры и адъюнктуры (аспирантуры) учреждений образования и научных учреждений.

Тезисы представлены в авторской редакции.

Фамилии авторов набраны курсивом, после авторов указаны научные руководители.

УДК 614.8.084
ББК 38.96

ISBN 978-985-590-119-9 (Т. 2)
ISBN 978-985-590-120-5

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«Университет гражданской защиты
Министерства по чрезвычайным
ситуациям Республики Беларусь», 2021

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MAIN OCCUPATIONAL DISEASES OF MINERS

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Abstract. The paper identifies the main occupational diseases that are characteristic for workers of coal mines, which include: physical, chemical, biological and psycho- physiological. Modern measures to prevent them are given.

Keywords: professional risk, safety, coal mine, mat and forth with safety.

The miner's profession is one of the most dangerous, especially in developing countries.

Dust from crystalline silica, which is a major component of the earth's crust, causes an occupational disease called silicosis. It is an insidious process that produces pulmonary fibrosis, which causes the lungs to expand and reduce the transfer of oxygen to the lungs, increasing the risk of tuberculosis, infections and cancer.

In addition to silicon dioxide, a miner is exposed to a complex mixture of several agents that impair his health, leaving the miner 50 years old, if he has not yet died of cancer or an accident, is often disabled.

Diesel exhaust gases (carbon monoxide, polycyclic aromatic hydrocarbons, particulate matter): can cause cancer, chronic lung disease and asphyxia (which can be fatal or lead to neurological consequences or heart disease).

Explosive gases (nitric oxide): may cause chronic lung damage and irritant asthma.

Methane: may cause explosions (explosions).

Hydrogen sulfide: May cause respiratory irritation and suffocation.

Lack of oxygen (sometimes caused by carbon dioxide emissions) (the source of the gas is a geological formation in the form of a crack or round hole from which carbon dioxide comes out): may cause loss of consciousness.

Plastics (formaldehyde, isocyanate): can cause asthma, allergies and cancer.

Vibrating and rotating instruments: can cause damage to the vessels of the hands (white finger syndrome) and neurological damage to the fingers.

Radiation (emitted by radon in many underground mines): can cause lung cancer.

Noise: can cause stress and deafness.

In addition to all these dangers, it is possible to include the most common injuries, namely injuries of the musculoskeletal system: chronic back or neck pain, chronic tendinitis in the wrists, elbows and shoulders due to difficult tasks and multiple accidents.

Finally, we must not underestimate or forget the psychological consequences. Like soldiers, many miners suffer from post-traumatic stress. This will probably be the main consequence of the episode experienced by the miners.

When miners reach retirement age, they suffer chronic pain in the neck, back, upper extremities, sensitivity to cold due to their disease, not to mention the diseases of the lungs.

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УДК 159.9:614,8=111

PSYCHOLOGICAL TRAINING OF EMERGENCY RESCUERS

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Abstract. Psychological support of the effective activity of rescuers involves assessment of the existing and active formation of the required level of their psychophysiological readiness to work in extreme conditions.

Keywords: psychological training of rescuers, simulation, melancholic, phlegmatic, choleric, sanguine.

Psychological training plays an extremely important role in the professional activities of rescuers. The rescuer must have specific, inherent only in this profession, the following basic professional qualities: carry out monotonous movements for a long time, in the presence of great physical and emotional stress, in uncomfortable working positions; move quickly and perform work in various conditions, as well as in the presence of real and potential danger; independently choose the optimal pace of work, commensurate with the pace of work of other rescuers, machinery and equipment; quickly perceive and quickly process information in conditions of poor visibility, sound interference, sudden changes in illumination, dustiness, smoke and other distractions; evaluate and distinguish between the speed and direction of movement of objects; adequately respond to a sudden hazard; simultaneously observe several objects or their parts; perceive, differentiate and isolate useful sound information from the general noise; endure significant short-term physical and neuro-emotional overloads, quickly switch attention, be ready to perceive new loads, sensations, impressions; confidently unmistakably recognize objects by their shape and outlines; measure your strength with the work ahead; determine the distance between objects; endure unpleasant impressions without pronounced emotional stress; independently make changes to work and make decisions quickly when the situation changes; quickly and accurately perform actions and maintain the stability of motor reactions under the influence of extreme factors, in conditions of lack of time; suppress fatigue, drowsiness, work effectively at different times of the day; have conscientiousness, courage, a sense of duty, endurance, self-control, responsibility and collectivism; coordinate their activities with the work of other rescuers; gain experience, extract errors and be able to understand the degree of risk; be ready for mutual understanding, compassion.

The main goal of the simulation is to create mental tension in the interests of developing rescuers' skills and abilities to act effectively in emergency situations. Practice shows that it is advisable to use the following techniques for this:

- Creation of conditions of surprise, uncertainty, lack of information and time, high pace of action or monotony, discomfort, the need to combine several types of activity at the same time and other psychogenic factors that require responsibility, decisiveness and risk when making decisions;