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Section 16

Physical and mathematical principles of technological processes

Секція 16

Фізико-математичні основи технологічних процесів

16.1.

Physics and occupational safety

16.1.

Фізика та професійна безпека

Modern challenges of biosafety of employees in the hotel and restaurant industry

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Introduction. The hotel and restaurant industry is a sector of increased biological risk, as employees constantly interact with visitors, come into contact with food products, and use shared facilities. Global challenges, in particular the COVID-19 pandemic, have increased the requirements for biosafety, making worker protection an important element of occupational safety, which directly affects the stable operation of enterprises in the industry.

Materials and methods. The work used an analysis of scientific publications, recommendations of the Center for Public Health of the Ministry of Health of Ukraine, international WHO guidelines, and regulatory documents in the field of sanitary safety and food hygiene. The research methods are generalization of information, comparative analysis of risks and measures for the prevention of biological hazards in hotel and restaurant establishments.

Results and discussion. It was found that biological risks for workers are divided into external and internal. External risks include respiratory infections such as COVID-19, influenza, acute respiratory viral infections, tuberculosis, which can be transmitted by airborne droplets, as well as contact skin infections and fungal diseases [1]. Internal risks are associated with violations of sanitary working conditions in the institution: food infections (salmonella, E. coli, norovirus), mold in damp rooms, biological agents in ventilation and water supply systems (legionella) [2].

Effective personnel protection involves a set of preventive measures: vaccination, medical examinations, use of personal protective equipment, regular disinfection of surfaces, quality control of raw materials, air and water, implementation of the HACCP system and ongoing employee training.

Each preventive measure is implemented taking into account the possible danger, with an outline of the circle of people who may be infected. Thus, the COVID-19 pandemic has become an illustrative example of a high external risk - the use of protective face shields, mask mode, contactless service and enhanced sanitary requirements were introduced to protect workers [1]. These measures have proven the effectiveness of rapid adaptation to safety standards. No less important is the education and training of personnel in biosafety training and the development of algorithms for responding to possible outbreaks of infection

Conclusions. Biological risks are part of the professional activities of hotel and restaurant workers. Minimization of these risks is possible only under the conditions of a systematic approach that combines sanitary control, engineering solutions, preventive medicine and personnel training. Modern challenges require increased biosafety standards, which not only protects workers, but also builds consumer trust and ensures the stability of enterprises in crisis conditions.

References

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