

PROBLEMS OF ORGANIZING OCCUPATIONAL SAFETY AT INDUSTRIAL ENTERPRISES**Ashurova Laylo**

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Annotation

This article describes the existing problems in order to create safe and healthy working conditions in the field of construction and production and the results of scientific research to eliminate them. In addition, the article reflects the scientific proposals and practical recommendations made by the author on this issue.

Keywords

labor protection, certification, safety technology, risks, harmful factors, accidents, production, man-machine-environment, labor safety,

Research Relevance: Since the emergence of humanity, people have continuously developed and expanded an environment known as the **technosphere** in order to create favorable living conditions for themselves and their families within areas belonging to the biosphere. This indicates that every citizen is the main driving force in shaping and developing society, participating in production processes, and managing them. Under the influence of these forces, countries develop and the socio-economic living conditions of the population improve. At the same time, the frequency of hazardous and harmful factors in production enterprises, which are elements of the technosphere, is also increasing. From this perspective, within the “human–machine–environment” system, the number and types of emergencies, accidents, occupational injuries, and occupational diseases are also increasing.

According to the data of the Federation of Trade Unions of the Republic of Uzbekistan, in 2020 there were 607 occupational accidents in production processes, resulting in 693 injured employees, of whom 201 died. In 2024, 868 occupational accidents were recorded, in which 974 employees were injured and 261 died. A total of 299 accidents resulted in fatalities. These figures indicate that many problems still exist in this field, requiring joint efforts by specialists, researchers, and scientists to effectively address them.

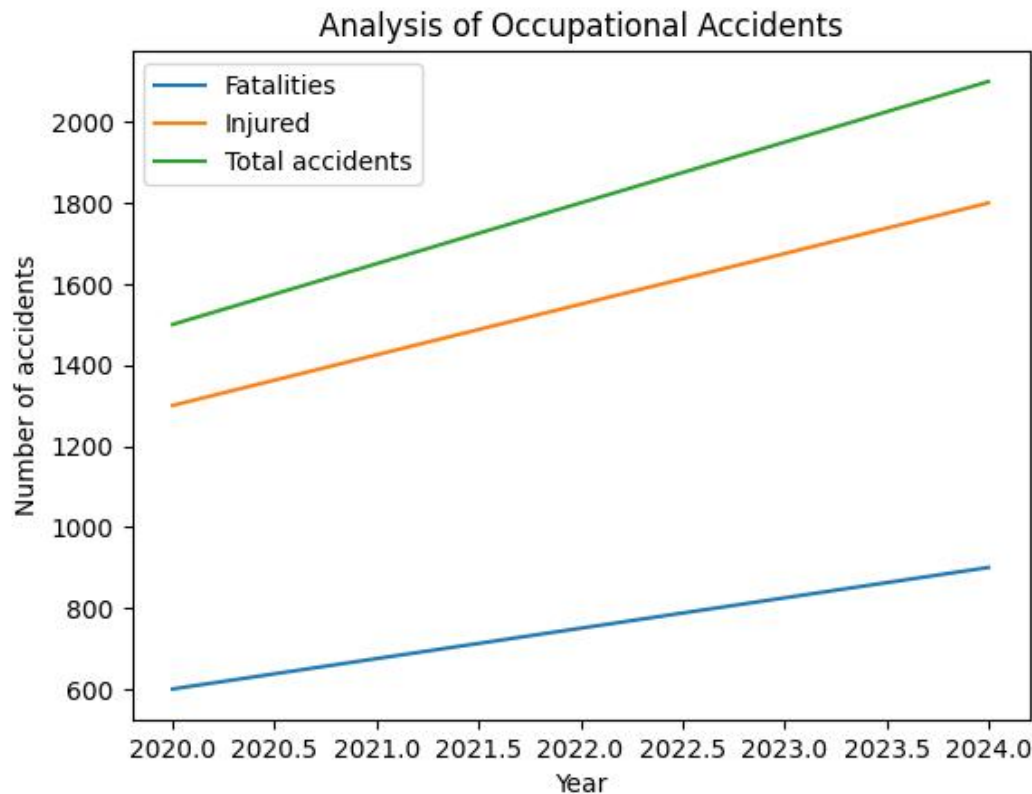


Figure 1. Analysis of Occupational Accidents

The relevance of the research is primarily focused on ensuring occupational safety at enterprises, protecting employees’ health, creating healthy and safe working conditions, and coordinating scientific research with practical implementation.

Research objectives and tasks: The main objective of the research is to study and implement solutions to ensure occupational safety at industrial enterprises, protect employees’ health, and create healthy and safe working conditions.

Research results: The long-term life experience of humanity confirms that any type of activity has a potential risk. This statement has a general and universal character. However, under production conditions, it is possible to manage and reduce the level of risk. Nevertheless, absolute safety can never be fully achieved.

Safety is defined as a state of activity in which the probability of risk occurrence is reduced to an acceptable level. Ensuring safety is one of the primary objectives in any human activity. Therefore, since the beginning of civilization, humanity has recognized the need to ensure occupational safety and to study hazardous factors arising during labor processes.

Research on ensuring human safety in work activities can be traced back to the works of ancient scholars such as Aristotle (384–322 BC) and Hippocrates (460–377 BC). Later, significant contributions were made by Russian scientists M. V. Lomonosov and D. L. Kirpichev, as well as great Central Asian scholars such as Al-Khwarizmi, Abu Rayhan Beruni, and Ibn Sina (Avicenna), whose scientific works addressed issues related to safety, working conditions, and human well-being.

Today, the concept of occupational safety and health is considered one of the most urgent and globally significant issues. International standards and regulations on occupational safety include the following requirements.

In our country, national labor legislation is being continuously improved in accordance with the standards of the International Labour Organization (ILO). Under the leadership of the President, extensive work is being carried out by the state and government to further develop the regulatory and legal framework for occupational safety and health, bringing it in line with modern requirements and ensuring its effective implementation. For example, the adoption of the new edition of the Law “On Labour Protection” in 2016 and the enforcement of the new Labour Code in 2023 have had significant importance for society and for the development of occupational safety and health.



Figure 2. International Standards on Occupational Safety and Health

The legal and regulatory documents, standards, provisions, rules, and guidelines adopted in the field of occupational safety and health serve to protect the life, health, and working capacity of employees at enterprises, prevent occupational accidents, injuries, and occupational diseases, create safe and comfortable working conditions, and promote the design, production, and implementation of safe machinery, mechanisms, and equipment.

It should also be noted that the activities carried out by the Government in the field of occupational safety are positively recognized by international organizations. A clear example of this is the international meeting organized in Tashkent in 2021, as well as the Asian Forum on Human Rights held in Samarkand in November 2023.

At the same time, the situation in occupational safety across all sectors of the economy, particularly in construction, agriculture, and the private sector, cannot yet be considered fully satisfactory. In many construction processes, workers' safety is not fully ensured. Even at heights of 20–30 meters, construction workers are often observed working under extremely hazardous conditions on unstable scaffolding. Although high-rise buildings are important, no construction project is worth risking human life.

In addition, many workers are employed informally. Research shows that, firstly, employers often fail to formalize employment contracts with hired workers. Secondly, due to the large size and heavy weight of construction materials such as cement, slate, wood, and other products, private entrepreneurs cannot manage loading, transporting, unloading, packaging, storing, and selling these materials with only one officially employed worker, as permitted by legislation. Therefore, they are often forced to hire additional workers informally. This situation is observed not only in construction but also in manufacturing, small contracting organizations, and agriculture.

As a result, accidents involving informally employed workers often remain unrecorded, unanalyzed, and undocumented, due to the lack of occupational safety measures. Consequently, injured workers may face difficulties in obtaining social protection, maintaining official employment records, and securing guaranteed pension benefits in the future. This situation leads to an increase in labor disputes and violations of occupational safety requirements.

According to existing technical regulations, loading and unloading operations are classified as heavy and hazardous work. The maximum weight that one worker is allowed to lift manually should not exceed 15 kg at one time, and the total weight lifted during a work shift should not exceed 870 kg. However, the weight of materials such as cement, potatoes, carrots (50 kg per bag), slate, and wooden products significantly exceeds these standards, making compliance with these norms difficult in practice.

Therefore, in accordance with the Regulation approved by the Resolution of the Cabinet of Ministers No. 263 dated September 15, 2014, "On the Procedure for Certification of Workplaces According to Working Conditions and Risk of Occupational Injury," workplace certification is carried out to assess whether working conditions, the severity and intensity of labor processes, and injury risks comply with regulatory legal and technical requirements in the field of occupational safety and health. The purpose is to identify harmful and hazardous production factors.

What benefits does workplace certification provide to employees?

The purpose of workplace certification is to establish benefits and compensation provided by law for employees engaged in heavy, harmful, or hazardous work; assess occupational risks; provide workers with personal and collective protective equipment; and determine occupational diseases.

Workplaces employing persons with disabilities, as well as all workplaces and professions at hazardous production facilities, are subject to mandatory certification. This is also beneficial for employers. If workplaces are not certified, employees working under unsafe conditions have the right to refuse to perform tasks that pose a threat to their life or health and may demand compensation. This may reduce the economic efficiency of enterprises and affect production performance. Therefore, working conditions at uncertified workplaces cannot be considered safe.

According to Article 14 of the Law “On Labour Protection,” in organizations where workplace certification has been carried out, the probability of legal disputes is reduced, the number of occupational diseases and injuries decreases, and compensation costs are optimized, which may later be included in the cost of produced goods.

Although the causes of occupational accidents are diverse, one of the main reasons is that, in pursuit of profit in a market economy, many employers fail to create safe working conditions and do not comply with safety regulations.

Conclusion:

In recent years, large-scale reforms have been implemented in the Republic of Uzbekistan to ensure human safety, life, health, and working capacity during labor processes. In particular, the following four main measures should be implemented in the field of occupational safety and health:

- transfer of occupational safety services to professional market participants;
- strengthening state and public control over occupational safety;
- improving working conditions at enterprises and workplaces as a priority of all implemented measures;
- prevention of occupational injuries in production.

Nevertheless, accidents still occur in many cases due to employer negligence, insufficient competence, lack of worker awareness, and other factors.

To eliminate these shortcomings, it is proposed to establish an Occupational Safety Commission, including representatives of trade unions, employee representative bodies, and legal advisors. The purpose of such a commission is to comprehensively coordinate occupational safety, industrial safety, and technical safety activities at enterprises. Since occupational safety issues are broad and complex, it is difficult for a single occupational safety engineer to manage all risks alone. Various deficiencies may occur daily at different workplaces, and these shortcomings primarily affect the life and health of employees working in those environments.

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