

ANALYSIS OF THE ORIGIN OF ACCIDENTS AND OCCUPATIONAL DISEASES IN AUTOMOTIVE ENTERPRISES

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Abstract

Currently, the issue of accidents and occupational diseases in the automotive industry in Uzbekistan is receiving increased attention, but although the problem is being solved, it is difficult to provide accurate statistical reports. However, it is possible to analyze the main trends and challenges in the last five years (2019–2024). The article analyzes the statistics of accidents and occupational diseases in the automotive industry in Uzbekistan for the last five years and recommends measures developed on this basis.

Keywords: Occupational safety, environment, accidents, occupational diseases, injuries, safety training, training courses, compensation.

Introduction

The following information was studied based on a number of sources and statistical analyses to provide information on accidents and occupational diseases in the automotive industry in Uzbekistan, their origin, causes, and measures taken to eliminate these problems.

1. Statistics of accidents and occupational diseases in the automotive industry in Uzbekistan .

Currently, the issue of accidents and occupational diseases in the automotive industry in Uzbekistan is receiving increased attention, but although the problem is being solved, it is difficult to provide accurate statistical reports . However, it is possible to analyze the main trends and challenges that have arisen over the past five years (2019–2024).

1.1 Accident statistics:

In 2019–2020, more than 50 accidents were recorded in the automotive industry. These processes were often caused by workers not following existing safety regulations for the process, superior technical equipment, or mechanical hazards.

In 2021–2022 — A decrease in the number of accidents was observed, as automotive enterprises paid more attention to safety work and new training courses were organized.

2023–2024 — Automation and robotization systems have been introduced to ensure safety, but systems to ensure the safety of working assistants are still under development.

1.2 Occupational diseases:

People working in the automotive industry are particularly susceptible to respiratory diseases, orthopedic diseases, premature birth, and work-related stress. Workers are also exposed to high levels of toxic substances, noise, or harmful effects from mechanical work.

Respiratory and orthopedic illnesses were on the rise in 2019–2021, as mechanical issues with doors, bodies, and chassis caused problems for workers.

In 2022–2023 — The number of occupational diseases decreased due to increased safety measures, but problems with noise and chemical exposure persisted for some overloaded workers.

2. Causes of accidents

The causes of accidents in the automotive industry in Uzbekistan are largely related to technical and human factors. The causes include the following factors:

2.1 Technical and technological reasons:

Mechanical hazards: In the automotive industry, workers are exposed to collisions or minor injuries related to machinery and mechanisms (e.g., press arms, cylinders, working with new mechanisms).

Introduction of new technologies and automation: Problems have arisen due to some technical errors in the current automated systems and robotization.

2.2 Human Factors and Safety Policy:

Failure to follow rules: Most accidents are caused by workers not following safety rules and not following the process correctly.

Insufficient safety training: Many workers in the automotive industry lack ongoing safety training, special courses, and curricula, which leads to problems in the workplace.

Working environment and conditions: In automotive industries, the technical conditions of workers, cleanliness and safety of the workplace are often overlooked.

3. Measures in the current situation

Currently, the following measures are being implemented in Uzbekistan to prevent accidents and occupational diseases at automotive enterprises:

3.1 Technical modernization and automation

Robotization and automation processes are becoming widespread in enterprises. This helps protect workers from harm.

New safety technologies and preventive mechanisms are being introduced, and accordingly, special automatic systems are being developed to ensure the safety of workers.

3.2 Safety training and exercises

The latest safety training and education courses have been organized for workers at automotive enterprises, which is yielding results.

Courses aimed at explaining safety rules and technical performance are reviewed annually.



3.3 Security policy and legislation

It is known that in Uzbekistan, special attention is being paid to the safety of workers, based on the newly introduced modules of the Labor Code and Legislation. In this regard, laws on the protection of workers' rights, compensation, and health care have been fully implemented. Security measures are always monitored by the state and assistance is provided to companies.

3.4 Reorganization and monitoring

Internal safety monitoring systems and special safety inspections have been established at automotive enterprises.

Annual visits are made to monitor workplaces and identify problems.

3.5 Prevention of occupational diseases

Effective prevention programs and testing systems against occupational diseases have been implemented.

Health services have been established for workers, and preventive payments and testing procedures are being implemented.

When we analyze foreign experiences in preventing accidents and occupational diseases, they take a number of preventive measures to ensure personal safety and worker health. These measures include:

- Safety training and education: Automotive companies organize regular training to strengthen workers' safety knowledge and skills. This involves educating workers on the risks and hazards of the process or technical safety:
- Technical modernization and innovation: Overseas, automotive companies are constantly improving safety equipment and technological processes. These processes are increasingly using robotics and automation, which significantly reduces the risk of injury to workers.
- Conditions and workplace design: Corporations take the work environment very seriously to create safe workplace conditions. Workplace optimization, hazard zones, and the construction of new devices play an important role in this.

4. Conclusion

A number of measures are being implemented in Uzbekistan to reduce the number of accidents and occupational diseases at automotive enterprises. However, in order to fully address the problems in this area, it is necessary to use foreign experience in introducing more precise and perfect safety systems.

Technological innovations, improved training and education on occupational safety, and improved legislation will reduce worker safety and occupational diseases.

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