



# Al-Farabi University



- **Theme Safe and healthy work environment**
- Department of Management
- Course " Human Resources management
- Professor Adambekova A.A.

# Occupational safety of personnel

**01** | **Basic  
concepts**

**02** | **Sources of  
Hazards in the  
Workplace**

**03** | **Measures for the  
formation of occupational safety**

## Theme Safe and healthy work environment

Occupational safety and health of employees is a system of ensuring the safety of life and health of employees in the course of work, including legal, socio-economic, organizational and technical, sanitary and hygienic, therapeutic and preventive, rehabilitation and other measures



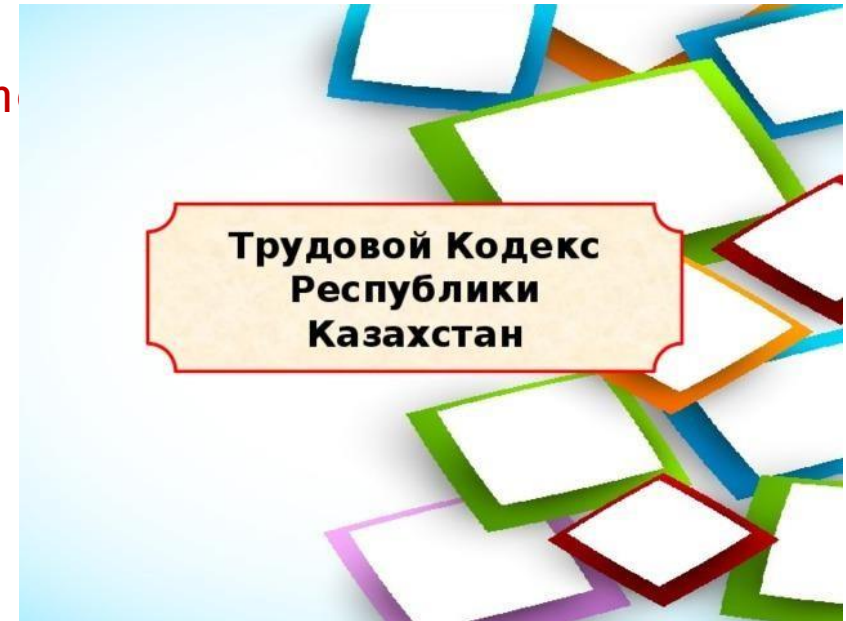
## Theme Safe and healthy work environment

The main documents regulating safe and healthy working conditions are:

Requirements of the Constitution of the Republic of Kazakhstan on safe working conditions

The Law of the Republic of Kazakhstan on Labor in the Republic of Kazakhstan

The Law of the Republic of Kazakhstan dated 28.02.2004 N 528-2 "On SAFETY AND LABOR PROTECTION"



## Basic concepts

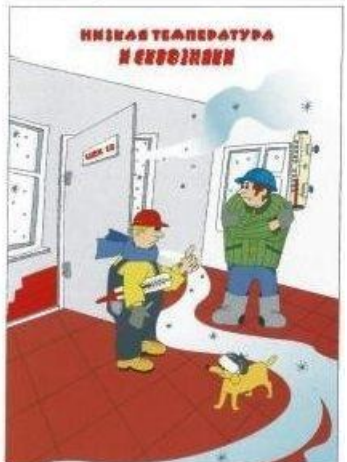
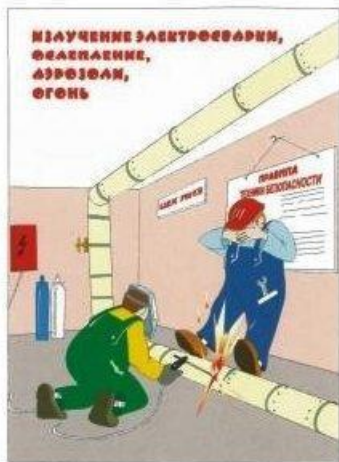
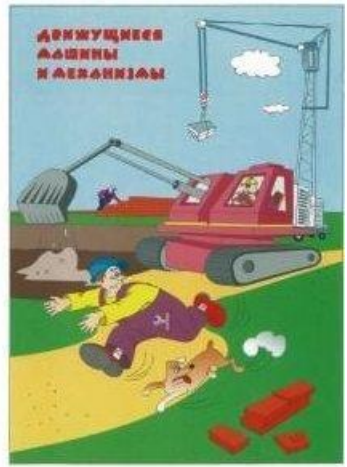
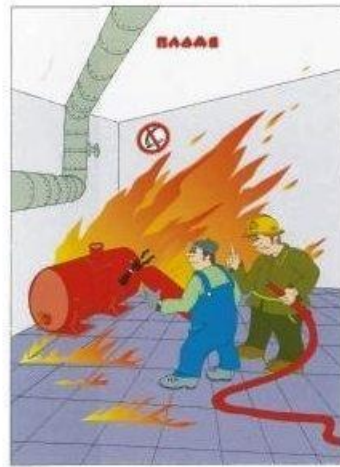
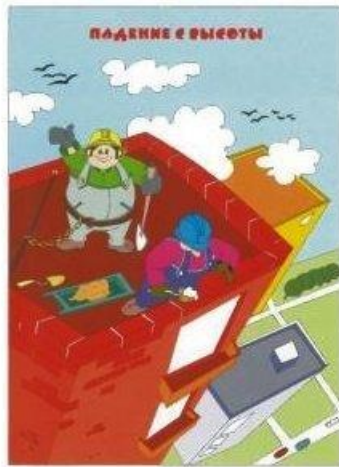
The axiom about the potential danger of any activity is the basis of the scientific problem of ensuring human security

impossibility to  
develop (find) an  
absolutely safe  
type of human  
activity

no type of activity  
can provide  
absolute security  
for a person

# Basic concepts

Danger is processes, phenomena, objects that have a negative impact on human life and health.



## Basic concepts

Physical factors harmful to health are:

- 1 high humidity and air velocity
- 2 increased levels of noise, vibrations, ultrasound and various radiations
- 3 dust and gas content in the air of the working area
- 4 insufficient illumination of workplaces, aisles and driveways
- 5 eye-cutting brightness of light and pulsation of the luminous flux

## Basic concepts

Biological hazardous and harmful production factors: microorganisms and macroorganisms

Psychophysiological hazardous and harmful production factors: physical overload (static and dynamic) and neuropsychic overload

Hazards posed by human activity have two qualities that are important for practice: they are potential (they may be, but not harmful) and they have a limited impact zone (hazard zone)



# Sources of Hazard Formation

man himself as a complex system of "organism-personality"

processes of interaction between humans and elements of the environment



**Физические**



**Химические**



**Биологические**

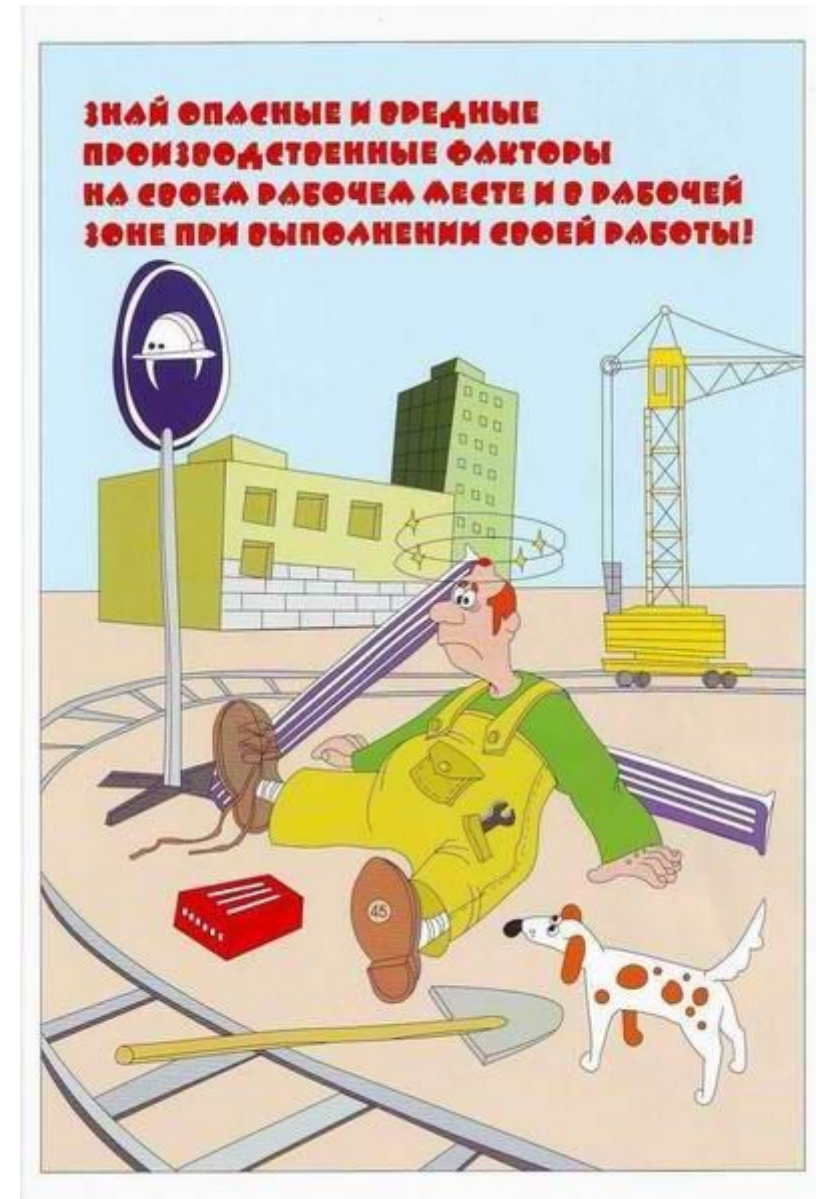


**Психофизические**

## Sources of hazard formation

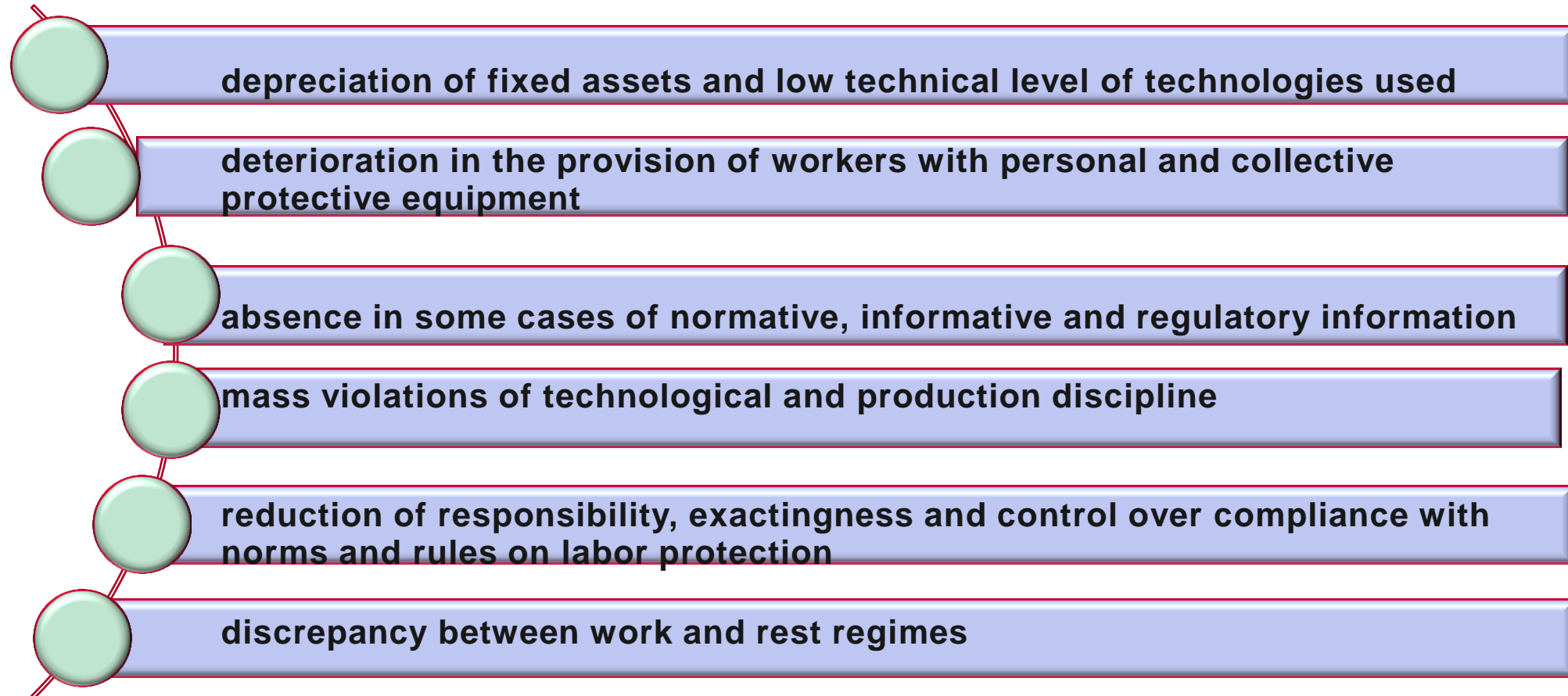
In case of non-compliance with sanitary norms, rules and instructions on labor protection, an accident may occur, as a result of which an employee may be injured

**An accident is an incident that caused damage to health as a result of a short-term and, as a rule, one-time exposure to an external factor.**



## Sources of Hazard Formation

The main causes of industrial injuries and occupational diseases include:

- 
- depreciation of fixed assets and low technical level of technologies used**
  - deterioration in the provision of workers with personal and collective protective equipment**
  - absence in some cases of normative, informative and regulatory information**
  - mass violations of technological and production discipline**
  - reduction of responsibility, exactingness and control over compliance with norms and rules on labor protection**
  - discrepancy between work and rest regimes**

## Sources of Hazard Formation

The main criteria for assessing working conditions in an organization are the results of attestation of workplaces, regardless of ownership

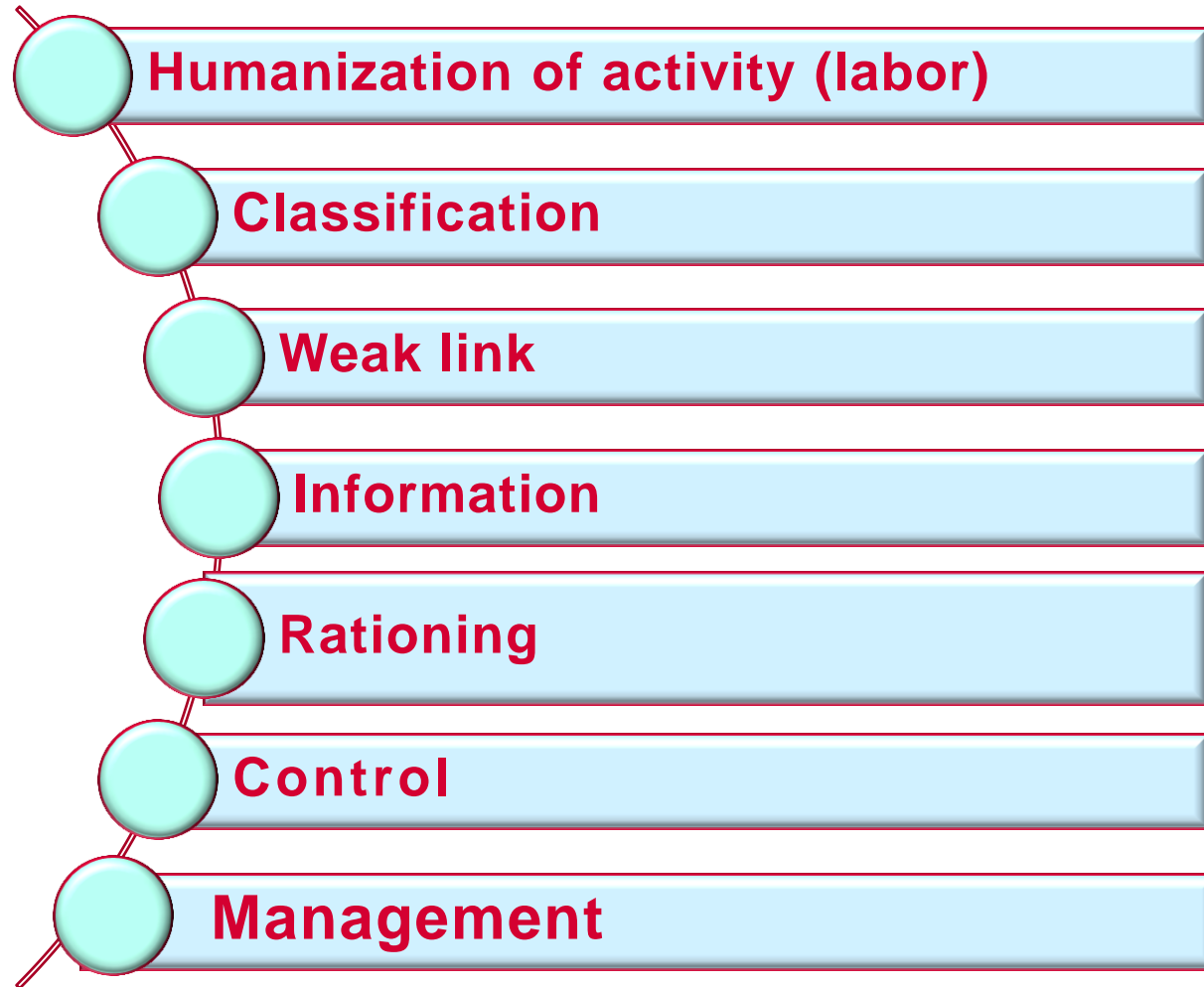
Measures according to the nature of the impact on working conditions can be divided into three types:

- aimed at creating favorable working conditions;
- aimed at maintaining them at the achieved level;
- aimed at improving the existing conditions and labor protection



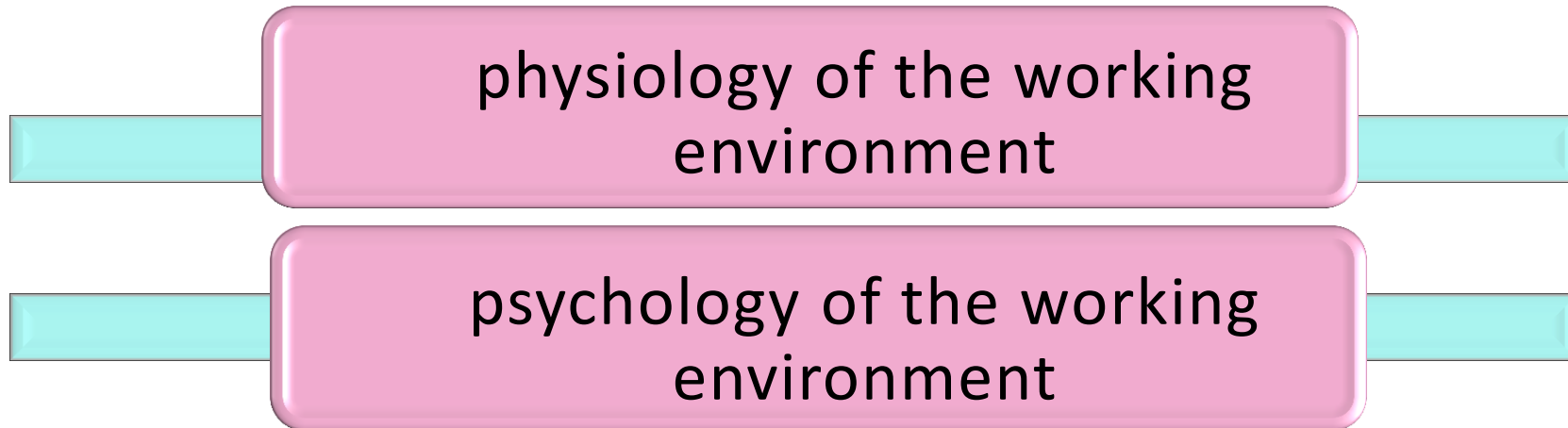
# Methods and means of ensuring safe activities

The principles and methods of ensuring security are private, special, in contrast to the general methods inherent in dialectics and logic.



## Methods and means of ensuring safe activities

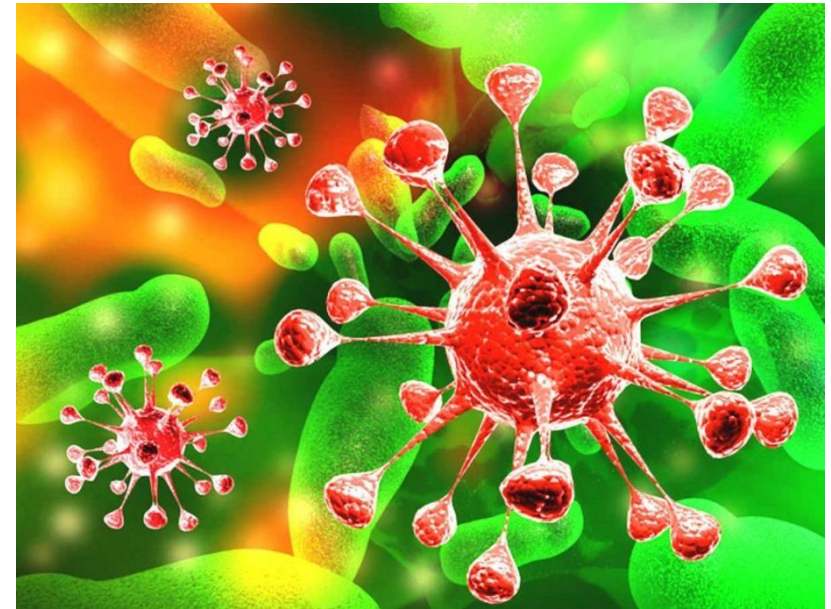
Today, most states recognize the need to intensify the development of modern regulatory solutions in the following areas:



## Methods and means of ensuring safe activities

An independent and relatively new type of risks are carcinogenic and mutagenic substances, as well as reproductive toxins (including substances that destroy the endocrine system of the body).

A separate row in the first group of physiological problems are biological risks associated with the spread of new incurable or intractable infectious diseases (AIDS, hepatitis, specific fevers, etc.), as well as with the revival of once defeated infections (anthrax, plague, tuberculosis, etc.). ), which in our time have acquired new distribution channels and new forms that are resistant to traditional medicines.



# Methods and means of ensuring safe activities

acceleration of production processes, the need to spend a long time in the same position and (or) perform monotonous operations causes workers a very wide range of disorders in the musculoskeletal system





# Methods and means of ensuring safe activities

## Psychology of the working environment

The idea of "psychology of the working environment" is intended primarily to eliminate production stress, since, according to experts, stress is often the cause of production errors and injuries.



One factor is the lack of work–life balance among workers. – high business mobility, tight deadlines, career ambitions, diversification of types of employment contracts and others – cause objective difficulties in ensuring such a balance. The other side of the "medal" are low–paid jobs and unskilled labor in general. Both there and there, workers tend to overwork, and the employer – to make excessive demands on employees.

## Methods and means of ensuring safe activities

Occupational safety programs based on the interaction of state, regional, sectoral authorized bodies for managing labor protection and health, as well as the organizations themselves, include the following activities:

- 
- compulsory health insurance
  - compulsory social insurance of professions
  - introduction of state objective, open and equally accessible statistical reporting and information on the levels of occupational risk in various industries
  - creation of state and market labor protection funds to finance scientific research in the field of labor protection, training, publication of information materials

## Methods and means of ensuring safe activities

Safe and healthy working conditions in organizations should be ensured by the complex interaction of the head of the organization, the labor protection service, state labor protection inspectors, authorized trade unions and the employees of the organization themselves.



### Надежность персонала (человеческого фактора) – основа культуры безопасности



## Methods and means of ensuring safe activities

### **The social result of improving working conditions will be:**

reduction in the number of persons whose working conditions deviate from sanitary and industrial standards

improvement of working conditions and regime of workers, reduction of their employment at work with harmful conditions and at night

reduction in the number of work-related injuries and cases of occupational diseases

creating favorable conditions for psychophysiological activity, increasing job satisfaction

## Methods and means of ensuring safe activities

Evaluation of national economic efficiency from the improvement of conditions and labor protection is manifested by:

in increasing the income of organizations, as well as tax revenues to the budgets of all levels

as a result of a reduction in temporary disability benefits, lump-sum and monthly payments to victims of work or their relatives in connection with the loss of a breadwinner

reduction of expenses for medical, professional, social rehabilitation, special medical care, etc.

Thank you for your attention