

## ASSESSMENT OF OCCUPATIONAL STRESS AMONG TRAFFIC POLICE OFFICERS, ITS CONSEQUENCES AND PSYCHOHYGIENIC CORRECTION METHODS

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### Abstract

The study examines the key factors contributing to occupational stress among traffic police officers, its physiological and psychological consequences, and the psychohygienic measures aimed at reducing stress levels. The findings indicate that hazardous working conditions, shift-based work schedules, and frequent conflict situations are the main sources of stress. A comprehensive preventive and corrective approach have been shown to play a significant role in enhancing officers' psychological resilience and overall service effectiveness.

**Keywords:** Traffic Police Service, occupational stress, stress factors, psychological workload, emotional burnout, psychohygiene, prevention, stress management, emergency situations, work schedule, conflict situations, service efficiency.

### Introduction

Officers of the Road Patrol Service (RPS) of the internal affairs bodies perform their duties under conditions of high psychological-emotional and physical strain. Their work is directly associated with ensuring public safety and maintaining road traffic order, which makes it one of the key factors contributing to the development of chronic occupational stress (professional burnout).

This article provides a scientific and practical analysis of the sources of stress in the professional activity of RPS officers, its psychophysiological consequences, and effective psychoprophylactic measures.

The present study comprehensively examines the factors shaping occupational stress among Road Patrol Service (RPS) officers, the physiological, psychological, and social manifestations of this stress, and the system of psychohygienic measures aimed at reducing stress levels. The research findings demonstrate that the high-risk and high-responsibility nature of the service, irregular and shift-based work

schedules, frequent conflict situations with the public, as well as organizational and administrative factors, constitute the main determinants of stress among RPS officers.

The negative impact of occupational stress on officers' work performance, psychophysiological state, and behavioral responses has been scientifically analyzed. In addition, evidence-based psychohygienic measures aimed at strengthening individual stress-management strategies, implementing psychological correction and counseling approaches, introducing rehabilitation programs, and fostering a healthy psychological climate within the team have been proposed.

The study's findings hold significant theoretical and practical value for improving service efficiency within the Road Patrol Service (RPS), safeguarding officers' physical and mental health, preventing professional emotional burnout, and establishing a stable and sustainable service culture.

Accurate and objective assessment of occupational stress requires simultaneous analysis of its multiple dimensions. Stress manifests not only through psychological experiences but also through physiological responses of the body and the characteristics of the working environment. Therefore, the evaluation process must integrate psychophysiological, psychological, and organizational indicators within a comprehensive assessment framework.

## 1. Psychophysiological Indicators

Psychophysiological analysis is aimed at assessing the physiological responses of an officer's body to stress. The main indicators include:

### **Cardiovascular parameters**

Blood pressure, heart rate (pulse), and stress-induced tachycardia.

- Levels of stress hormones**

Increased concentrations of cortisol, adrenaline, and noradrenaline in the blood.

- Neuromuscular tension**

Muscle tension measured through electromyography (EMG).

- Assessment of sleep quality**

Insomnia, persistent sleep disturbances, and poor restorative sleep are key signs of stress.

- **Attention and reaction time tests**

As stress increases, attention concentration decreases and reaction time slows down.

These indicators reflect the actual physiological impact of stress on the body.

## **2. Psychological Indicators**

Psychological analysis focuses on assessing an officer's internal experiences, behavioral tendencies, and emotional state.

- **General stress level**

Measured using specialized psychological scales (e.g., PSS — Perceived Stress Scale).

- **Symptoms of anxiety and depression**

Identified using Beck's scales or clinical questionnaires.

- **Emotional burnout**

Assessed through the Maslach Burnout Inventory (MBI), which evaluates emotional exhaustion, depersonalization, and reduced motivation.

- **Predisposition to conflict and emotional stability**

Includes analysis of personality type, stress tolerance, and temperament characteristics.

- **Adaptation ability**

An individual's capacity to cope with and adjust to occupational difficulties.

These indicators reveal the internal emotional and cognitive effects of stress.

## **3. Organizational Indicators**

Organizational analysis focuses on identifying stressors within the work environment.

- **Work schedule**

Long shifts, night shifts, or 24-hour duty cycles.

- **Workload level**

Volume of paperwork, number of daily calls, and frequency of emergency situations.

- **Conflict situations**

Difficulties in communication with the public and working with aggressive individuals.

- Incentive and Management System**

Fair evaluation, supervisory support, and working conditions.

- Psychological Climate within the Team**

Interpersonal relations among employees, mutual assistance, or internal conflicts that may provoke stress.

These indicators make it possible to identify the sources of stress within the working environment.

## 1. Classification of Occupational Stressors

Stressors affecting traffic police officers have a complex nature and can be divided into three main groups.

### 1.1. Physical and Environmental Stressors

These factors arise from the interaction between the officer and the external environment:

- Tropospheric Pollution:**

In large cities and on congested roads, high concentrations of toxic exhaust gases (CO, NO<sub>x</sub>, SO<sub>2</sub>) from motor vehicles lead to chronic intoxication of the respiratory and nervous systems. This creates an additional chemical stress load alongside physical strain.

- Adverse Weather Conditions:**

Due to the nature of service being performed outdoors for extended periods, traffic police officers are exposed to extreme climatic conditions. High ambient temperatures in summer reduce the body's thermoregulation capacity and increase the risk of **hyperthermia**. In winter, low temperatures and wind can lead to **hypothermia**, i.e., a drop in core body temperature. Such extreme temperature fluctuations intensify physiological stress responses and negatively affect the officer's working capacity, attention, and overall health.

- Ergonomic Discomfort:**

Prolonged standing or remaining seated in the same position inside a patrol vehicle leads to **static musculoskeletal strain** among traffic police officers. Such orthostatic and static loads accelerate degenerative changes in the vertebral column,

potentially resulting in **osteochondrosis**, lower back pain syndrome, and persistent muscle tension. Additionally, reduced blood circulation and pooling of blood in the lower extremities may cause **varicose vein enlargement**, edema, and venous insufficiency characterized by pain and swelling.

This type of static strain is considered one of the significant occupational risk factors that can decrease an officer's work capacity, physical endurance, and overall health.

## 1.2. Psychological and Emotional Stressors

These factors directly influence the mental and emotional state of the officer:

- **Threat to Life:**

In rapid-response situations (e.g., pursuits, armed resistance), officers are exposed to a constant perception of danger to their life and health.

- **Psychological and Emotional Stressors**

- **Emotional Dissonance:**

A mismatch between the emotional responses required during service, such as demonstrating strictness toward violators while simultaneously showing empathy toward victims.

- **Social Criticism:**

High levels of public scrutiny and negative portrayal in mass media may lead to feelings of self-doubt and social isolation among officers.

- **1.3. Organizational and Work-Schedule Stressors**

- **Disruption of Circadian Rhythms:**

Shift-based (especially night) work schedules disturb the body's biological rhythms. This results in reduced sleep quality, hormonal imbalance, and decreased attention.

- **Workload Imbalance:**

A sudden increase in rapid-response tasks, along with additional administrative paperwork, raises **time pressure** and intensifies stress.

- **2. Psychophysiological Consequences of Occupational Stress**

- Chronic stress leads to a range of pathological changes in traffic police officers:

- **Somatic Consequences:**

Prolonged elevation of cortisol and adrenaline levels contributes to cardiovascular diseases (hypertension, ischemic heart disease), gastrointestinal disorders, and weakened immune function.

- **Psychological Disorders:**

Decreased concentration, memory impairment, increased anxiety, and the development of depression. The most severe outcome is **post-traumatic stress disorder (PTSD)**, particularly common after dealing with severe traffic accidents.

- **Burnout Syndrome:**

A three-component condition characterized by emotional exhaustion, depersonalization (a negative attitude toward others), and diminished professional accomplishment.

- **3. Psychohygienic Prevention and Intervention Measures**

- A comprehensive approach is required to prevent stress and mitigate its consequences.

- **3.1. Organizational and Ergonomic Measures**

- **Service Rotation:**

Limiting the duration of duty at the most stressful posts and patrol routes and establishing a regular rotation system.

- **Ergonomic Support:**

Ensuring heating/cooling systems, fresh air access, and proper sanitary conditions at duty posts. Improving the ergonomic design of patrol vehicle workplaces.

- **3.2. Psychological Support**

**Debriefing:** Debriefing is an early psychological intervention conducted after severe traffic accidents or life-threatening incidents. It aims to alleviate acute emotional tension. Specially trained professionals facilitate immediate emotional “release” through structured discussions, group debriefing sessions, and psychological analysis. This process helps reduce shock, fear, and distress, and prevents the development of long-term psychological disorders.

The primary objective of debriefing is to reduce the intense effects of shock, fear, affective reactions, and stress, restore psychological stability, and prevent the development of post-traumatic stress disorders.

**Training Programs** — These practical educational interventions aim to enhance the psychological resilience of traffic police officers and strengthen their adaptability to occupational stress. Through such programs, officers learn effective stress-management techniques, including autogenic training, elements of meditation, and controlled breathing exercises. Additionally, they acquire skills in constructive conflict resolution, mindful communication strategies, and effective interpersonal communication methods.

An essential component of these programs is the development of **emotional intelligence**, which involves improving an officer's ability to recognize, regulate, and appropriately manage their own emotions as well as the emotions of others. As a result, officers become more stress-resistant, more effective in communication, and more psychologically stable during service activities.

### **Confidential Counseling:**

Establishing free, confidential psychological counseling services provided by qualified psychologists within the Ministry of Internal Affairs.

#### **• 3.3. Development of Personal Hygiene**

Improving personal hygiene culture among traffic police officers is a significant factor in reducing occupational stress and strengthening overall health. This requires the implementation of measures promoting a healthy lifestyle. Officers should be informed, on a scientific basis, about the importance of regular physical exercise for maintaining physiological stability, the impact of proper and balanced nutrition on work capacity, and the crucial role of sleep hygiene in psychological and physical recovery.

• Such a comprehensive approach to personal hygiene contributes to increasing officers' stress tolerance, enhancing emotional stability, and maintaining high levels of service efficiency.

**Conclusion:**

Effective assessment of occupational stress cannot be limited to analyzing indicators from a single dimension; the most accurate and reliable results are achieved through an integrative, multidimensional approach that combines psychophysiological, psychological, and organizational data. This multifactorial assessment model enables the comprehensive and objective identification of the sources of stress, its intensity level, and its impact on the psychophysiological well-being of officers.

Stress experienced by traffic police officers is a critical issue from the perspective of public safety and organizational efficiency. Therefore, its investigation and mitigation require institutional attention. Optimizing working conditions, providing continuous psychological support, and strengthening individual stress-management competencies not only ensure the physical and mental stability of officers but also contribute to maintaining high overall performance within the Road Patrol Service and improving communication culture with the public.

**References:**

1. Belousov AA. Ocenka veroyatnosti razvitiya sensonevral'noj tugourosti pod vliyaniem portativnyx audiostrojstv u licz molodogo vozrasta. Rossijskaya otorinolaringologiya. 2015; 76(3): 15–17. Russian.
2. Henry P., Fooths A. Comparison of user volume control settings for portable music players with three earphone configurations in quiet and noisy environments // J. Am. Acad. Audiol. – 2012. – Mar; N 23 (3). – P. 182-191.
3. Ikramova, N. A., & Axmedova, R. D. (2025, April). THE IMPACT OF ATMOSPHERIC AIR POLLUTION ON HUMAN HEALTH. In The Conference Hub (pp. 7-10).
4. Ikramova, N. A., & Axmedova, R. D. (2025, March). THE IMPACT OF ATMOSPHERIC ENVIRONMENTAL POLLUTION ON HUMAN HEALTH: THE ROLE OF MOTOR VEHICLES AND INDUSTRIAL EMISSIONS. International Conference on Advance Research in Humanities, Applied Sciences and Education.
5. Ikramova, N. A., Jalolov, N. N., Mirsagatova, M. R., Kasimova, K. T., Sadirova, M. K., & Sultonov, E. Y. (2025, April). AMBIENT TEMPERATURE AND THE RISK OF THERMOREGULATORY DISORDERS AMONG

TRAFFIC POLICE OFFICERS: AN EPIDEMIOLOGICAL ANALYSIS. International Conference on Advance Research in Humanities, Applied Sciences and Education.

6. Ikramova, N. A., Mirsagatova, M. R., Jalolov, N. N., Kasimova, K. T., Sultonov, E. Y., & Sadirova, M. K. (2025, April). THE EFFECT OF THERMAL LOAD ON THE BODY OF OUTDOOR WORKERS: ANALYSIS BASED ON MEDICAL AND HYGIENIC INDICATORS. International Conference on Advance Research in Humanities, Applied Sciences and Education.
7. Ikramova, N. A., Sherqo'zieva, G. F., & Salomova, F. I. (2025). OZIQ-OVQAT MAHSULOTLARININING XAVFSIZLIGI MUAMMOLARI VA YECHIMLARI. Медицинский журнал молодых ученых, (13 (03)), 279-283.
8. Ikramova, N. A., Suyunov, M. Z., & Khoddarov, A. A. (2025, April). HYGIENIC ASSESSMENT OF PROFESSIONAL RISK FACTORS FOR ROAD PATROL EMPLOYEES IN HOT CLIMATE. In The Conference Hub (pp. 59-62).
9. Jalolov, N. N., & Ikramova, N. A. (2025, April). THE RELATIONSHIP BETWEEN AIR POLLUTION AND ARTERIAL HYPERTENSION. In The Conference Hub (pp. 169-173).
10. Jalolov, N. N., Umedova, M. E., & Ikramova, N. A. (2025, April). Occupational risk factors for workers operating in hot climates: the case of traffic police officers. International Conference on Advance Research in Humanities, Applied Sciences and Education.
11. Kosimova, K. T., Jalolov, N. N., & Ikramova, N. A. (2025, April). THE RELATIONSHIP BETWEEN AIR POLLUTION AND ARTERIAL HYPERTENSION. International Conference on Advance Research in Humanities, Applied Sciences and Education.
12. Kosimova, X. T., Ikramova, N. A., & Umedova, M. E. (2025). HAVONING IFLOSLANISHI VA ARTERIAL GIPERTENZIYA O 'RTASIDAGI ALOQADORLIK.
13. Niyazova, O. A. (2018). Study of the influence of physical education on the functional state of the organism of pupils of comprehensive schools. Medical Scientific Bulletin of Central Chernozemye (Naučno-medicinskij vestnik Central'nogo Černozem'â), (73), 54-58.

14. Niyazova, O. A., Yuldasheva, F. U., & Norqulov, S. J. (2025, March). SLEEP HYGIENE OF STUDENTS. In Innovate Conferences (pp. 13-16).
15. Qosimova, X. T., Ikramova, N. A., Juraboyeva, D. N., & Mukhtorova, D. A. (2025, March). THE ADVERSE EFFECTS OF SMARTPHONES ON COGNITIVE ACTIVITY IN THE EDUCATIONAL PROCESS AND WAYS TO MITIGATE THEM. In The Conference Hub (pp. 76-79).
16. Sharipova, S. A., & Ikramova, N. A. (2024). CONSEQUENCES OF NOT BREASTFEEDING FOR THE MOTHER AND INFANT. Web of Medicine: Journal of Medicine, Practice and Nursing, 2(12), 273-276.
17. Sharipova, S. A., Ikramova, N. A., Bahriiddinova, M. N., Toshpulatov, B. M., & Egamberdiyeva, Z. Z. (2025, March). SPECIFIC ASPECTS OF PREVENTION OF INFECTIOUS DISEASES. International Conference on Advance Research in Humanities, Applied Sciences and Education.
18. Sherko'zieva, G. F., Ikramova, N. A., Bakhriiddinova, M. N., Toshpulatov, B. M., Boysarieva, M. R., & Abdurashidova, D. J. & Rasulov, RS (2025). ATMOSPHERIC AIR AND HEALTH.
19. Sherkuzieva, G. F., Salomova, F. I., & Ikramova, N. A. (2025). IBN SINO'S FERTILIZERS ON MEDICINES IN THE " MEDICINE EPISTLE". Web of Medicine: Journal of Medicine, Practice and Nursing, 3(5), 257-260.
20. Sherqo'ziyeva, G. F., Salomova, F. I., Sharipova, S. A., Yuldasheva, F. U., & Ikramova, N. A. (2025). Avtomobilashuv va uning ekologo-gigiyenik muammolari.
21. Икрамова, Н.А., Мирсагатова, М.Р., Джалолов, Н.Н., Касимова, К.Т., Султонов, Э.Ю., и Садирова, М.К. (2025, апрель). ВЛИЯНИЕ ТЕПЛОВОЙ НАГРУЗКИ НА ОРГАНИЗМ РАБОТНИКОВ, РАБОТАЮЩИХ НА ОТКРЫТОМ ВОЗДУХЕ: АНАЛИЗ ПО МЕДИКО-ГИГИЕНИЧЕСКИМ ПОКАЗАТЕЛЯМ. Международная конференция по перспективным исследованиям в области гуманитарных, прикладных наук и образования.
22. Ниязова, О. А., & Валиулин, Р. И. (2022). Изучение и гигиеническая оценка фактического питания студентов (Doctoral dissertation, Doctoral dissertation, Молодежный инновационный вестник. Научно-практический журнал).
23. Ниязова, О. А., Хусниддина, М. С., Махкамова, Д. М., & Нигматуллаева, Д. Ж. (2025, March). МИКРОКЛИМАТ КЛАССНЫХ ПОМЕЩЕНИЙ



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International Conference on Advance Research in Humanities, Applied Sciences and Education.

24. Ниязова, О., & Саломова, Ф. (2022). Studying changes in the health state of school children arising from incorrect fitting.
25. Хайитов, Ж. Б., Бурибоев, Э. М., & Ниязова, О. А. (2023). Исследование и оценка фактического питания детей и подростков спортсменов. Academic research in educational sciences, 4(TMA Conference), 449-454.