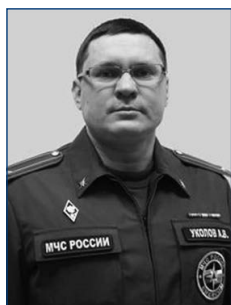




# Comprehensive programme to promote a healthy lifestyle among employees of the fire and rescue service of the Republic of Sakha (Yakutia) in the context of family and professional activities

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## Abstract

**Objective of the study** is to justify and develop a comprehensive programme to support a healthy lifestyle for employees of the fire and rescue service of the Republic of Sakha (Yakutia) in the context of family and professional life, and to test it in practice.

**Methods and structure of the study.** The study was conducted among employees of the fire and rescue service of the Republic of Sakha (Yakutia) in 2024. The sample size was 57 employees of the fire and rescue service and their family members. The following research methods were selected to ensure the correct organisation of the experimental work: analysis of scientific and methodological literature on the topic, interviews, questionnaires, surveys, pedagogical observations, expert assessment, systematisation, structuring, methods of mathematical statistics, experiments, etc. The preliminary theoretical and statistical material formed contributed to the development of a comprehensive programme to support a healthy lifestyle for employees of the fire and rescue service and their families and to test the innovation in practice.

**Results and conclusions.** Upon completion of the pilot project, a comprehensive programme was developed to promote healthy lifestyles among employees of the fire and rescue services of the Republic of Sakha (Yakutia) in their family and professional lives. The comprehensive programme is adapted to the local climatic and geographical conditions of residence and the social and everyday life of employees in the industry and their families.

The comprehensive programme includes three basic sections: physical education and health activities in the family; mass sporting events among employees' families; professional and practical classes and competitions among employees of the industry.

The results of the experiment showed the high effectiveness of the experimental comprehensive programme, which was reflected in an average increase of 28% ( $P < 0.05$ ) in the healthy lifestyle indicators of employees of the fire and rescue industry and their families. All this allows us to recommend the developed comprehensive programme for promoting a healthy lifestyle for widespread use among the population of the Republic of Sakha.

**Keywords:** comprehensive programme, support, healthy lifestyle, employees and their families in the fire and rescue sector, Republic of Sakha (Yakutia), professional activities.

**Introduction.** The relevance of the study is due to the fact that the issue of preserving the health of Russian citizens has now become one of the priorities of state social policy, since the health of the population is an unconditional social value, the basis of national wealth and national security, and reflects the vitality and future prospects for the development and preservation of the nation. Preserving the health of the working-age population and forming a culture of health is of strategic importance, since a decline in the physical potential of

the nation threatens to undermine the socio-economic and progressive development of the country and destroy the integrity and stability of the state. In this context, it is particularly important to train management personnel and competent specialists for various sectors of the economy, production, etc., including specialists in the fire and rescue sector, who must be in constant physical readiness to effectively perform their professional duties to protect the state from various destructive natural and man-made disasters. The



highly efficient and coordinated activities of fire and rescue personnel are aimed at preventing and protecting the population and material resources of the state from various extreme situations. The development of a modern comprehensive software package to promote and maintain a healthy lifestyle for firefighting specialists in their family and professional lives will contribute to a significant improvement in their professional training, which was the goal of this work.

**Objective of the study** is to justify and develop a comprehensive programme to support a healthy lifestyle for employees of the fire and rescue service of the Republic of Sakha (Yakutia) in the context of family and professional life, and to test it in practice.

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*Table 1. Socio-psychological climate and content of a healthy lifestyle in the families of employees of the fire and rescue service in the Republic of Sakha (based on the example of 6 PSCH 5 PSO FPS GPS GU MChS of Russia in the Republic of Sakha)*

| No. | Questionnaire questions   | Survey results, in %            |
|-----|---|---------------------------------|
| 1.  | Age, years  | X = 33 years old                |
| 2.  | Work experience in the industry   | X = 6,3 years                   |
| 3.  | Unmarried   | 29%                             |
| 4.  | Married   | 46%                             |
| 5.  | Divorced  | 25%                             |
| 6.  | Smokers   | 50%                             |
| 7.  | Follow a diet   | 90%                             |
| 8.  | Number of children in the family:<br>1 – child<br>2 – children<br>3 – children                  | 50%;<br>33%<br>17%              |
| 9.  | Sleep quality:<br>Do not get enough sleep<br>Light sleep<br>Insomnia<br>Problems falling asleep | 55,6%<br>41,8%<br>12,1%<br>7,7% |
| 10. | Use psychological training  | 31%                             |
| 11. | Engage in regular physical exercise   | 39%                             |
| 12. | Optimal work and rest regime:<br>«YES»<br>«NO»  | 46%<br>54%                      |
| 13. | Positive attitude towards life:<br>«YES»<br>«NO»  | 53%<br>47%                      |
| 14. | Aware of the value of family relationships:<br>«YES»<br>«NO»                                    | 64%<br>36%                      |
| 15. | Receives positive emotions in the family:<br>«YES»<br>«NO»                                      | 57%<br>43%                      |
| 16. | Family encourages physical activity:<br>«YES»<br>«NO»   | 46%<br>54%                      |
| 17. | Family walks in the fresh air:<br>«YES»<br>«NO»   | 36%<br>64%                      |
| 18. | Follow a routine (daily schedule):<br>«YES»<br>«NO»   | 46%<br>54%                      |
| 19. | Follow a healthy lifestyle in the family:<br>«YES»<br>«NO»                                      | 61%<br>39%                      |



cue service and their family members. The following research methods were selected to ensure the correct organisation of the experimental work: analysis of scientific and methodological literature on the topic, interviews, questionnaires, surveys, pedagogical observations, expert assessment, modelling, systematisation, structuring, methods of mathematical statistics, experiments, etc. The preliminary theoretical and statistical material formed contributed to the development of programme material to promote a healthy lifestyle among fire and rescue service employees and their families, and to test the innovation in practice.

Results of the study and discussion. At the preliminary stage of the study, an analysis was conducted of the family life of employees of the fire and rescue service of the Republic of Sakha (Yakutia) and their family members (Table 1):

A preliminary analysis of the healthy lifestyle habits of fire and rescue service employees and their families showed that more than 50% of respondents smoke; 55.6% do not get enough sleep; 54% do not

have an optimal work-rest balance; 39% do not promote a healthy lifestyle in their families; 64% do not go on family outings in nature, etc. All of this allows us to conclude that healthy lifestyles are not systematic or significant in the families of employees of the fire and rescue service in the Republic of Sakha (Yakutia).

To promote healthy lifestyles among fire and rescue service employees and their families, a comprehensive programme was developed, which is presented in Table 2.

Upon completion of the pilot comprehensive programme to promote healthy lifestyles among fire and rescue service professionals and their families, the following statistical indicators were identified (Table 3).

### Conclusions

1. A preliminary sociological survey of fire and rescue specialists on the state of healthy lifestyles in their families and professional activities showed the following: less than 40% of employees engage in regular physical exercise; only 36% go on healthy walks with their families; 61% adhere to a healthy lifestyle in their families; 50%

Table 2. Comprehensive programme to support healthy lifestyles for fire and rescue service specialists in their family and professional lives

| No.  | Types of events  | Time of year   | Venue   |
|------|--|--|---|
| I.   | Physical education and health activities in the family:<br>Availability of a sports corner<br>Games and walks in the fresh air<br>Morning exercises<br><br>Viewing and attending sporting events<br>Skiing<br>Mutual encouragement among family members to participate in sports         | During the year<br>During the year<br>During the year<br><br>During the year<br><br>Winter time<br>Systemically                                | Apartment<br>Forest park area<br>In the apartment and outdoors<br>Sports facilities in the place of residence<br>Ski slopes<br>Sports clubs, competitions |
| II.  | <b>Sports and mass events among employees' families:</b><br>2.1. Winter sports competition<br>2.2. Summer sports festival<br>2.3. Family athletics cross-country races<br>2.4. Family starts 'Everyone swims'<br><br>2.5. Family starts 'The Ski Track Calls'                            | February-March<br>May-June<br>September<br>November-December<br>February   | Sports facilities<br>Sports facilities<br>Park area<br><br>Swimming pool<br><br>Ski stadium   |
| III. | <b>Professional and applied competitions among employees:</b><br>3.1. General physical training competitions<br>3.2. Obstacle course<br><br>3.3. Sports competitions<br>3.4. Powerlifting<br>3.5. Swimming competitions<br>3.6. Ski starts<br>3.7. Putting on special equipment at speed | During the year<br><br>September, February, May<br>During the year<br>During the year<br>During the year<br>February, March<br>During the year | Gym<br><br>Gym<br><br>Gym<br>Gym<br>Swimming pool<br>Ski stadium<br>Gym   |



*Table 3. Final results of the study on promoting healthy lifestyles among fire and rescue service professionals in the context of family and professional life*

| No. | Healthy lifestyle indicators   | Results, in % |
|-----|--|---------------|
| 1.  | Engage in regular physical exercise                                      | 61% (39%)     |
| 2.  | Optimise work and rest patterns  | 76% (46%)     |
| 3.  | Have a positive attitude towards life                                    | 78% (53%)     |
| 4.  | Appreciate the value of family relationships                             | 87% (64%)     |
| 5.  | Experience positive emotions within the family                           | 87% (57%)     |
| 6.  | The family encourages physical activity                                  | 78% (46%)     |
| 7.  | Family walks in the fresh air  | 68% (36%)     |
| 8.  | Maintain a work-rest balance   | 84% (46%)     |
| 9.  | Adhere to a healthy lifestyle within the family                          | 97% (61%)     |
| 10. | Smokers  | 38% (50%)     |
| 11. | The average increase in healthy lifestyle indicators among employees was | 28%           |

*Note: The results in parentheses show the percentage at the start of the experiment compared to the results at the end of the experiment.*

of employees smoke; 46% observe a work-rest regime; 57% experience positive emotions in their families.

This factual material allows us to conclude that specialists and their families are not sufficiently active in leading a healthy lifestyle in their daily lives and that there is a need to develop a comprehensive programme to promote healthy lifestyles in the above-mentioned social group.

2. To promote healthy lifestyles among specialists and their families, three blocks of comprehensive programme support were developed:

Block I: 'Physical education and health activities in the family';

Block II: 'Sports and mass events among employees' families';

Block III: 'Professional and applied competitions among employees.'

These blocks of the comprehensive programme make it possible to expand the content of activities and increase the healthy lifestyle activity of specialists and their families.

3. The comprehensive programme implemented in the daily and professional lives of fire and rescue specialists and their families contributed to the promotion of healthy lifestyles, with the greatest increase in healthy lifestyle indicators occurring in: family walks – 32%; compliance with work and rest regimes – 38%; and a 36% increase in healthy lifestyle activities. The average increase in healthy lifestyle indicators among

the families of industry employees was 28%. The results of the study allow us to recommend the comprehensive programme developed for other employees of the fire and rescue industry in the Republic of Sakha (Yakutia) as part of the practice of promoting healthy lifestyles.

## References

1. Kravchenko V.M., Ponomarev V.V., Bartnovskaya L.A. Zdorovesberegayushchie tekhnologii podderzhaniya dvigatelnoy aktivnosti naseleniya, prozhivayushchego v usloviyah Kraynego Severa. Teoriya i praktika fizicheskoy kultury. 2023. No. 5. Pp. 98.
2. Ponomarev V.V., Zhernakov D.V., Ukolov A.V., Kosenko L.A. Zdorovesberegayushchie tekhnologii podderzhaniya aktivnoy trudovoy deyatel'nosti naseleniya v osvoenii Eniseyskoy Arktiki. Statya v sbornike trudov Vserossiyskoy nauchno-prakticheskoy konferentsii «Eniseyskaya Arktika», Krasnoyarsk, 2022. Pp. 66-67.
3. Ponomarev V.V., Zhernakov D.V., Ukolov A.V., Leskovskiy A.A. Zakonomernosti i faktory vzaimosvyazi okruzhayushchey sredy s sostoyaniem zdorovya naseleniya: analiticheskiy aspekt. Statya v sbornike Mezhdunarodnoy nauchno-prakticheskoy konferentsii «Monitoring, modelirovanie i prognozirovanie opasnykh prirodnykh yavleniy i chrezvychaynykh situatsiy», Zheleznogorsk, 2023. Pp. 163-166.