



DISTANCE COVERED BY A TECHNICAL SAFETY EMPLOYEE WORKING IN THE MINING INDUSTRY DURING A WORK SHIFT (DAILY, WEEKLY, MONTHLY)

Ortugmat Jumanov

Candidate of Pedagogical Sciences, Professor,
Institute for Retraining and Advanced Training of Specialists in Physical
Education and Sports, Tashkent, Republic of Uzbekistan.

Abstract

In the article, was determined the movement distance of occupational safety personnel working in the mining industry. The distances traveled by occupational safety workers during a single workday (shift), weekly, and monthly were identified. The results were summarized and presented in a table. The study concluded with a summary.

Keywords: Work shift, mining industry, level of physical fitness of the population, step, km.

TOG‘-KON SANOATIDA ISHLOVCHI TEXNIKA XAVFSIZLIK XODIMINING ISH NAVBATI(SMENA) DA BOSIB O‘TGAN MASOFASI (KUNLIK, HAFTALIK, OYLIK)

Ortugmat Jumanov

Pedagogika fanlari nomzodi, professor,
Jismoniy tarbiya va sport bo‘yicha mutaxassislarni
qayta tayyorlash va malakasini oshirish instituti,
Toshkent shahri, O‘zbekiston Respublikasi

ANNOTATSIYA

Maqolada tog‘-kon sanoatida ishlovchi texnika xavfsizligi xodimlarining ish faoliyatidagi harakatkanish masofasi aniqlangan. Ishda texnika xavfsizligi ishchilarining bir kunda yani ish navbatida(smenada), haftalik va oylik bosib



o'tgan masofalari aniqlangan. Natijalar umumlashtirilib jadvalga solingan. Xulosa bilan ish tugatilgan.

Kalit so'zlar: Ish navbati, tog'-kon sanoati, aholi jismoniy tayyrgarlik darajasi, qadam, km.

Introduction

The study of the physical and working condition of miners is relevant, since the severity and complexity of professional activity in unfavorable, harmful conditions of the external environment are increasing.

Research objective: It is necessary to develop a system of professional physical training of miners based on the study of their physical and working condition, to develop scientific methodological foundations of effective means and methods of using it in work activities to improve the working capabilities and health of the human body.

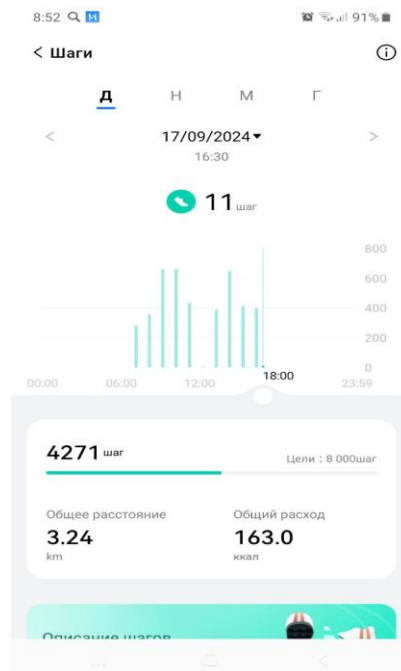
Normative data on the physical development and physical fitness of mining industry workers ("On organizational measures for the implementation of a system for assessing the level of physical fitness of the population" sports tests) are of particular importance. The physical characteristics of employees in this industry have been poorly studied. Such studies have also been practically not conducted with employees of other industries.

As we know, the technical safety of employees working in the mining industry is strictly controlled. Safety equipment safety supervisors were observed to cover several thousand meters during an 8-hour shift.

We analyzed the observations of the path traveled by a mining supervisor during a one-month shift. The monitoring was carried out using a Samsung Health polar measuring device. The analysis revealed that supervisors covered various distances during their daily work. For example: on the first day of the analysis, 4271 steps were taken, which corresponds to 3.24 km.



The analysis results are as follows:



On the third day of the workday, 12,493 steps were taken, which amounted to 9.48 km.



Or if 14,857 steps were taken on the 15th day of observation, this distance corresponds to 11.28 km,



**Modern American Journal of Engineering,
Technology, and Innovation**

ISSN(E): 3067-7939

Volume 2, Issue 3, March, 2026

Website: usajournals.org

**This work is Licensed under CC BY 4.0 a Creative Commons Attribution
4.0 International License.**



If we take it again, 11,072 steps were taken during the 23 days of analysis, and this distance was 8.41 km.



So, such analyses show that the technical safety worker working in the underground mining industry covers different distances during each shift.

If we take a weekly view



Modern American Journal of Engineering, Technology, and Innovation

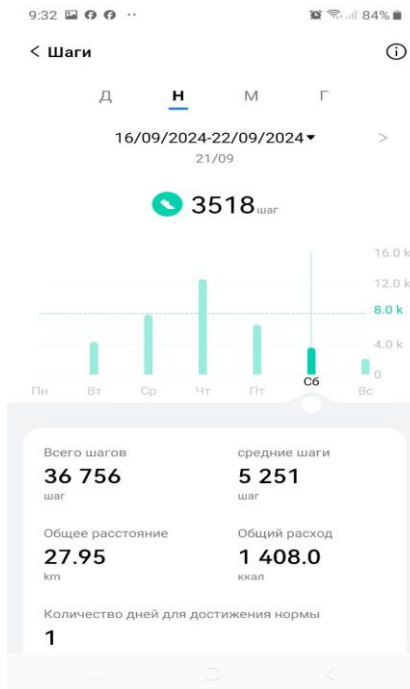
ISSN(E): 3067-7939

Volume 2, Issue 3, March, 2026

Website: usajournals.org

This work is Licensed under CC BY 4.0 a Creative Commons Attribution
4.0 International License.

Week 1



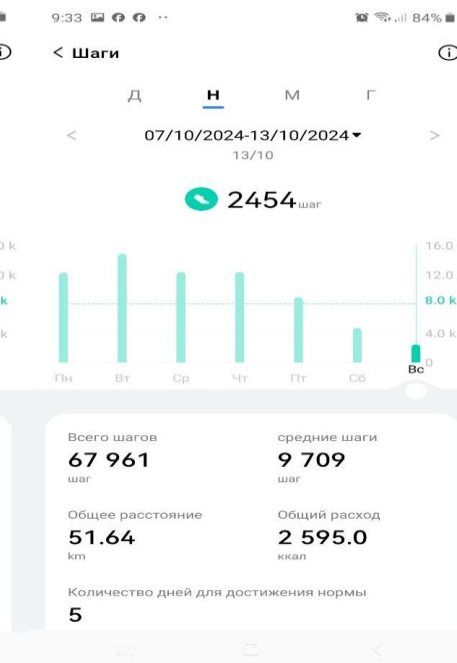
Week 2



3rd week

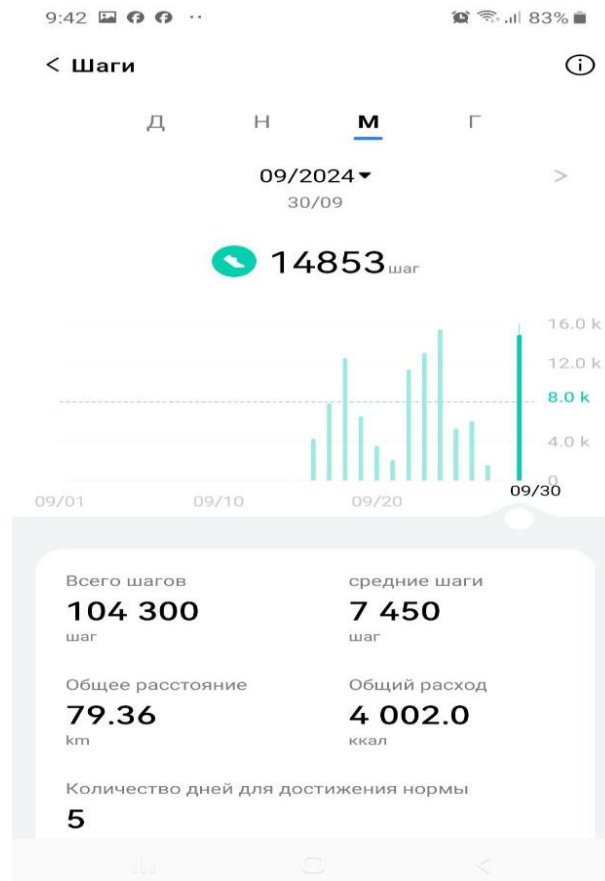


4th week





The overall figure for September was as follows:



If we analyze the 26 working days in a month and calculate the results for daily, weekly and monthly results, we get the following data.

The daily massif is shown in the table as follows.

Date	Step	km
16.09.2024-17.10.2024-until	183339	139,46
Working day	Average per day	Average per day
26	7051,5	5,4

The conclusion showed that it is known that the technical safety officers working in the mining industry cover different distances during each shift. The minimum distance walked during the work shift (shift) was 1863 steps (1.14 km), and the maximum distance walked was 14857 steps (11.28 km). If we analyze 26 working



days, we get 183339 steps (139.46 km), which is an average of 7051.5 steps (5.4 km) per day.

References

1. Implementation of the decision of the President of the Republic of Uzbekistan "On organizational measures for the introduction of the system for assessing the level of physical fitness of the population" dated June 16, 2021 PQ-5148
2. Resolution No. 23 of the Cabinet of Ministers of the Republic of Uzbekistan dated January 15, 2022
3. The Tower (1984) directed by Emily Hubley, Georgia Hubley...
letterboxd.com>film/the-tower-1984/2.
4. Yunusova Yu.M., Ruziakulova M.M. Professional-practical preparation in the system of physical education./method.recom. Tashkent. 1990. 22 p.
5. Stychinskaya N.A. Professional zabolevaemost hornorabochix pri razlichnyx tekhnologix viemko uglya i mery prophylactic: Autoref. diss. sugar Med. nauk: Donetskiy gos.med.in-t im. M. Gorkogo, Donetsk, 1991.-23 p.
6. Tkachenko L.I. Sostoyanie tsentralnoy hemodinamiki hornorabochikh glubokikh ugolnykh shakht.//Metod.truda i prof.ekologiya.- 1999.-№10, S. 42-46.
6. Jumanov O.S. Dissertation. Vocational-practical physical training of miners of the Angren coal basin. Tashkent. 2005.
7. Polzik E.V. Colovin Yu.G, Method of individual predisposition to pain and pneumoconiosis (1980).
8. Ivashchenko Lyudmila Yakovlevna - Samostoyatelnye zanyatiya fizicheskimi uprajneniyami. 1990.
9. Tarashchenko I.M. Analyz fizicheskoy podgotovlennosti rabochikh gornoobogatitelnykh kombinatov. TiPFK. 1980., No. 4, S. 31-32.
10. Lastkov D.O. Hygienicheskaya otsenka proizvodstvenno-klimateshkih faktorov glubokikh ugolnykh shakht Danbassa. // Hygiene truda.-Kiev, 1988.- vyp. 24 .- S. 8-13.
11. Subbotin V.V. Pylevaya nagruzka na organy dykhaniya hornorabochikh ochistnykh zaboev ugolnykh shakht. Hygieni.truda i prof.zabol., 1985. No. 7, S. 8-12.