

INTERNATIONAL MEDICAL SCIENTIFIC JOURNAL

# **ART OF MEDICINE**

Founder and Publisher North American Academic Publishing Platforms

Internet address: <a href="http://artofmedicineimsj.us">http://artofmedicineimsj.us</a>

E-mail: info@artofmedicineimsj.us

**11931 Barlow Pl Philadelphia, PA 19116, USA** +1 (929) 266-0862

## CHIEF EDITOR

Dr. Pascual Izquierdo-Egea

# EDITORIAL BOARD

Prof. Dr. Francesco Albano Prof. Dr. Tamam Bakchoul

Dr. Catherine J. Andersen Prof. Dr. Pierre-Gregoire Guinot

Prof. Dr. Sandro Ardizzone Prof. Dr. Rainer Haak

Dr. Dmitriy Atochin Prof. Henner Hanssen

Prof. Dr. Antonio Aversa

Available at <a href="https://www.bookwire.com/">https://www.bookwire.com/</a>

**ISBN:** 978-0-578-26510-0

# RESULTS OF ASSESSMENT OF TEMPORARY WORKABILITY OF WORKERS

#### **Abbas Rustamov**

Military Medical Academy of the Armed Forces of Uzbekistan **Dilshod Alimukhamedov** 

Tashkent Medical Academy, Doctor of Medical Sciences, Associate Professor
Nizom Ermatov

doctor of medical sciences, professor Tashkent Medical Academy

Abstract: Research studies evaluated the temporary loss of working capacity of the workers of the production enterprise "Jizzakh plastic" based on the medical records and medical records. There are 205 employees working at "Jizzakh plastic" enterprise, 168 (81.9%) of them are men and 37 (18.1%) are women. From the analysis of the number of cases, it can be seen that 30.7% of cases were among men and 12.75 cases among women. The ratio of cases between men and women is as follows, i.e., infectious and parasitic diseases accounted for 15% only in men, diseases of the eye and its peripheral apparatus accounted for 28%, and in women diseases of the blood production system accounted for 16.2%, endocrine system, nutrition and metabolic diseases accounted for 24%. Among workers under the age of 25, diseases of the circulatory system, respiratory system and urinary system accounted for 0.49%, while among those aged 25 to 35, diseases of the blood and blood production, nervous, respiratory, skin and subcutaneous, bone - the index of muscular system, urinary excretion and injuries and poisonings was 0.5%, and diseases of the digestive system were 1.0%.

**Keywords:** temporary working capacity of workers, number of cases, day of cases

## **INTRODUCTION**

The socio-economic development of the country depends on the full compliance of the population's lifestyle with hygienic requirements, the creation of the state of labor resources, the quality of which is determined to some extent by the high working ability of the population of working age, the hormonal state of health, and the decrease in the level of morbidity.

The problem of prevention and reduction of the level of occupational disease has gained special importance in a number of scientific sources. Occupational disease is not only the reason for the decrease in the share of the working-age population, the deterioration of the health of the next generation, and the increase in the amount of expenses for social assistance, but it is also the main reason for the death of the working-age population in the world. is one of the reasons, as evidenced by a large number of cohort epidemiological studies (3,4,5,6).

The dynamic analysis of occupational illness (OI) in various industrial enterprises during 2006-2018 shows that the process is not subject to a linear relationship. In the last 5 years, the rate of occupational disease in the Irkutsk region of the Russian Federation, among working women (4.91 per 10 thousand workers in

2014, 2.23 per ten thousand workers in 2018, from 0.58 per 10 thousand workers in 2014 to 2018 by region) Significantly decreased to 0.19 in 10 thousand women (7.8.9).

In our country, the working conditions of workers in various industrial enterprises, their degree of severity, temporary reduction of working capacity and their failure are scientifically proven (1,2,10).

In various industrial enterprises, the health status of workers is affected by the working conditions, its level of severity, harmful sources in the enterprise, noise, vibration, microclimate indicators, dustiness level, the amount of various chemical substances in the air exceeding the REF (Radio electromagnetic field), despite the fact that the number of authors' works shows a sharp increase in the level of illness of workers, and this is one of the urgent problems of specialists in the field of occupational hygiene in the field of prophylactic medicine today.

The purpose of the study. Enterprises producing polymer products consist of evaluating the temporary labor capacity of workers. There are 205 employees working at "Jizzakh plastic" enterprise, 168 (81.9%) of them are men and 37 (18.1%) are women.

#### INTRODUCTION

"Jizzakh plastic" enterprise, located in the Jizzakh industrial zone of our country, was first built in 1972, and has been operating for half a century. Today, it consists of the following shops: 1st polyethylene film production shop; It consists of the 2nd polyethylene pipe production workshop, the 3rd consumer goods production workshop, and the 4th polyethylene components production workshop.

Today, the enterprise produces the following products, polyethylene film coverings of various thicknesses, various sewage systems and more than 50 polymer and polyethylene products. Today, 205 employees work in the enterprise, of which 168 (81.9%) are men and 37 (18.1%) are women. Data on the average working time, average age, and seniority of workers are presented in Table 2.

The illness rate of workers was analyzed based on the materials of the International Classification of Diseases (ICD-1993,10) and days of temporary incapacity for work.

Statistical processing of the results of the research was done using the "Statistica for Windows 7.0" personal computer application package.

# RESULTS AND DISCUSSION

"Jizzakh plastic" enterprise was built in 1972 and has been operating in our country for 50 years. It consists of the following shops: production of polyethylene film, production of polyethylene pipes, production of consumer products, polyethylene components.

The following products, polyethylene film coverings of various thicknesses, various sewage systems and more than 50 polymer and polyethylene products are produced at the enterprise with the help of derivatives of various chemical substances. The working hours of the enterprise consist of 2 shifts. These chemicals have a negative impact on non-compliance with established hygienic requirements,

10.5281/zenodo.7010098

the working conditions of the enterprise, its microclimate indicators, and the health status and morbidity of workers. The average age and length of work of the workers of the "Jizzakh plastic" production enterprise is presented in Table 1.

Table 1
Information on the age and length of service of employees of "Jizzakh
plastic" enterprise

plastic chiefprise					
indicators	Total workers, number, 205 people	Men 168 people	Women 37 people		
Average age of workers	43,9±076	44,2±0,84	42,33±1,8		
Minimum age limit	22	22	24		
The highest age level	68	68	60		
The highest age level	13,9±0,66	13,7±0,74	12,4±,4		
Work experience (minimum level of year, month)	2 months	2 months	6months		
Work experience (highest of the year)	43	43	34		

The average age of the workers working in Jizzakh Plastics production joint-stock company is  $43.9\pm0.76$  years, for men it is  $44.2\pm0.84$  years, and for women it is  $42.33\pm1.8$  years. The youngest age was on average 22 years old, 22 years old for men, and 24 years old for women, and the oldest workers were 68 years old on average, 68 years old for men, and 60 years old for women.

The average length of service of workers was 13.9±0.66 years, 13.7±0.74 years for men, and 12.4±.4 years for women. The maximum length of service was 43 years in total, 43 years for men and 34 years for women, 0.7 times more for men than for women. The maximum duration of work was 2 months for men and 6 months for women.

Table 2 shows the analysis of temporary disabled employees of the "Jizzakh Plastics" production enterprise by gender by number and day.

Distribution of temporary disable employees of the "Jizzakh plastic" production enterprise by gender

Table 2

Interna tional	Class of diseases	Number of events, %		Days of events, %	
Classifi		woma	men	woma	men
cation		n		n	
of					
Diseas					
es - 10					

I	Infectious and parasitic diseases	ı	0,5	-	7,3
II	Tumors	-	-	-	-
III	Blood and blood production system diseases	2,4	1	39,5	-
IV	Diseases related to the endocrine system, nutrition and metabolism	0,5	-	11,7	-
V	Mental disorders and behavioral disorders	0,0	-	0,0	
VI	Diseases of the nervous system	1,0	2,9	17,1	45,9
VII	Diseases of the eye and its corneal apparatus	-	0,5	-	13,7
VIII	Ear and mammary tumor diseases	0,5	0,5	7,3	4,9
IX	Diseases of the circulatory system	3,4	3,4	48,8	49,8
X	Diseases of the respiratory system	0,98	8,3	14,6	131,2
XI	Diseases of the digestive system	0,5	4,9	5,4	57,6
XII	Skin and subcutaneous fat layer diseases	0,5	0,5	4,9	7,3
XIII	Musculoskeletal and connective tissue diseases	1,5	3,9	32,7	68,3
XIV	Diseases of the urinary system	0,98	5,4	18,5	84,4
XVI	Some conditions that occur during the perinatal period	0,5	-	43,9	
XIX	Injuries and poisonings	-	-	4,9	122,9
	General for all diseases	12,7	30,7	249,3	593,17

As can be seen from the results obtained from Table 2, from the analysis of the number of cases, it can be seen that the overall prevalence of all diseases was 30.7% among men and 12.75% among women. According to the hygienic analysis of distribution between genders, the highest rate among men is respiratory system diseases 8.3%, followed by urinary system diseases 5.4%, digestive system diseases 4.9%, musculoskeletal system diseases - 3.9%, diseases of the circulatory system - 3.4%, infectious diseases, diseases of the eye and its mucous membrane, ear and mammary tumors, diseases of the skin and subcutaneous fat layer - 0.5% it is visible.

Among women, the first place was diseases of the blood circulation system at 3.4%, the second place was diseases of the blood and blood production system at 2.4%, diseases of the musculoskeletal system at 1.5%, and diseases of the nervous system at 1.0 %, and diseases of the respiratory system and urinary system made up 0.98.

The analysis shows that among women, the lowest rate was 0.5% of diseases related to the endocrine system, nutrition and metabolism, diseases of the ear and mammary tumor, diseases of the digestive system, and diseases of the skin and subcutaneous fat layer.

According to the analysis of events by day, there are sharp differences between the number of events and the day, in men 131.2 days in respiratory system diseases, 84.4% in urinary system diseases, 68.3% in musculoskeletal disorders, ear and in the case of mammary tumor diseases, it was 4.9 days, and in women, it was

48.8 days in diseases of the circulatory system. In case of injuries and poisoning, it was 4.9 days.

Table 3 shows the prevalence of temporary disability for work of employees of the "Jizzakh plastic" production enterprise in 2020-2021.

Hygienic analysis of distribution of temporary disability for work among workers of the Jizzakh Plastics production enterprise by sex, the ratio between men and women is as follows, that is, infectious and parasitic diseases accounted for only 15% of men, while apparatus diseases accounted for 28%, and in women, diseases of the blood production system accounted for 16.2%, and diseases related to the endocrine system, nutrition and metabolism accounted for 24%.

Table 3

Distribution of average duration of temporary disability per event by gender

	genuei			
Internatio	Class of diseases	The number of average durations of each event,%		
nal Classificat ion of Diseases - 10	Class of alseases	woman	man	
I	Infectious and parasitic disease	-	15	
II	Tumors	-	-	
III	Blood and blood production system diseases	16,2	-	
IV	Diseases related to the endocrine system, nutrition and metabolism	24	-	
V	Mental and behavioral disorders	-	-	
VI	Diseases of the nervous system	17,5	15,7	
VII	Diseases of the eye and its corneal apparatus	-	28	
VIII	Ear and mammary tumor diseases	15	10	
IX	Diseases of the circulatory system	14,3	14,6	
X	Diseases of the respiratory system	15	15,8	
XI	Diseases of the digestive system	11	11,8	
XII	Diseases of the skin and subcutaneous fat layer	10	15	
XIII	Musculoskeletal and connective tissue diseases	22,3	17,5	

XIV	Diseases of the urinary system	19	15,7
В	y total diseases, sexes	16,4	15,9
	On total diseases	19,4	

Volume-2

Issue-3

The analysis of cases in both sexes shows that diseases of the musculoskeletal system and additional tissues account for 22.3% among women and 17.5% among men, diseases of the urinary system account for 19% in women and 15.7% in men, respiratory system diseases were 15.5% in men and 15% in women, circulatory system diseases were 14.6% in men and 14.3% in women, digestive system diseases were 11.8% and 11.0% respectively in the comparative analysis of both sexes organized.

It is very important not only among different layers of the population, but also among workers, the prevalence of illness and temporary work disability among young people is very important. The prevalence of temporary disability for work among young workers is presented in Table 4.

According to the analysis of the obtained results, among the workers under the age of 25, diseases of the circulatory system, respiratory system, and urinary system accounted for 0.49%, while among those between the ages of 25 and 35, diseases of the blood and blood production, nervous, respiratory, the rate of skin and subcutaneous, musculoskeletal system, urinary excretion and injuries and poisonings was 0.5%, and diseases of the digestive system were 1.0%.

It is worth noting that among workers above the age of 35, the incidence rate increased dramatically.

Among workers under the age of 25, respiratory system diseases accounted for 8.29%, digestive system diseases 5.4%, urinary system diseases 5.37%, blood circulation and musculoskeletal system diseases 4.9%. and injuries and poisonings accounted for 4.4%.

Tumors, mental disorders, eye and spinal cord diseases, skin and subcutaneous tissue diseases were not reported among workers over 35 years old.

The total rate of temporary incapacity for work by age of all diseases under the age of 25 was 1.46%, an average of 0.49%, and among 25-35-year-olds, the number of cases of all diseases was 4.4%, an average of 0.98 %, and 81.1% among workers over 35 years of age, the average occurrence rate was 6.24%.

Table 4
Analysis of temporary unemployment by age of workers, %

		Number of events, %		
nternat	Class of diseases			
ional		25	25-35	35 +
Classifi		under	under the	under
cation		the age	age of	the age
of		of	_	of
Disease				
s - 10				

				1
I	Infectious and parasitic diseases			0,5
II	Tumors			
III	Blood and blood production system diseases		0,5	1,5
IV	Diseases related to the endocrine system, nutrition and metabolism			0,5
${f V}$	Mental and behavioral disorders			
VI	Diseases of the nervous system		0,5	3,4
VII	Diseases of the eye and its corneal			
	apparatus			
VIII	Ear and mammary tumor diseases			1,0
IX	Diseases of the circulatory system	0,49		4,9
X	Diseases of the respiratory system	0,49	0,5	8,29
XI	Digestive system		1,0	5,4
XII	Skin and subcutaneous tissue		0,5	
XIII	Musculoskeletal system and tissue diseases		0,5	4,9
XIV	Urinary system	0,49	0,5	5,37
XVI	Some conditions that occur during the perinatal period			0,5
XIX	Injuries and poisonings		0,5	4,4
	Total		100	
	General for all diseases	1,46	4,4	81.1
-	Average	0,49	0,98	6,24
	II III IV V VI VII VIII IX X XI XII XIII XIV XVI	III Blood and blood production system diseases  IV Diseases related to the endocrine system, nutrition and metabolism  V Mental and behavioral disorders  VI Diseases of the nervous system  VII Diseases of the eye and its corneal apparatus  VIII Ear and mammary tumor diseases  IX Diseases of the circulatory system  X Diseases of the respiratory system  XI Digestive system  XII Skin and subcutaneous tissue  XIII Musculoskeletal system and tissue diseases  XIV Urinary system  XVI Some conditions that occur during the perinatal period  XIX Injuries and poisonings  Total  General for all diseases	III Tumors III Blood and blood production system diseases IV Diseases related to the endocrine system, nutrition and metabolism V Mental and behavioral disorders VI Diseases of the nervous system VII Diseases of the eye and its corneal apparatus VIII Ear and mammary tumor diseases IX Diseases of the circulatory system VX Diseases of the respiratory system XX Diseases of the respiratory system XXI Skin and subcutaneous tissue XXII Musculoskeletal system and tissue diseases XXV Urinary system XXI Some conditions that occur during the perinatal period XXX Injuries and poisonings Total General for all diseases 1,46	III Blood and blood production system diseases  IV Diseases related to the endocrine system, nutrition and metabolism  V Mental and behavioral disorders  VI Diseases of the nervous system 0,5  VII Diseases of the eye and its corneal apparatus  VIII Ear and mammary tumor diseases  IX Diseases of the circulatory system 0,49  X Diseases of the respiratory system 0,49  XI Digestive system 1,0  XII Skin and subcutaneous tissue 0,5  XIII Musculoskeletal system and tissue diseases  XIV Urinary system 0,49 0,5  XVI Some conditions that occur during the perinatal period  XIX Injuries and poisonings 0,5  Total 100  General for all diseases 1,46 4,4

Based on the conducted scientific analysis, it worth noting that the results of the assessment of temporary incapacity for work among the employees of the enterprise show that the low effectiveness of medical examinations, non-compliance with requirements, working conditions and severity, particulate factors and diseases that occur among the employees of this enterprise today a decrease in the rate of return indicates deficiencies in the accumulation and return of resources.

#### CONCLUSION

- 1. The average length of service of workers is 13.9±0.66 years, 13.7±0.74 years for men, and 12.4±.4 years for women, the maximum length of service is 43 years, 43 years for men, and 43 years for women 34 years, men are 0.7 times more than women. The minimum duration of work was 2 months for men and 6 months for women.
- 2. From the analysis of daily events, it can be seen that there are sharp differences between the number of events and the day, 131.2 days for respiratory system diseases in men, 84.4% for urinary system diseases, 68.3% for musculoskeletal system diseases, and for diseases of the ear and mammary tumor it was 4.9 days, while for women it was 48.8 days for diseases of the blood circulation system, and for injuries and poisoning it was 4.9 days.

3. The rate of incidence in both sexes, diseases of the musculoskeletal system and additional tissues accounted for 22.3% among women and 17.5% among men, diseases of the urinary system accounted for 19% in women and 15.7% in men, respiratory diseases of the digestive system were 15.5% in men and 15% in women, diseases of the circulatory system were 14.6% in men and 14.3% in women.

#### REFERENCES

- 1. Akhmadaliev R.Y. Improving the system for eliminating existing hygienic problems in glass production / Abstract doktor philosophy in medical sciences.-Tashkent, 2018. P.48.
- 2. Boltaboev U.A. Optimizing working conditions in footwear manufacturing enterprises / author. doktora filosofii po meditsinskim naukam.-Tashkent, 2019. P.46.
- 3. Volgareva A. D., Karimova L. K., Mavrina L. N., Gimaeva Z. F., Beigul N. A. Occupational noise as an occupational risk factor at petrochemical enterprises // Health Risk Analysis. 2017. No. 1. P. 116–124.
- 4. Dolgikh O.V., Starkova K.G., Krivtsov A.V., Bubnova O.A. Variability of immunoregulatory and genetic markers under combined exposure to industrial environment factors. Hygiene and sanitation. 2016; 95(1): 45-48
- 5. Zhidkova I., Ivanova L. A. Prevention of occupational diseases at the enterprise for the production of synthetic rubber // Technospheric safety. 2019. P. 82-85.
- 6. Kiselev D. V. Occupational safety in the production of polymers // The future is behind us: the view of young scientists on the innovative development of society. 2020. S. 108-111.
- 7. Meshchakova N.M., Shayakhmetov S.F., Dyakovich M.P. Improving methodological approaches to assessing the risk of health disorders in workers under the influence of a chemical factor. Hygiene and sanitation. 2017; 96(3): 270-274.
- 8. Pankov V.A., Kulishova M.V. Analysis of occupational morbidity in women of working age. // Hygiene and sanitation, 2019 98(10).-p. 1056-1061.
- 9. Taranenko N.A., Meshchakova N.M., Zhurba O.M., Telezhkin V.V. Air pollution by organochlorine hydrocarbons in the production of polyvinyl chloride and epichlorohydrin. Hygiene and sanitation. 2014; 93(4): 47-51.
- **10.** Khashirbaeva D.M. Hygienic assessment of the impact of production-related factors of industrial zone enterprises on the health of workers, and the development of comprehensive preventive measures. Abstract doktor of medical sciences.-Tashkent, 2018. P.52.