– w aspekcie wymogów ergonomii, organizacji domowej przestrzeni roboczej do pracy z komputerem, nasuwa się dość optymistyczne stwierdzenie, że podstawowe zasady są młodzieży znane i stosowane w ich mieszkaniach i domach,
– większość problemów z prawidłową organizacją domowej przestrzeni roboczej do pracy z komputerem wynika z braku przestrzeni w mieszkaniach. Brak przestrzeni jest główną barierą do organizacji wygodnego stanowiska komputerowego, z możliwością rozmieszczenia dodatkowych akcesoriów do pracy, np. uchwytu na dokumenty w optymalnym zasięgu rąk.

LITERATURA:

[1] http://www.ergotest.pl/ergonomia.php [04.01. 2010].
[2] Musioł T. Grzesiek J.: Podstawowa problematyka projektowania stanowisk pracy. Wyd. WSEiA, Bytom 2008.
[3] Bugajska J.: Komputerowe stanowisko pracy, Wyd. CIOP Warszawa 1999
[4] http://www.zdrowebiuro.pl/jak_wybrac_dobry,_ wygodny_fotel.php [30.11.2009].
[5] http://bhp-partner.net/zasady-udzielania-pierwszej-pomocy/zasady-bhp-przy-komputerze.html [5.01.2010].
[6] http://www.jotbe.wroc.pl/html/pomoc/ergonomia.htm [08.01.2010].
[7] Kotowski J. www.adm.uz.zgora.pl/.../zasady_pracy_przy_komputerze_info.doc [dostęp 05. 01. 2010].
[8] www.zdrowebiuro.pl/pracuj_zdrowo _i_wygodnie.php [05.01.2010].
[9] Katedry Inżynierii Komputerowej Wydziału Elektro-niki Politechniki Koszalińskiej. http://kik.ie.tu.koszalin.pl/pmppk/zdrowie/index.html [02.02.2010].
[10] Rozporządzenie Ministra Pracy i Polityki Socjalnej z dnia 1 grudnia 1998 roku w sprawie bezpieczeństwa i higieny pracy na stanowiskach wyposażonych w monitory ekranowe (Dz. U. z dnia 10 grudnia 1998 r., Dz.U.98.148.973).
[11] http://www.zdrowebiuro.pl/choroby_zwiazane_z_praca_biurowa.php [08.01.2010].
[12] Rozporządzenie Ministra Pracy i Polityki Socjalnej z dnia 1 grudnia 1998 roku w sprawie bezpieczeństwa i higieny pracy na stanowiskach wyposażonych w monitory ekranowe (Dz. U. z dnia 10 grudnia 1998 r., Dz.U.98.148.973).
[13] Sztumski J.: Wstęp do metod i technik badań społecznych. Wyd. Śląsk. Katowice 1995.
[14] Juszczyk S.: Metodologia badań empirycznych w naukach społecznych. Wyd. Akademii Wychowania Fizycznego. Katowice 2001.

KUNDIEV YU. I., NAHORNA A.M.
Institute for Occupational Health of National AMS of Ukraine, Kyiv.

The problem of the industrial traumatism in Ukraine

Problem zdarzeń traumatycznych w przemyśle na Ukrainie

Abstract:
The paper contains the data related to occupational traumatism in Ukraine for the period of 2000-2008, from the point of its occupation-related distribution and by the types of economic activity and causes of development. The number of workers suffered from accidents, concerning, in particular, face miners, builders, mechanics, unskilled laborers, have been carefully examined. The differences have been found in the occurrence of cases of traumatism, due to the effect of dangerous work environmental factors, in workers of the mentioned occupations.

Streszczenie:
Artykuł zawiera dane dotyczące występowania zdarzeń traumatucznych związanych z wykonywaniem zawodu na Ukrainie w okresie 2000-2008, zaprezentowane pod kątem ich występowania w różnych zawodach, jak również rodzajach działalności gospodarczej wraz z przyczynami powstawania. Przeanalizowano liczbę pracowników, w szczególności górników, budowlańców, mechaników oraz robotników niewykwalifikowanych, którzy doznali urazów w wypadkach. Znaleziono różnice w występowaniu zdarzeń traumatycznych, wynikające z niebezpieczeństw w środowisku pracy wśród wymienionych zawodów.

Key words*: occupational traumatism, types of economic activity, occupations, causes of development.*

Słowa kluczowe*: zdarzenia traumatyczne w miejscu pracy, rodzaje działalności gospodarczej, zawody, przyczyny powstawania*

The production process practically always is accompanied by the traumatism of workers, what is resulted in the loss of the working potential of the country. The working potential is a foundation of economical, cultural development of the country, its national independence. It is securing of the vital activity of the society.

The power of the working potential of the country is depended on many factors: state of physical and psychical health of workers, their medical and demographical characteristics, social and economical conditions of the work and life, medical and social support of the vital activity of workers etc.

The state policy in the branch of the labour protection is determined in accordance with the constitution of Ukraine, the foundation of the legislation concerning health protection, Low of Ukraine "On Labour Protection", Low of Ukraine "On sanitary and epidemical well-being of the population and their legislative and normative documents".

The conception of labour protection management is directed on the realization of the regulations and lows of Ukraine concerning securing life and health protection of workers in the process of labour activity on each workplace, good conditions for forming in workers conscious attitude to the personal safety [1].

The target social program "The preservation and development of the working potential of Ukraine for 2008-2017" is more contractive and generalized. Its conception was discussed by specialists and public on the 2-nd All-Ukrainian forum "The preservation and development of the working potential of Ukraine" in September 2007.

The project "Strategies of the securing safety working conditions and the health of the working population in Ukraine on 2006-2011" was discussed in the institute for occupational health in 2005 with participation of the representatives of WHO, Ministry of health of Ukraine, Ministry of labour, research institutes, fund of social insurance, trade unions, non-governmental organizations.

The Convention of ILO № 187 and corresponding Recommendation № 197 "On the fundamentals of safety and labour hygiene were published by the ILO in June 2006. These documents are envisaged using of three main instruments concerning securing of the consecutive system of industrial safety: the national policy, national system and national program. As a matter of fact this is the development of the problem concerning of the systematic approach to practical management of labour protection on all levels from state level to corporative level, that was pointed by ILO in "Guidance on management system of labour protection ILO/SMLP/JSH-2001" [2,3,4,5].

World Health Assembly (WHA) was considered and approved in May 2007 Global plan of actions on health protection of workers for 2008-2017, especially underlined, that workers health is necessary preliminary condition for increasing of productivity and economical development. WHA calls all member-countries: to develop in collaboration with employees, employers and their organizations according national policy and plans for the realization of Global plan of actions concerning health protection of workers and establish corresponding mechanisms and legal fundamentals their realization, monitoring and evaluation [6].

The propositions concerning securing safety work conditions, preservations of workers health, decreasing of industrial traumatism must be most important factors of productive force of the society and economical policy of the state. These propositions have is source the main principle abovementioned documents of WHA, and ILO.

It should be noted, that national and other countries legal and normative documents at hand their main principles, scientific basing and practical needs in considerable degree not implemented in the system of labour protection and health protection of workers. This result in significant loss of working potential in account of industrial traumatism and occupational morbidity among workers, consequences of traumatism beside medical, have social, economical, legal, ethical and other aspects.

In our time in the frames of the Program of collaboration Ukraine – EU the project of rapprochement Ukrainian legislation and legislation of European Union and with documents of intergovernmental organizations (WHA, ILO) in the branch of the health protection and the safety of workers.

The numerous accidents and the health loss at the workplace result in the people suffering and the significant economical losses. Every 15 second 1 person in the world is perished. Every year 2,2 mln workers are perished during work, near 270 mln workers are received serious traumas. The economical losses by the workers death and health loss at the workplace are reached 1,25 billion USA dollars, that undermine the economics and is disturbed the development of any country [7,8,9].

55-60 workers are received traumas at the workplace every day in Ukraine, from them 3-4 with mortal consequences, that is resulted besides economical losses also in social and psychological losses.

The most unfavourable work conditions in Ukraine as in the majority NIS Countries were revealed in the coal and shipbuilding industries, ferrous and non- ferrous metallurgy, agriculture, building materials industry, construction, where wear and tear of basic funds of industry is reached 65-90%. The greatest part of workers which engaged in the dangerous and harmful work conditions, works at the private enterprises [10,11].

Many studies are dedicated to the state traumatism analysis in the production [12,13,14,15].

Authors of this paper also repeatedly and from various positions evaluated of the situation concerning traumatism in the country and were determinatd some regularities its formation [16,17,18,19].

The aim of this work is to study of the dynamics of the industrial traumatism in varions branches of economics for 2000-2008, causes, the peculiarities of workers labour protection in dependence from form of the property of the production.

Materials and methods of the study

Analysis of industrial traumatism was conducted to the official data of State Committee of Statistics of Ukraine, Centre of medical statistics of Ministry Health of Ukraine, Fund of social insurance from accidents and occupational diseases of Ukraine, State Committee of Supervision in Mining and Industry, results of selective studies, of National research Institute for labour protection for the years 2000-2008.

The massif of data concerning accidents with mortal consequences in Ukraine was used for the study of cause-investigation relations of industrial traumatism. The massif was formed by the materials of the National research institute of labour protection. The statistical data were evaluated with the help ob ranking, correlative analysis, determination of extensive and intensive indices and their trustworthiness by Student criterion.

Results of the study and their discussion

Analysis concerning industrial traumatism is testified, that the number of traumatized workers was decreased from 34288 cases in 2000 to 16491 – in 2008 (in 2 times).

For this period number of mortal cases was decreased from 1239 to 927 (in 1,3 times) [20].

To day the state of industrial traumatism in our country in according with international criteria can evaluate as satisfactory (1 mortal case on 12 thousands workers). But this value it is still enough high. 2,52 cases of industrial traumatism was in 2000 and 1,60 cases in 2008 on each thousand of workers in Ukraine (reliable decreasing, $p< 0,001$). (Fig 1,2).

This is connected with an activity of labour protection service, sanitary and epidemiological stations, employers, increasing of capital investments into industry, the accretion of the internal gross output etc. The later has reliable connection (R=0,78) with the level of industrial traumatism, which is decreased during increasing of internal gross output [17].

It is necessary to add, that during definite general trend to decreasing of the industrial traumatism, in the some branches of industry is registered uneven character of this process. So the level of industrial traumatism among workers of the agriculture, manufacturing industry, construction, production of power, gas and water and social sphere hasn't the trend for decreasing.

The correlation of indices of the general traumatism and the mortal traumatism not correspond with existed regularities in the world. For example. 1,1-1,16 mln accidents is registered early in Germany, and perished 1,1-1,7 thousands workers (0,08-0,12%) [13].

The cases with mortal consequences in Ukraine in structure of general industrial traumatism take up 4,5-5,0%, that is testified about aspiration to put aside of significant number of accidents.

The number of workers suffered from traumatism connected with the production is differed in accordance with kinds of the economical activity (Tabl. 1).

The first place (36,4%) is occupied by extracting industry the second- manufacturing (25,6%), the third – construction (7,5%), the fourth – agriculture, hunting and forestry (6,1%), the fifth – transport (5,2). On the production of power, gas and water fits 3,0% of the industrial traumatism. On the non-productive sphere (trade, education, health protection, financial activity, state administration) fits 16,2% traumatism cases.

The distribution of rank places concerning the number of the mortal accidents is following: the first place belong to the extracting industry, the second – manufacturing, the third –construction, the fourth – agriculture, the fifth – transport.

The denationalization of production objects, appearance the private undertakings negatively marked on the quality of the labour protection, maintenance of the hygienic standards in the production, introducing among workers of collective and personal means of protection. At the private enterprises industrial traumatism registered more often (55,2%) in the comparison with state and communal (44,8%). As concern of the traumatism with mortal consequences, then its share at the private undertakings almost in 2 times (68,0%) is exceeded the same in the state and communal (32,0).

It was determined, that in the structure of distribution the number of general accidents and accidents with mortal consequences in the regions, situation is following: the first place is occupied by Donetsk region, the second – Lugansk, the third – Dnipropetrovsk region, the fourth - Kiev-city, the fifth – Kharkiv and the sixth – Zaporizhya region. The share these 6 industrial regions gives 65,0% all cases of industrial traumatism in Ukraine.

The results of systematization and the statistical treatment form N – 1 data in according with materials of the special studies of the accidents in production (21) are testified, that most often have mortal traumas workers such professions as the builders (12,7%) the face-miners (11,3%), the drivers (9,3%), the metalworkers (7,4%) the unskilled

laboures (6,9%) the managers (4,4%). Such professions give hear 60% of the all mortal accidents (Fig. 3).

Results of accidents analysis for last three years, that are reflected quantitative changes of industrial traumatism amend workers of enumerated professions.

The number of the perished workers in such professions as face-miners, builders, metalworkers, unskilled laborers was increased in the comparison with 2006. (Fig. 4)

The main kinds of incidents and their causes (in accordance with the classification) [4], which were resulted in the traumatism abovementioned profession, were revealed during the analysis the materials of investigation.

The analysis of the mortal accidents concerning their causes is testified, that in 62,8% cases this cases have organized character, 24,2% were technical cases, and 13% cases have psycho physiological character (Fig. 1).

In the general structure of accidents causes are predominated the non-fulfillment of the demands of the labour protection instructions (20,13%), the infringement of traffic regulation (8,84%), the non-fulfillment of the official duties (8,54%), the breach of the technological process (6,55%)

Almost 5% of mortal accidents are occurred as a result of the dissatisfied technical state production means (Table 2).

The level of mortal traumatism is remained high owing to the following factors: the fall of victim (24,1%), the fall, bringing down, collapse of the objects, materials, rock, soil (16,38%), the traffic incident (19,14%), the effete of objects and details which moved, fly away, revolved (13,33%), the affection by current (8,78%). Mainly, these dangerous cases are happened owing to organized causes. (Table 3).

One of influenced factors at state of industrial traumatism is professional work experience, which take into account ratio of length of the service in profession to general length of the service and also level of psychopysiological selection [16,17].

During equality general and professional length of the service in professional work experience is 1,0.

It was determined, that most often mortal traumatism was registered in workers which have the professional work experience 0-0,2 (39,2%) in the age of 42-47 years old (8,54%). They were workers, which changed the profession but havn't experience and qualified retraining (Table 4).

The significant number of the mortal accidents is registered in workers with professional work experience 0,8-1,0 in the age 18-23 years old. This is an evidence of neglect by young people the safety regulations and insufficient control of the knowledge level of workers.
The note should be taken, that teaching of profession or kind of work during which execution was occurred mortal accident were passed 65,90 % of perished, entry instructing – 87,04%, primary – 80,18%, repeated – 72,23%.

Such data is testified, that noted measures were conducted formally or given information was ignored. Necessary to note, that almost 43,5% of victims havn't a special purpose instructing.

It was established, that culprits almost half (46,93%) all accidents are as victims so other persons. It is mentioned, that at the private enterprises most often is situation where accident is happened through other person fault.

The important component of human factor is motivation, professional orientation. Workers, which have strong and firm the professional interest are traumatized mach less. The traumatism level is depended from health state of the worker and his relations in the collective. For comprehensive taking into account of the human factor in the production process it is purposefully also to in troduse the psychophysiological selection system of workers in profession which are special demaands or for workers, which work is in the conditions heightened danger. Professional psychophysiological selection is a great help for making assignment of rational personnel system, which is active counterparting of spontaneous professional selection [22].

Such data is testified, that noted measures were conducted formally or given information was ignored. Necessary to note, that almost 43,5% of victims havn't a special purpose instructing.

It was established, that culprits almost half (46,93%) all accidents are as victims so other persons. It is mentioned, that at the private enterprises most often is situation where accident is happened through other person fault.

The important component of human factor is motivation, professional orientation. Workers, which have strong and firm the professional interest are traumatized mach less. The traumatism level is depended from health state of the worker and his relations in the collective. For comprehensive taking into account of the human factor in the production process it is purposefully also to in troduse the psychophysiological selection system of workers in profession which are special demaands or for workers, which work is in the conditions heightened danger. Professional psychophysiological selection is a great help for making assignment of rational personnel system, which is active counterparting of spontaneous professional selection [22].

It is known, that right to entry to work of persons, which according to their psychophysiological peculiarities cannot fulfillment the work satisfactory or fulfill its which

Table 1. The industrial traumatism in connection with kinds of economical activity (on data 7-TNB form)

Kind of economical activity	Number of suffered from accidents workers								
	2000	2001	2002	2003	2004	2005	2006	2007	2008
Ukraine	**34288**	**33941**	**27808**	**25691**	**23276**	**21175**	**19741**	18778	**16491**
Agriculture, hunting, forestry	3272	4113	3111	2384	1827	1667	1460	1181	1009
Fishing	18	31	38	30	26	23	24	18	24
Extracting industry	18263	16144	12271	10794	9313	7897	7000	6837	6003
Manufacturing industry	6462	6933	6316	6187	6011	5728	5293	5047	4217
production of power, gas, water	450	553	632	605	594	581	568	549	504
Construction	1540	1684	1378	1397	1499	1363	1320	1344	1237
Wholesale and Retail trade	294	490	464	414	406	395	509	511	488
Hotels and restaurants	43	55	31	11	28	28	23	39	40
Transport	1071	1118	1066	1142	1079	1092	927	957	852
financial activity	41	79	72	62	59	86	101	71	81
Operations with immovables, renting, judicial persons service	1178	798	603	604	543	523	533	498	456
State administration	617	707	676	895	712	677	734	606	546
Education	489	466	399	357	392	378	424	386	331
Health protection and social relief	391	534	449	570	535	538	602	510	515
Collective, public and personal services	150	211	205	195	204	176	222	223	188
Other	9	25	97	27	48	23	1	1	-

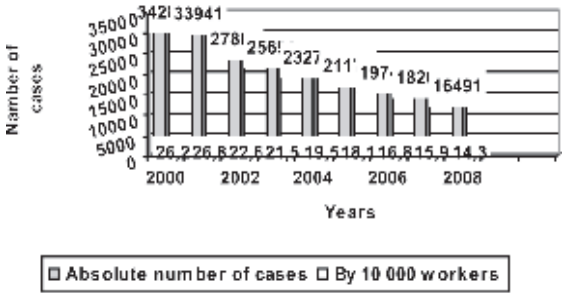


Fig. 1 Dynamics of industrial traumatism in Ukraine (from 2000 to 2008).

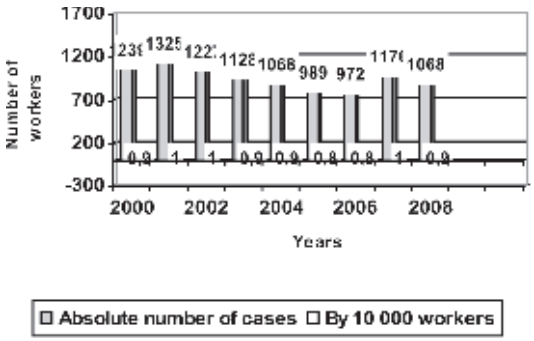


Fig. 2 Dynamics of industrial traumatism with mortal consequences in Ukraine (from 2000 to 2008).

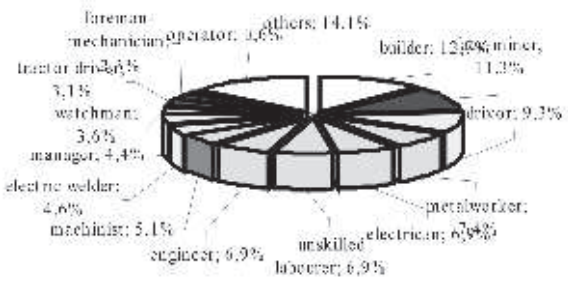
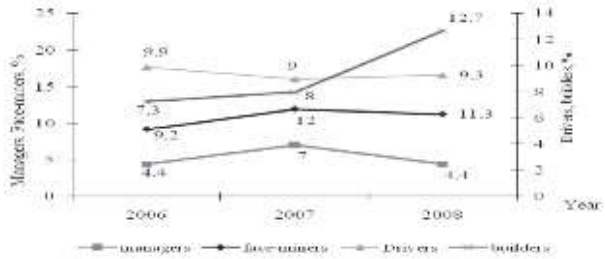


Fig 3. Distribution of the perished workers from accident by professions (2008).



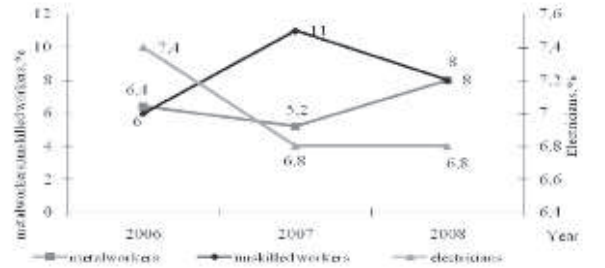


Fig 4. Dynamics of the perished workers in the main professions.

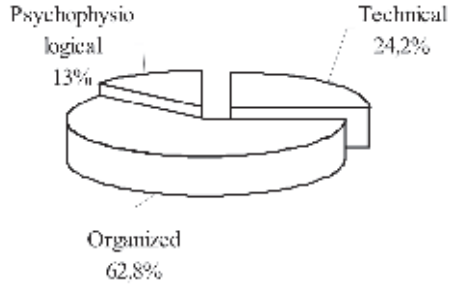


Fig 5. The distribution of the mortal accidents and their causes.

Table 2. The description of technical, organized and psychophysiological causes accidents with mortal consequences in 2008.

Causes of the accidents	Share, %
Technical	
The shortcomings of the construction, imperfection, unreability	2,28%
The non-qualitative elaboration, absence of designed documentation	1,83%
The imperfection of technological process, disparity its to safety	3,96%
demands	
The dissatisfied technological state of production means	4,88%
The dissatisfied technological state of production buildings	3,05%
The dissatisfied technological state of transport means	2,89%
Other technical causes	5,33%
Organized	
The dissatisfied functioning, imperfection of labour protection	2,59%
management	
The non-qualitative instructing	2,13%
The right to entry without knoledge about labour protection	1,22%
The imperfection of instructions about labour protection	0,46%
The breach of work and rest regimen	0,46%
The non-qualitative medical examination	0,3%
The unused of the personal protection means because their absence	0,3%
The breach of technological process	6,55%
The enlisting to the work of non-specialist	0,46%
The breach of safety demands of transport means	2,74%
The breach of safety demands of installation and equipment	3,66%
The infringement of traffic regulation	8,84%
The unused of the personal protection means (in the presence)	2,89%
The non-execution of the official duties	8,54%
The non-execution of labour protection instructions	20,13%
The other organized causes	5,02%
Psychopysiological	
The dissatisfied physical data or health state	3,2%
The traumatism owing to illegal action of other persons	2,74%
The psychopysiological causes	3,55%

** In according with classifier [21].*

Table 3. The main kinds causes of mortal accidents in 2008

Kind of incident	The causes			The whole
	Technical	Organized	Psychopysiological	
The traffic incident	3,17%	14,76%	1,21%	19,14%
The fall of victim	5,76%	15,77%	2,57%	24,1%
The fall, bringing down, collapse of the objects, materials, rock, soil ets.	5,44%	10,19%	0,75%	16,38%
The effects of objects and details which moved, fly away, revolved	5,0%	7,88%	0,45%	13,33%
The affection by current	1,96%	6,06%	0,76%	8,78%
The action of high temperature (beside fire)	0,15%	0,6%	0,15%	0,9%
The effect of harmful and toxic substances	0,15%	1,21%	0%	1,36%
The effect of ionizing radiation	0%	0,15%	0%	0,15%
The indices of work tension	0%	0,15%	0%	0,15%
The harmfulness owing to contacts with animals, insects and other fauna	0,15%	0,45%	0,3%	0,9%
The drowning	0,15%	0,75%	0,3%	1,2%
The asphyxia	0,15%	0,3%	0,15%	0,6%
The purposed murder or trauma by other person	0%	0,3%	2,43%	2,73%
The natural calamity	0,15%	0%	0%	0,15%
The fire	0,6%	1,81%	0,45%	2,86%
The explosion	0,15%	0%	0%	0,15%
Other kinds	1,24%	2,41%	3,47%	7,12%
The whole	24,2%	62,8%	13,0%	100%

** In accordance with classifier [21].*

significant number of mistakes – is a matter for society economically unprofitable and dangerous, for workers can come to an end by loss of health, ability to work and sometimes – life.

It is necessary to underline, that during the same level potential danger of traumatism which caused by organization of technological process and using of equipment and protection means, traumas for a period of production length of a service traumas are received the same persons. It is connected which peculiarities their nervous and psychical organization, which is determined such traits of personality as heightened emotionality, prolonged afteraction in the cases of conflict situations, absentmindedness, forgetfulness, insufficient selfcontrol, unnecessary concentration of attention on some working moments at the expense of other important moments. To reveal such persons during preliminary medical examinations (during entry to work) practically impossible.

Table 4. The distribution of the mortal accidents in accordance with age of victims and their professional work experience in 2008

Age, years	Number of victims, %					At all
	Professional work experience					
	0-0,2	0,2-0,4	0,4-0,6	0,6-0,8	0,8-1,0	
18-23	0,87%	1,59%	0,72%	0,29%	4,46%	7,93%
24-29	2,46%	1,16%	1,01%	1,16%	3,89%	9,68%
30-35	4,63%	2,60%	1,30%	1,01%	3,39%	12,93%
36-41	5,50%	2,32%	1,88%	2,17%	2,60%	14,47%
42-47	8,54%	2,75%	2,03%	1,30%	2,17%	16,79%
48-53	7,24%	3,04%	1,59%	1,30%	5,51%	18,68%
54-59	7,53%	1,30%	1,30%	1,01%	2,67%	13,81%
>60	2,46%	0,72%	0,43%	0,58%	1,51%	5,70%
At all	39,2%	15,5%	10,3%	8,8%	26,2%	100 %

Psychophysiologists must for this, situations to develop the special tests, and managers, technical inspectors, and industrial hygienists must to determine "dangered on traumatism places of production". Persons, which are pretended to work connected which hightened danger of traumatism must receive special testing-psychophysiological selection. Until this process shall receive scientific, methodical and organized solution, the rule must be taken: that workers which is receive twice of production trauma in the same workplace, in the same production must be placed in a safe job.

Sanitary and hygienic causes of hightened traumatism are various. Among them are: hightened concentration of air--borne neurotoxic chemical substances at the workplace (which can cause an euphoria with unforeseen consequences), reduced illumination, especially during hightened humidity and dustness of air and hightened noise levels, which cause breach of excitation and inhibition processes in central nervous system. This can caused non-adequate reaction on the sudden situation.

The determination of share in traumatism which is caused by sanitary and hygienic conditions in general structure of traumatism causes is very difficult. It is difficult to receive direct evidences of decreasing traumatism causes on account normalization of sanitary and hygienic work conditions. But to deny the relation between traumatism level and sanitary and hygienic work conditions is impossible.

Conclusion

1. The trend is marked in Ukraine concerning decreasing of the industrial traumatism. The decreasing of the general traumatism from 2000 was in 2 times and the mortal traumatism in 1,3 times.
2. The highest levels of traumatism were marked in such kinds of economical activity: extracting and manufacturing industries, construction, agriculture and transport.
3. The materials of special investigation of accidents in the production are testified, that most often mortal accidents are registered in the face-miners, builders, metal-workers electricians, unskilled labourers. 60% of the all mortal accidents fall on these professions.
4. The incidents, which connected with the mortal traumatism are varied in accordance with some professions and technological processes in which they employed: the face-miners-rock, soil brought down, fall of suffered, action of moving subjects; for builders is typical: fall of the suffered from the height, action of moving details, affection by power. The causes of appearing of the accidents in the production are almost nut differed in various professions and are in the plane of organized, technological and psychological factors.

LITERATURA:

[1] The conception of labour protection management. The Orger of the Ministry of Labour and Social Policy № 432, 12.10.2001. (in Ukrainian).
[2] International conference ILO, session ninety five, Geneve, 2006 Preliminary protocol 20A.
[3] Safe and healthy workplaces: making decent a reality. Final draft (ILO, 2007).
[4] Plan of decisions fulfilling of the world meeting at highest level on stable development.
[5] Health of workers. Global plan of action. WHO document ERB 120/28. – 02.05.2007. - P.1-9.
[6] Jonn F., Kim C.: Preveuting injury, illness and disability at work //Scand. J. Work, Environ and Health – 2006. – Vol. 32, № 2. – P. 160-167.
[7] Khelkovskij-Sergeev N.A.: The world Day of labour protection: health of working people – a basis of the society well-being // Med. truda i prom. ecologiya. 2007; № 4 – P. 1-4.
[8] Izmerov N.F.: National project "Health" – role of occupational medicine // Medizina truda i prom. ecologiya. 2007; № 7: 4-11 (in Russian).
[9] Kundiev Yu. I., Nahorna A.M. Occupational health in Ukraine. Epidemiological analysis. Kyiv: Avicena. - 2006; 316 p. (in Ukrainian).
[10] Kundiev Yu. I., Nahorna A.M.: Occupational health in Ukraine. Epidemiological analysis. Kyiv, Avicena. 2007; 396 p. (in Russian).
[11] Kobets V.: The cause of traumatism is inactivity of departmental supervision and absence of the control. Okhorona Pratsi. 2007; № 4: 7-9 (in Ukrainian).
[12] Brown J.A. McDonough P., Mustard C.A., Shannon H.S.: Healthcare use befor and after a workplace injury in British Columbia, Canada // Occup. Env. Med. 2006; Vol. 63, № 6. – P. 396-403.
[13] The information about industrial mortal traumatism in the subjects of Russian Federation in 2001-2005 (on Federal Labour Inspection data) // Okhorona truda i techn. bezop. stroit. 2006; № 6: 36-37. (in Russian).
[14] Tsapko V.G., Shyakhvskij O.O., Labas V., I.: State of traumatism in the agricultural production // Collection "Gigiyena truda" – 2002. issue 33 – P. 52-55.
[15] Koptikov V., Lyovkin M.: State of labour protection at the enterprises of coal industry // Okhorona Pr. – 2007. № 8. – P. 15 - 17. (in Ukrainian).
[16] Kundiev Yu. I., Lysyuk M.O., Nahorna A.M., Degtyarenko T.E.: The state of industrial traumatism in Ukraine: problems and ways of their solution // Okhorona Zdorovya Ukrainy. - 2003; 9(2): 25-29. (in Ukrainian).
[17] Kundiev Yu. I., Lysyuk M.O., Nahorna A.M., Romanenko N.V.: The industrial traumatism in Ukraine: hygienic, social, economical aspects // Ukr. zhurnal problem Med. Pr. 2006; № 1; 3-9.
[18] Kundiev Yu. I., Lysyuk M.O., Nahorna A.M., Romanenko N.V.: The state of industrial traumatism and supervision activity concerning labour protection and safety in Ukraine // Ukr. zhurnal problem Med. Pr. 2008; № 2; 4-9. (in Ukrainian).
[19] Kundiev Y.I., Lysyuk M.O., Nahorna A.M., Romanenko N.V., Kononova I.G., Bediy I.S.: Industrial traumatism in Ukraine: causes appearance // SES. Profilaktychna Med. – 2009 - № 6. – P. 48-51.(in Ukrainian).
[20] The conception of labour protection management. The Orger of the Ministry of Labour and Social Policy № 432, 12.10.2001. 192 p. (in Ukrainian).
[21] Official standing concerning of the investigation and registration of occupational diseases and accidents in production Approved by decree of Cabinet Ministers from 25.08.2004. № 1112. (in Ukrainian).
[22] Yena A., Kalnish B., Bazhenov O., Khmelnitskij O.: Normative and legal basis of professional psychopysiological selection // Okhorona Pr. – 2007. № 4. – P. 36-37. (in Ukrainian).