north								
%	5,9	5,4	5,2	5,1	5,1	5,0	5,1	
(for 10000 population)								

Republic of	118	130	128	129	129	136	139	+ 17,8
Sakha								
Yakutia								
region living a small number	108	106	103	105	105	115	119	+ 10,2
people of the north								

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# A.I. Rumjantseva, L.F. Timofeev

# The economic analysis of morbidity with temporary disability in the Republic Sakha (Yakutia) Arctic areas

In article the analysis of payments of the temporary disablement allowances made in the Arctic group of areas of republic for 2005-2009 is presented. Indicators среднедневного the size of the grant, days of payments are presented, to average duration of 1 case on time invalidity.

**Keywords**: disease with time disability, time disability, payments of temporary disablement allowances.

**Introduction.** Changes in conceptual basis of healthcare financing contributed to considerable shift of emphasis in the approaches to the general or social estimation of various arrangements held. In these conditions one of the main criteria is economical effectiveness and retrenchment as its constituent.

Economical efficiency issues in public health service are considered at many seminars of WHO (World Health Organization) which witnesses the fact that the problem has not been solved determinately yet. The importance of this problem from the medical, social and organizational point of view is determined by the constant growth of general sickness and mortality rates, invalidism of people (more often employable), difficulties of technical support of modern methods of diagnostics and treatment [4]. Nowadays this problem is becoming especially topical in connection with the current demographic situation which is going to result in the reduction of labour reserve [6]. In this connection it is very important to determine the economic damage conditioned by invalidity, disease with time disability (TD) and precocious mortality caused by one or another disease.

Considering the problem of sickness rate with TD, the expert evaluation of time disability (EETD) in the activity of public health service facilities takes an important place. Firstly, this work has important clinical, legal, social and economic meaning: it contributes to the preservation and recovery of employability of the employed after sickness and injuries, has a positive influence on the reduce of sickness rate with time disability and invalidism of people and therefore contributes to the preservation of labour force, raise of labour productivity, economical spending of national insurance funds. Secondly, the certificates given on EETD have much importance for the employed, as on the basis of these the issues of providing the disabled with pensions, allowances, various benefits and privileges provided by the social insurance and security legislation are decided [1]. It is clear that the high sickness rates of the employable people stipulate the high figures of sickness rate with time disability, initial invalidity and irretrievable loss of labour force respectively. In this respect, huge sums of state and municipal institutions (organizations), industrial enterprises of different forms of ownership, other employers' funds are spent. One of the essential components of the social policy of the market economies is compulsory social insurance the techniques of which allow accumulate effectively and distribute purposefully the financial resources providing financial support medical aid and social security to the employed and member of their families in the cases of corresponding risks. The function of management of the funds of compulsory social insurance in case of time disability under the legislation is put on the Fund of social insurance of the Russian Federation (the Fund). Thereby, the Fund is authorized to pay out the allowances, in particular, on time disability, and to control the Russian Federation law observation by the insurants while paying out the stated allowances, and also to control the validity of drawing the certificates of incapacity of work verifying the people's time disability in public health service facilities.

Work content. The Funds joint integrated information system (JIIS) allows monitoring and analyzing efficiently the data on paying the time disability allowances in the republic under such criteria as average-list number of the employed, the number of the days of payments of temporary disablement allowances, the number of cases of temporary disablement allowances payments, the general length of 1 case of time disability and the expenditures on payment on TD. In this paper the stated criteria are analyzed in the profile of the arctic group of regions where belong the following uluses (regions) of the republic: Abyiskiy, Allaikhovskiy, Anabarskiy, Bulunskiy, Verkhoyanskiy, Zhiganskiy, Momskiy, Nizhnekolymskiy, Olyenekskiy, Srednekolymskiy, Ust-Yanskiy, Eveno-Bytantaiskiy. Approximately 6% of the republic's employed population live in the arctic group of regions. Moreover, during the recent years the tendency of the reduction of the employed in the specified regions remains in a greater level than in the republic in general (chart 1).

The largest reduction in the number of the employed in 2009 to compare with 2005 is viewed in Anabarskiy (by 32,2%), Zhiganskiy (32,0%), Alaikhovskiy (25,6%), Olyenekskiy (22,9%) regions. The quotient of initial and general sickness rate during the stated period in the given group are increasing, and in 2009 the initial sickness rate approached the republic's quotients [2, 5] (chart 2).

Thereat, to compare with 2005, in 2009 the quotients of general and initial sickness rate increased in Zhiganskiy region by 51,3% and 34,7% respectively; in Bulunskiy region – by 40,2% and 48,8%; in Momskiy region – by 37,6% and 59,5 %; in Olyenekskiy region – by 27,7% and 17,5%. The analysis showed that the tendency of raise of the general quotients of sickness rate led to the rise of the days of payments on temporary disability (chart 3). Compared with 2005, the rise of the days of payments on temporary disability is viewed in Zhiganskiy (by 55,2%), Momskiy (45,8%), Olyenekskiy (43,2%), Bulunskiy (41,3%), Srednekolymskiy (41,2%) regions. Entirely reasonable and accountable is the fact that the data on general sickness rate and disease with time disability stated above lead to the high quotients of the TD allowances size overall in the arctic group of regions, which in 2009 are equitable to the data in RS(Y) (chart 4).

To compare with 2005, the largest average-day size of the allowance is observed in the following regions: Momskiy – rise by 80,7%; Zhiganskiy – by 65,6%; Allaikhovskiy – by 58,0%; Bulunskiy – by 56,0%; Verkhoyanskiy – by 50,5%. When compared with the average data in the republic, the percentage of change of the average-day size of the allowance in the arctic group becomes higher by 2009. According to the JIIS Fund data three regions having the lowest quotients of the number of the employed were selected, and structural analysis of payments of temporary disablement allowances in 2005-2009 was done (chart 5). This analysis

shows that in Zhiganskiy region as compared to 2005 the number of the employed decreased by 32,0%, while the number of cases of TD increased by 37,4%, the number of the days of payment on TD increased by 55,2%, the average-day allowance size increased by 65,6%. The same tendency is observed in Olyenekskiy and Allaikhovskiy regions.

**Summary.** 1. During the compared period there is a tendency of decrease in the number of the employed in the arctic group of regions by 17,6%, which exceeds the data in the republic in the same period by 2,5 times. 2. With the decrease in the number of the employed in the arctic group of regions the number of days of payment in 2009 compared with 2005 increased by 27,4%. 3. The average-day allowance size in the arctic group of regions since 2005 increased by 44,9%, which is higher than the republic's quotients during the same period by 1,2 times.

Conclusion. On the basis of the undertaken analysis it is possible to conclude that the quotients of disease with time disability remain high, in particular, in the arctic group of regions. These results require the improvement of the whole system of the expert evaluation of temporary disablement including the organization of work on EETD in public health service facilities, staff training at the universities, organization of work of the controlling unit of the Fund of social insurance and Federal service on supervision in the sphere of public health service and social development. Also it is possible to conclude that one of the reasons of the increase in the expenditure of compulsory social insurance on payments of temporary disablement allowances is unsatisfactory state of the expert evaluation of disablement in the number of regions of the arctic group, insufficient training of doctors concerning the expert evaluation of disablement, unsatisfactory control of their work by the heads of public health service facilities. In these conditions the research in the sphere of EETD acquires emphasis. Accumulated theoretical data and large practical experience in the sphere of organizational and methodical basis of expert evaluation of TD and medical and social expert evaluation indicate the necessity of changing the ideology, tasks and functions of the specified services.

Chart 1. Average-list number of the employed (peop.), 2005-2009.

		2005	2006	2007	2008	2009
1	Average-list number of the					
	employed:					
	- in arctic group	31747	32174	28986	27226	26173
	- in RS(Y)	449595	446753	441691	428272	419508
2	The percentage of change by					
	2005:	-	101,3	91,3	85,8	82,4
	- in arctic group	-	99,4	98,2	95,3	93,3
	- in RS(Y)					



Chart 2. Quotients of general and initial sickness rate in arctic group of the regions of RS(Y) (for 1000 of population), 2005-2009.

		2005	2006	2007	2008	2009
1	General sickness rate (for					
	1000):	1543,5	1691,1	1650,8	1731,2	1838,6
	- in arctic group	1591,4	1722,8	1710,2	1759,2	1844,2
	- in RS(Y)					
2	Initial sickness rate (for					
	1000):					
	- in arctic group	851,7	930,4	893,2	961,0	977,9
	- in RS(Y)	885,4	956,8	940,5	987,0	1014,8

Chart 3. The analysis of the days of payments of temporary disablement allowances in arctic group of regions of RS(Y) (for 100 employed, in 2005-2009)

		2005	2006	2007	2008	2009
1	The number of the days of payments of temporary disablement allowances (for 100 employed): - in arctic group - in RS(Y)	567,2 612,7	528,3 606,9	662,8 813,2	730,1 882,9	722,7 865,1
2	The percentage of change by 2005: - in arctic group - in RS(Y)		93,1 99,1	116,9 132,7	128,7 144,1	127,4 141,2

Chart 4. The analysis of the size of payments of temporary disablement allowances in the arctic group of regions of RS(Y) in 2005-2009.

		2005	2006	2007	2008	2009
1	Expenditures on payments of temporary disablement allowances (thous. rub.): - in arctic group - in RS(Y)	66168,7 1106933,9	74062,9 1260290,6	75525,1 1474832, 8	86868,5 1781367,0	100700,4 1962794, 2
2	Average day size of payments of temporary disablement allowances (rub.): - in arctic group - in RS(Y)	367,5 401,8	435,7 464,8	393,1 410,6	437,0 471,1	532,3 540,8
3	The percentage of change in average day size of payments of temporary disablement allowances by 2005: - in arctic group - in RS(Y)	<del>-</del> -	118,6 115,7	107,0 102,2	118,9 117,2	144,9 134,6



Chart 5. Structural analysis of payments of temporary disablement allowances in Allaikhovskiy, Zhiganskiy and Olyenekskiy regions in 2005-2009.

			The percentage of change by 2005							
№	Regions	average-list number of the employed in 2009	cases of time disability in 2009 r. (for 100 employed)	days of payments of temporary disablement allowances in 2009 r. (for 100 employed)	average day size of temporary disablement allowances in 2009	general sickness rate in 2008 (for 1000 of population)	initial sickness rate in 2008 (for 1000 of population)			
1	Allaikhovskiy	74,4	94,4	125,8	158,0	104,6	94,8			
2	Zhiganskiy	68,0	137,4	155,2	165,6	147,2	127,8			
3	Olyenekskiy	77,1	113,3	143,2	144,0	125,6	128,0			

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## Grigorieva V. K., Varfolomeyeva G. D.

Protection of the rights of citizens and non-departmental control over quality of medical aid in OAO GSMK "Sakhamedstrakh" for 2007-2009

**Ключевые слова:** экспертиза, качество медицинской помощи, страхование граждан. **Keywords:** examination, quality of medical aid, insurance of citizens.

### A.N. Grigorieva, N.V. Savvina, G.I. Grigoriev

Effectiveness of supplementary prophylactic medical examination and recovery measures among municipal medical workers of Yakutsk city

Indicators of general, primary disease and temporary disability of medical workers of Yakutsk are noted to be higher as compared with those indicators of the whole population of the Republic Sakha (Y), Yakutsk city as well as of Russia, and even of medical workers of Russia as a whole. The clinical picture of medical workers of Yakutsk city strategically does not differ from the all-Russian one. The conducted supplementary prophylactic medical examination and recovery measures for municipal medical workers of Yakutsk have caused the reduction in indicators.

**Keywords:** medical workers, supplementary prophylactic medical examination, disease, recovery measures, temporary disability.

**Introduction**. Conditions and type of work of public health workers should be paid steadfast attention, taking into account the influence of various adverse factors of industrial