### Table 2

### Physical persons of doctors on the territory of the Republic of Sakha (Yakutia)

	2000	2005	2010	2011	2012	2013	2014	2015
Pediatric profile (according to-17)	463	499	557	555	531	516	493	476
Pediatricians (according to f. 17)	417	446	498	497	472	458	445	431
including district pediatricians (according to f30)	153	239	268	254	240	238	263	261
Neonatologists (according to-17)	46	53	59	58	59	58	48	45

the beginning of the PNP «Health 2005-8.6) (Table 1).

As shown in table 2 in the Republic of Sakha (Yakutia) in the pediatric service there is a positive dynamics in terms of the number of individuals working in the system, for example, pediatric specialists in 2015 -476 (2000-463), pediatricians -431 (2000-417), district pediatricians - 261 (2000 - 153), neonatologists - 45 (2000 - 46).

During the implementation of the PNP «Health», the level of certified and certified pediatricians increased (Table 3). The certificate of a specialist is 94.9% of pediatricians, the certificate of a neonatologist is 96.8% of doctors.

#### CONCLUSION

The quality of medical care, its accessibility and security is directly related to the provision of medical personnel. Undoubtedly, the fact that the implementation of federal programs increased the number of doctors of pediatricians and neonatologists in the healthcare system of the region, and also formed the basis for improving their qualifications.

#### The authors

1. Grigoryeva Antonina Nikolaevna, Deputy Minister of Health of the Republic of Sakha Table 3

Specific weight of certified pediatric physicians on the territory of the Republic of Sakha (Yakutia)

		2000	2005	2010	2015
pediati i	Category	52,0	49,8	51,8	55,9
	Certificate	54,4	82,3	97,6	98,8
neonatolo-	Category	37,0	60,4	71,2	68,9
gists	Certificate	47,8	84,9	100,0	100,0

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# **EFFICIENCY OF CARRYING OUT** PROFILACTIC MEDICAL EXAMINATIONS OF CHILDREN AND ADOLESCENTS IN THE REPUBLIC OF SAKHA (YAKUTIA) BY THE DATA OF OFFICIAL MEDICAL **STATISTICS**

#### **ANNOTATION**

The article analyzes the official medical statistics of these preventive medical examinations of the children of the Republic of Sakha (Yakutia) and the Russian Federation for 2011-2015. The evaluation of the effectiveness of conducting preventive medical examinations in a comparative

Keywords: children, preventive examinations, Yakutia.

### INTRODUCTION

The first decade of the beginning of the 21st century was marked by the presence of two trends developing in the RF healthcare system: an increase in the volume of medical services rendered to the population and a revival of the system of medical examination. The effectiveness of conducting preventive medical examinations in the traditional way is 7-11%. In this regard, the role of the use of automated technologies for preventive examinations of the population

is increasing [2].

Evaluating the quality and efficiency of visiting and practical work of district medical specialists in RS (Y), it is possible to note the following: The central district hospitals try to execute their planned departures in a short time, at the same time brigade method, because of economic, transport and personnel problems. In this regard, more than 80% of the managers of the paramedic midwife remain dissatisfied with the results of these visits [1].

The organization of mass preventive examinations in Yakutsk is also carried out with a heavy workload, both for medical staff and patients. Today, experts widely use the statistical information received during mass dispensary / preventive examinations, but very few people talk about how much and how reliable the data of these works are.

#### Materials and methods

The article presents an analysis of the official medical statistics of these preventive medical examinations of the children of the Republic of Sakha (Yakutia) and the Russian Federation for 2011-2015. We have analyzed the report form of the Federal State Statistical Survey No. 31 «Information on medical care for children and adolescents-schoolchildren.» The report form No. 31 contains the number of children who, during preventive examinations, have a decrease in hearing acuity, decreased visual acuity, speech defect, scoliosis, and posture disorder.

## **RESULTS**

The coverage of preventive examinations of children and adolescents in the RS (Y) is more than 90%.

According to the analysis, the decrease in hearing acuity in children of the RS (Y) in the range of 2.1-2.5 ‰, in the Russian Federation 1.7-2.0 ‰. With age, the prevalence of hearing impairment increases. Before the end of the school in 16-17 years, this pathology meets 3.9-5.7 per 1000 people examined, in the Russian Federation it is 3.0-3.3 cases per 1000. There is an increase in the frequency of hearing impairment before the end of school more than 1.5 times (Table 1).

Reduction of visual acuity is a common violation of health among schoolchildren and occupies one of the leading ranking places in the structure of morbidity. The frequency of occurrence of this disorder in children of the Republic of Sakha (Yakutia) (RS (Y)) varies from 53.3 to 63.3 ‰, in the Russian Federation from 70.0 to 74.3 %; before the end of school in 16-17 years this pathology was revealed in 127,4-149,6 cases out of 1000 examined, in the Russian Federation 151,6 - 153,2. In the whole process of school education, the prevalence of visual impairment increases 2.5 times. The level of detectability of this pathology in the Russian Federation is higher than in the Republic of Sakha (Yakutia). (Table

A speech defect is a common violation among children attending pre-school institutions and students of the first classes of mass schools. The frequency of occurrence of this violation in the Republic of Sakha (Yakutia) in the range from 15.1-17.3 %, in the RF 31.2-34.2%. Compared with RF in the RS (Y), two times less. The frequency of occurrence of this disorder among preschool and primary school children in the RS (Y) in the range of 44.1-53.4 ‰, in the RF 77.1-91.7\%. In this age period in the RS (Y) is 2 times lower. Among students in the middle and upper grades, speech defects are rare. Before the end of the school at the age of 16-17 this pathology

Table 1

Results of preventive examinations with a decrease in hearing acuity in children and adolescents (per 1000 inspected)

			Revealed during examination with a					
Contingents		decrease in acuity of hearing						
e e e e e e e e e e e e e e e e e e e			2012	2013	2014	2015		
TOTAL CHILDREN UNDER THE AGE OF 14 AND TEENAGE SCHOOLCHIL-		2,5	2,2	1,9	2,1	1,7		
DREN AGED 15-17 YEARS	RF	2,0	2,0	1,8	1,7			
From the total: before entering a preschool		1,2	1,5	1,5	2,3	1,0		
institution	RF	1,6	1,7	1,6	1,4			
Before entering school		2,2	2,0	1,9	1,7	2,4		
		2,4	2,3	2,2	2,1			
When moving to subject learning (grades	RS (Y)	2,8	2,7	2,9	2,4	1,8		
4-5)		2,8	2,7	2,5	2,3			
Before graduation from school (16-17 years)		5,7	4,3	3,3	3,9	3,4		
Before graduation from school (10-17 years)	RF	3,3	3,2	3,0	3,0			

Table 2

Results of preventive examinations with reduced visual acuity in children and teenage schoolchildren (per 1000 inspected)

Contingents			Revealed during examination with a						
			decrease in visual acuity						
			2012	2013	2014	2015			
TOTAL CHILDREN UNDER THE AGE   R		63,4	58,8	53,7	53,3	47,5			
OF 14 AND TEENAGE SCHOOLCHIL- DREN AGED 15-17 YEARS	RF	74,3	74,4	70,7	70,0				
From the total: before entering a preschool	RS (Y)	10,9	10,5	11,0	32,9	14,9			
institution		26,8	26,3	27,6	26,3				
Before entering school		53,6	48,4	50,6	47,4	47,6			
		56,9	56,0	54,3	54,7				
When moving to subject learning (grades	RS (Y)	112,1	92,7	102,4	96,2	74,8			
4-5)		120,9	117,9	110,5	109,8				
Before graduation from school (16-17 years)		149,6	147,1	136,0	127,4	146,8			
		153,2	153,4	156,0	151,6				

Table 3

The results of preventive examinations with speech defects in children and teenage schoolchildren (by age groups) (per 1000 inspected)

Contingents			Identified in examinations with speech						
			defects						
			2012	2013	2014	2015			
TOTAL CHILDREN UNDER THE AGE	RS (Y)	17,3	16,8	14,8	15,1	12,9			
OF 14 AND TEENAGE SCHOOLCHIL- DREN AGED 15-17 YEARS	RF	34,2	35,3	32,6	31,2				
From the total: before entering a preschool	RS (Y)	35,3	37,1	36,6	46,1	48,8			
institution	RF	87,1	85,4	81,5	79,2				
Before entering school		53,4	49,4	43,3	44,1	39,4			
		91,7	86,0	82,9	77,1				
When moving to subject learning (grades	RS(Y)	6,6	7,2	7,7	7,0	6,3			
(4-5)		12,8	11,5	11,1	10,2				
D-f 1(1( 17)		4,9	4,1	3,2	2,7	2,6			
Before graduation from school (16-17 years)	RF	4,1	3,7	3,5	3,7				

is less common (RS (Y) 2.7-4.9 ‰, in the RF 3.7-4.1 ‰.). In the process of school education, the prevalence of speech deficit among students decreases in 11,3 times (Table 3).

Posture disorders are common health problems among students in mass schools and occur 3-6 times more

often than scoliosis. The frequency of occurrence of this violation in the RS (Y) is in the range from 15.1-17.3 % (in the RF 31.2-34.2 %) and twice less than in the RF. The prevalence of these functional disorders in children before entering school is 25.4-34.2 % (RF 63.2-77.8 %). At the age of 15 years in the RS

Table 4

The results of preventive examinations with impaired sediment in children and adolescent schoolchildren (by age groups) per 1000 examined

		Revealed during examination								
Contingents		with a violation of posture								
		2011	2012	2013	2014	2015				
TOTAL CHILDREN UNDER THE AGE OF 14 AND TEEN-	RS (Y)	26,9	24,4	22,5	22,3	19,1				
AGE SCHOOLCHILDREN AGED 15-17 YEARS	RF	76,0	72,5	69,8	65,3					
From the total: before entering a preschool institution	RS (Y)	5,0	6,7	6,4	13,0	5,3				
	RF	18,8	17,7	17,5	14,1					
Before entering school	RS (Y)	34,2	32,8	25,2	25,4	22,8				
Before entering school	RF	77,8	74,6	69,1	63,2					
When moving to subject learning	RS (Y)	49,8	40,0	33,2	33,3	28,1				
(grades 4-5)	RF	124,3	115,0	106,8	98,2					
Before graduation from school	RS (Y)	50,7	46,4	53,0	43,6	48,7				
(16-17 years)	RF	115,0	112,1	114,5	107,7					

Table 5

The results of preventive examinations with scoliosis in children and teenage schoolchildren (by age groups) per 1000 examined

		Darr				tions		
	Revealed during examinations							
Contingents		with scoliosis						
		2011	2012	2013	2014	2015		
TOTAL CHILDREN UNDER THE AGE OF 14	RS (Y)	12,7	11,3	8,9	8,3	6,6		
AND TEENAGE SCHOOLCHILDREN AGED	RF	20,0	19,7	18,1	16,8			
15-17 YEARS	KI.	20,0						
From the total: before entering a preschool	RS (Y)	0,7	0,8	1,2	2,2	1,0		
institution	RF	1,8	1,8	1,9	1,6			
Before entering school		6,5	7,6	5,0	2,7	3,8		
		9,8	9,2	8,1	8,2			
When moving to subject learning (grades 4-5)		18,1	16,3	12,6	11,3	9,6		
		29,4	27,4	25,0	23,1			
Before graduation from school (16-17 years)		41,6	37,7	35,7	31,0	25,0		
		58,0	55,8	55,0	50,0			

(Y) 43.6-50.7 % (RF 129.4-144.1 %). Before the end of school in 16-17 years in the range of 22,3-26,9 ‰ and 3 times less than in the RF (RF 65,3-76,0 %)

Frequency of occurrence of scoliosis according to the data of preventive examinations in the RS (Y) in the range from 8,3-12,7 % (RF 16,8-20,0 %). Compared with Russia, twice less. The frequency of detection of this pathology before admission to school varies between 2.7-6.5 ‰, (RF 14.6-17.2 ‰). Before the end of the school in the 16-17 years in the range of 2.7-4.9 % (RF 3.7-4.1 ‰) (Table 5).

Thus, the comparative analysis of the results of mass preventive examinations in the Republic of Sakha (Yakutia) and

the Russian Federation showed that the prevalence of speech defects, posture disorders and scoliosis for the period from 2011-2014 is significantly lower in the RS (Y) than in the whole of the RF.

The indicator of the provision of the population of the Republic of Sakha (Yakutia) by doctors, average medical workers is not lower than in the Russian Federation as a whole. However, the obtained results of the analysis of official medical statistics on the prevalence of pathology in the course of mass preventive medical examinations once again confirm the fact of low detectability due to low availability of narrow specialists. According to official data, only 9 districts are provided with orthopedic doctors from 34 districts of the country, 4 districts do not have ophthalmologists, and there are no speech therapists in almost all districts.

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