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Federal service on customers' rights protection and human well-being surveillance

Sanitary-and-epidemiologic well-being of children in the Russian Federation

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The article provides a morbidity analysis and covers the epidemiologic process development tendencies in the Russian Federation for a range of infectious diseases, including those controlled by specific preventive measures, and the measures taken to fight them, aimed at preserving Russia's status as a poliomyelitis-free country, eliminating endemic measles and rubella, reducing hepatitis B and HIV-infection morbidity and preventing influenza and ARVI from spreading on the territory of Russia.

The article gives an analysis of how the measures aimed at maintaining sanitary-and-epidemiologic well-being in the process of preschool and school education, including measures of administrative responsibility enhancement for the official and corporate bodies for non-observance of sanitary-and-epidemiologic requirements for the rest and health improvement conditions of children, were fulfilled. An assessment of how aggressive information influences the population's health, especially that of children and adolescents, and measures taken by the Federal service on customers' rights protection and human well-being surveillance to decrease its influence is given. Main goals and activity areas on improving health protection and maintaining sanitary-and-epidemiologic well-being of the citizens.

Keywords: *infectious diseases, prevention, population immunization, poliomyelitis, measles, rubella, hepatitis B, HIV-infection, influenza, children's educational institutions, information influence.*

In his message to the Federal Assembly of the Russian Federation (12 December 2012), the President of the Russian Federation V.V. Putin defined childhood issues as the most urgent:

“Our country has historically had an attitude to life that involves living for the future, for our children. Of course this is a very important and noble task and purpose. We need new methods, a wide range of fitness activities, especially for young children. As we know, lifelong habits and interests are formed at this age, and we must work to encourage them...”

The world community has long ago concluded that epidemics are not a consequence, but a reason for restraining economic development and aggravating poverty in many regions of the world.

191 countries adopted the Millennium Declaration, which formulated the millennium development goals (MDG), including those concerning health of children and mothers, at the special session of the United Nations General Assembly:

- MDG 4 – reducing child mortality rates;
- MDG 5 – improving maternal health;
- MDG 6 – combating infection caused by human immunodeficiency virus (HIV) / acquired immune deficiency syndrome (AIDS), malaria and other diseases.

Deadline for their achievement was set in 2015.

The G8 summit in 2000 in Okinawa emphasized that MDG cannot be achieved without considerable effort in combating infectious diseases: “Health is key to prosperity. Infectious and parasitic diseases, most notably HIV/AIDS, TB and malaria, as well as childhood diseases and common infections, threaten to reverse decades of development and to rob an entire generation of hope for a better future”.

That is why the Russian Federation, as a member of the Group of Eight, regards MDG within the framework of resisting a wide range of threats connected with epidemics spread. This approach was reflected in the resolution of the Saint-Petersburg summit of the Group of Eight. This is especially important for Eastern Europe and Central Asia which encounter not only with HIV/AIDS and tuberculosis issues, but also with poliomyelitis, measles, tropical diseases, dangerous infections and also inadequate sanitary conditions.

The Group of Eight is one of the leaders of consolidating international effort in this area. Its leadership is not only about political aspect, but also about a considerable financial contribution of the Group of Eight into the resolution of global healthcare issues.

Realization of the following continued in 2012 within the framework of the resolution of the Group of Eight on combating infectious diseases in order to maintain nation health, reduce mortality rate and increase life expectancy:

- National priority project “Health” aimed at the population immunization, prevention and treatment of HIV/AIDS, viral hepatitis B and C;
- conception of financial provision of Russian initiatives of combating infectious diseases;
- regional and federal programs of sanitary-and-epidemiologic well-being of the population;
- National program aimed at maintaining a poliomyelitis-free country status;
- National measles eradication program in the Russian Federation;
- measures aimed at sanitary protection of the territory of the Russian Federation from the delivery and spread of dangerous infectious diseases.

The conducted complex of measures allowed attaining better sanitary-and-epidemiologic setting and reduction in infectious morbidity rate, primarily among children.

Morbidity rate reduction was registered in 2012 in 28 nosologies, the most substantial being the reduction in typhoid fever (27.3%), enterovirus meningitis (19.2%), acute viral hepatitis B (18%), acute viral hepatitis C (17.8%), meningococcal infection (14.6%), Crimean-Congo hemorrhagic fever (25.7%), tick-borne viral encephalitis (23.4%) and tick-borne borreliosis (17.3%) morbidity rates.

No cases of acute paralytic poliomyelitis, including the paralytic poliomyelitis associated with vaccination, were registered in 2011-2012.

At the same time, the increase in viral hepatitis A (27.6%; in children – 33.1%), pertussis (50%), measles (230%), rubella (170%), tularemia (140%), hemorrhagic fevers (14.9%), rickettsioses (17.7%), HIV-infection (11.7%), trichinosis (31.3%) morbidity rates was noted in 2012.

The last poliomyelitis case, caused by wild poliovirus, in the country was registered in September 2010. This indicates the end of wild poliovirus circulation in Russia, confirmed by the European certification committee at the meeting in 2011.

Measures aimed at maintaining a poliomyelitis-free country status continued in 2012. An additional immunization of children against poliomyelitis was organized and conducted in the North Caucasian region and also in 62 state subjects where the 95% coverage by preventive vaccines of children of the decreed age was not fulfilled. Ca. 315,000 children (98.8% of the immunization-subject) were vaccinated throughout the immunization campaign, 227,000 out of them coming from the North Caucasian Federal District regions (99.8% of the immunization-subject). This work will continue in 2013.

Moreover, it is necessary to continue work on the enhanced supervision of poliovirus detection in the environment.

An essential part of maintain the poliomyelitis-free country status is supervision of enterovirus infection. This infection’s outbreaks, primarily water-borne, are registered almost everywhere, mainly among children. The biggest number of the infected is revealed in the Siberian and Far Eastern Federal Districts. According to the current data, cohort infection nidi in 2012 were registered in Khabarovsk Territory, Orenburg and Tomsk Regions and Moscow.

Epidemiological Surveillance and Enterovirus Infection Prevention Program unrelated to poliomyelitis has been realized in our country since 2009; it has also been approved for 2012-2014.

Morbidity increase in several infections managed by specific immune prevention measures was registered in the past year.

Thus, measles morbidity in 2012 increased 3.3 times and constituted 1.47 per 100,000 people (0.44 in 2011). 2,106 measles cases were registered in 58 subjects of the Russian Federation in 2012; it should be noted that the share of children under 17 years of age considerably increased and constituted 57.2%.

The biggest number of measles cases (ca. 90%) was registered from November 2011 to June 2012; measles morbidity epidemiological situation stabilized by the end of 2012 due to active organization of preventive anti-epidemic measures (only 2 measles cases were registered in December 2012).

The measles epidemiological character in the Russian Federation is significantly influenced by the unfavorable epidemiologic situation in the European region. According to the Regional Office for Europe of the World Health Organization (WHO), in 2011-2012 measles was registered in 43 European countries. The situation with measles slightly improved in 2012: the measles morbidity rate in European countries reduced from 32,100 (2011) to 19,000 cases (2012) – 24 per 1,000,000 on the average. The highest morbidity rate was noted in Romania, Ukraine, Israel and the United Kingdom.

The highest morbidity rate in the Russian Federation were noted in the Southern and North Caucasian Federal Districts: in Volgograd Region (10.46 per 100,000), Republics of Ingushetia and North Ossetia (5.09 and 8.84, accordingly), Kabardino-Balkaria (6.05) and Stavropol Territory (7.11).

A significant number of the measles-infected patients was also registered in Moscow and Saint Petersburg, Krasnodar Territory, Moscow Region and the Republic of Dagestan.

Measles epidemiologic process's peculiarity in our country in the last 2 years was the registration of hospital infection outbreaks involving medical staff and unvaccinated children of different age groups in care.

Only 3 such outbreaks were registered in 2010, in 2011 – 17, while in 2012 – 27 measles outbreaks with the infection spread among the patients and personnel of inpatient hospitals and children's institutions with children's round-the-clock stay (Moscow, Saint Petersburg, Moscow, Belgorod, Volgograd, Kursk, Yaroslavl Regions, Krasnodar, Stavropol, Khabarovsk Territories, Republics of Dagestan, Kabardino-Balkaria and Udmurtia). It should be noted that the epidemiologic process mainly involved unvaccinated children. Medical staff furthered the infection spread in several cases: 95 measles cases were registered among medical personnel; most of them did not undergo preventive vaccination or were vaccinated against measles only once.

In the process of investigating outbreaks, considerable shortcomings were revealed in the organization of planned population vaccination and immunization according to epidemiological indications, violation of sanitary legislation requirements in observing antiepidemic regimen at medical-preventive organizations and shortcomings in rendering medical care to the infected and in diagnosing disease.

Cohort measles infections in 2012 were also registered among the non-immune gypsy population (both children and adults): in Kaluga (11 cases), Tambov (11 and 5 cases), Lipetsk (41 cases) and Samara (11 cases) Regions.

The most effective measure of terminating nidi is to immunize population. More than 2.95mn adults and 2.9mn children were vaccinated against measles in Russia in 2012, including immunization by epidemiological indications.

Rubella surveillance, including congenital rubella syndrome, is now being integrated into the existing measles surveillance system.

Thanks to cohort immunization against this infection, rubella morbidity rate decreased more than 150 times from 2005 (from 100.8 to 0.67 per 100,000 in 2012). No rubella cases were registered in 2012 in 25 subjects of the Russian Federation; in 57 subjects the morbidity rate was less than 1 case per 100,000 people. Adults were prevalent in the age structure of patients (92%). 90.7% of rubella patients in 2012 were people who were not vaccinated against this infection and people with unknown immunization history.

94-95% of rubella nidi in 2011-2012 did not have the infection spread; this indicates a relatively high level of community immunity.

Only singular cases of congenital rubella syndrome have been registered in recent years.

Use of experience of measles elimination in the Russian Federation and adequate maintenance of extensive population preventive coverage by vaccination against this infection and successful integration of rubella surveillance in the measles surveillance system will most probably eliminate rubella in the Russian Federation.

According to the WHO strategy on eliminating measles and rubella in the European region, the National measles liquidation program has been realized in the Russian Federation since 2002.

The morbidity rate concordant with the elimination criterion – less than 1 case per 1,000,000 people – had been achieved in Russia by 2010 thanks to purposeful work, mainly on the population immunization and measles epidemiological surveillance.

The WHO Regional Office for Europe intends to conduct verification (observation) of measles and rubella epidemiological situation in all countries of the region from 2013 onwards.

Program “Measles and rubella prevention in the period of their verification and elimination in the Russian Federation (2013-2015)” and an algorithm of its realization have been developed in our country.

The main principles of the program’s realization are high population coverage by vaccination against measles and rubella, timely identification, account and obligatory laboratorial confirmation of all measles and rubella cases and molecular-genetic typing of measles and rubella virus strains circulating within the population in order to confirm elimination of these infections in the Russian Federation.

Successful realization of this program’s measures will allow the Russian Federation to attain the status of endemic-measles-and-rubella-free territory in the process of measles and rubella elimination verification in the European region.

Cohort immunization against viral hepatitis B in the framework of the National priority project “Health” allowed reducing this infection’s morbidity rate six-fold (from 8.6 per 100,000 in 2005 to 1.42 per 100,000 in 2012); the morbidity rate in children reduced even more considerably – 16.7 times.

Only 35 children under 17 years of age were registered with the infection in 2012 (0.13 per 100,000 children under 17 years of age). The number of viral hepatitis B carriers among children under 17 years of age reduced by 13.1%.

At the same time, the acute viral hepatitis B morbidity rate remains much higher than in the Federation in general in Ivanovo (3.49), Kaluga (2.67), Tomsk (2.86), Kaliningrad (4.78) and Vladimir (2.7) Regions and in Moscow (2.76 per 100,000).

It should be noted that the immunization of people subject to vaccination in 2012 in Vladimir, Ivanovo and Kaluga Regions was conducted slowly: vaccination plans were fulfilled only 20, 42 and 24% - mainly because of the unsatisfactory explanatory work with the adult population.

Epidemiologic situation with influenza and acute respiratory viral infections (ARVI) in the Russian Federation and most territories of the European region is presently considered epidemic.

According to the Decree of the Chief State Medical Officer #43 of 06.08.2013, plans of preventive and antiepidemic measures were corrected, measures for providing medical-preventive organizations with the necessary medicines, protectors and equipment were assumed, immunization of population, especially of the high infection risk groups, was organized in order to prepare to the epidemic season.

According to the results of preventive immunization of children and adults against influenza, 37,734,758 people (26.4% of population) were vaccinated, including:

- adults – 20,752,103 people;
- children – 12,885,749 people;
- at the expense of other funding sources – 4,096,906 people.

Given the influenza, ARVI and community-acquired pneumoniae morbidity monitoring results and circulation of influenza and ARVI viruses, organizational, preventive and antiepidemic measures are gradually being introduced. Control over the timely close-up of children's educational institutions in case of the infection spread threat has been established.

According to the calendar of preventive immunization by epidemiologic indications at the expense of subjects of the Russian Federation, immunization of population is conducted against 13 more infections (viral hepatitis A, tick-borne encephalitis, typhoid fever, meningococcal infection, rabies, tularemia, leptospirosis, anthrax, plague, brucellosis, Sonne dysentery, yellow fever and Q fever).

Preventive immunization against these infections given the regional epidemiologic environment contributes considerably into maintaining sanitary-and-epidemiologic well-being of population in the country.

Significant reduction in total volume of immunization against viral hepatitis A in recent years is noticeable: from 511,640 people in 2008 to 388,982 in 2012.

Increase in this infection's morbidity by 27.6% was noted in 2012, among children – by 33.1%. Viral hepatitis A morbidity rate in several subjects of the Russian Federation significantly exceeds the Russian average level (5.47 per 100,000): in the Republics of Dagestan and Tuva, Astrakhan, Penza and Kurgan Regions. Viral hepatitis A outbreaks were registered in 2012 in the Republics of Dagestan and Penza Region.

It should be noted that viral hepatitis A immunization was not, or insufficiently, conducted in 34 subjects of the Russian Federation, including the aforementioned subjects.

Viral tick-borne encephalitis and tick-borne borreliosis remain topical. Extensive increase in the number of the Ixodidae and expansion of their areal have been taking place in the last 15 years. Morbidity of viral tick-borne encephalitis in Russia decreased by 23.4% in the epidemic season of 2012, of tick-borne borreliosis – by 17.3%.

The apportionment of funds for acaricide treatment exceeded the planned amount by 4.3% in 2012; however, the volume of funds for acaricide treatment decreased 1.6 times in comparison with 2011. The allocated funds were not drawn in the Republic of Udmurtia and Khanty-Mansiysk Autonomous Area (40.5 and 98.06%, accordingly).

One of the effective methods of combating viral tick-borne encephalitis is the specific population prophylaxis. The total number of the vaccinated has increased within the last 7 years (from 1.9mn people in 2005 to 3.1mn in 2012). However, according to the data of 2012, the endemic territories' population immunization coverage in Russia remains insufficient.

It should be taken into account when organizing immunization that the first Russian vaccine "Tick-E-Vac" aimed at the specific prevention of viral tick-borne encephalitis (for children of 1-16 years of age; produced by the FSUI "RAMS Manufacture of Bacterial and Viral Preparations of the Chumakov Institute of Poliomyelitis and Viral Encephalitides") was registered and permitted to use in the prescribed manner in 2012. The vaccine had undergone the obligatory complex of studies, is safe and effective.

Parasitic diseases are a topical issue for children; 78% of all the infected are children. Enterobiasis, ascariasis and toxocariasis prevail among the parasitoses registered in children.

The most widespread parasitosis is enterobiasis; its share in the structure of parasitic diseases is 72%. Ca. 95% of the infected are children. The highest enterobiasis level is noted among children attending senior groups of children's preschool institutions and junior school children.

Ascariasis takes the 2nd place after enterobiasis in spread in children. 974 ascariasis cases in children under 1 year of age were registered in the Russian Federation in 2012. The highest ascariasis morbidity rate is noted in children of 3-6 years of age – 56.5 per 100,000 children of this age; this is 2 times higher than the average aggregate value in Russia.

One of the reasons why these diseases are so widespread is violation of sanitary-and-epidemiologic regimen in children's organizations.

Increase in toxocariasis morbidity is a serious problem, especially in big cities. 1,367 toxocariasis cases were registered in 2012 in children under 17 years of age (5.76 per 100,000 children of this age group). High percentage (up to 10%) of people seropositive to toxocara antigens indicates the prevalence of the disease.

This situation results from a significant increase in the number of dogs in cities, failure to comply with the rules of how to keep them, lack of excrement disinfection means; this leads to the causative agent's intense circulation in the environment. The toxocara infection rate of home and stray dogs is 18-26%. Results of testing medical personnel on the issues of clinical presentation, epidemiology and prevention of helminthiasis, including, toxocariasis, show insufficient knowledge in these spheres – only around a half of medical staff handle the test control.

The work on improving the current national calendar continued in 2012: propositions of expanding the national preventive immunization calendar by introducing a pneumococcal infection vaccine were prepared.

Pilot project on the immunization of small children against pneumococcal infection in Saint Petersburg, which is planned to fulfill in 2013-2014, was developed together with the Rostropovich-Vishnevskaya Foundation.

The question of reviewing poliomyelitis immunization tactics is now being worked out: it is necessary to return to the triple immunization of children under 1 year of age against poliomyelitis by an inactivated vaccine, as was adopted in the framework of the National priority projects "Health" in 2007. This corresponds to the current epidemiologic situation and WHO recommendations (according to the global strategic plan of the final poliomyelitis liquidation in 2013-2018).

Moreover, it is necessary to review the tactics of immunizing children under 1 year of age against hemophilic infection. Not only the risk group, but all children should be immunized against this infection, as provided for by the current national preventive immunization calendar in the Russian Federation. Federal service on customers' rights protection and human well-being surveillance deems reasonable to review the national calendar in the first quarter of 2013 towards the extension of the contingency of children subject to immunization.

One of the most important areas of the National priority project "Health" is combat with HIV-infection. 719,445 HI-infected Russian citizens had been registered in the Russian Federation by 01.01.2013, including 6,306 children, 5,957 out of them being children born to the HIV-infected mothers.

69,280 new HIV infection cases were revealed in 2012 among Russians.

Epidemic's peculiarity on the modern stage is an increase in the HIV-infection epidemic feminization rate associated with heterosexual contacts in more than 60% of cases.

The number of HIV-infected women who conclude pregnancy with childbirth has increased in the last 5 years: from 49.7 to 73%.

This is why one of the most important goals of the HIV-infection prevention is to prevent HIV transmission from a pregnant woman to a fetus; this is provided for by the National priority project "Health".

13,327, or 95.5% of the infected pregnant women who concluded pregnancy with childbirth, received anti-retrovirus drugs in order to prevent mother-to-child HIV transmission. 89.6% of these "mother-infant" couples completed the 3-stage prevention course.

Infant chemoprophylaxis coverage was 98.4%.

Thanks to the work conducted, the share of children who got HIV infection from their mothers during pregnancy and labor is reducing year by year.

Negative tendency connected with children's infection at breast feeding continues. Investigation of such cases conducted by territories revealed that mothers contracted HIV-infection in the last stages of pregnancy or after labor, which is why the necessary preventive measures had not taken place.

Cases of late HIV-infection diagnostics in frequently and long-term ill children who have repeatedly been treated at pediatric inpatient hospitals of different levels have been noted in recent years; this indicates the necessity in drawing special attention to training pediatricians in such issues as diagnostics and treatment of HIV-infection in children.

Antiepidemic work remains one of the main activity areas of the Federal service on customers' rights protection and human well-being surveillance.

A pronounced tendency to the increase in the number of registered nidi of infectious and parasitic diseases has been noted in the Russian Federation in recent years.

According to the current data, 170 nidi of infectious diseases were registered in 2012; this exceeds the average long-term figures 1.6 times. More than 4,000 people fell victims, including more than 3,000 children.

Fecal-oral transmission took place in 51.8% of epidemic nidi. Droplet transmission nidi had a considerable specific weight (24.1%) in 2012 due to cases of measles, ARVI and community-acquired pneumoniae.

6 epidemic nidi of community-acquired pneumoniae were registered in 2012, mainly of mycoplasmal etiology, caused by violations of sanitary legislation on the accommodation of children in organized groups, no timely isolation of ARVI patients and late start of anti-epidemic measures.

Practical policies PP 3.1.2.3047-13 "Epidemiologic supervision of community-acquired pneumoniae" were approved in January 2013; they defined the main approaches epidemiologic supervision and organization of preventive measures in nidi of community-acquired pneumoniae.

The most widespread in 2012 were measles (32 nidi, 18.8%), norovirus infection (31 nidi, 18.2%) and salmonellosis (27 nidi, 15.9%).

Epidemiologic nidi were most often registered in children's organized groups (kindergartens, schools, internats, medical institutions – 42.4%) and medical-preventive organizations (27%).

The main causes of airborne and indirect physical contact outbreaks were, as a rule, carrying of an infection into the institution, untimely identification and isolation of the infected, violation of sanitary-and-anti-epidemic (prophylactic) regimen at medical-preventive organizations and lack of preventive vaccines in medical personnel.

Fecal-oral outbreaks were caused by gross technological process violations at enterprises producing and trading food and at nutrition units preparing food, such as:

- failure to comply with storage life and food handling regulations;
- failure to comply with requirements of room maintenance, processing of kitchen equipment, stock and tableware;
- failure of employees of food enterprises and nutrition units to comply with personal hygiene regulations.

19 nidi of infectious diseases with multiple morbid events were registered in children's health institutions of the Russian Federation in the summer season of 2012; 683 people got infected in total, including 477 children. Infections took a fecal-oral transmission route in most nidi. Acute intestinal infections of viral etiology (norovirus and rotavirus infections) dominated in the etiologic structure of outbreaks; they constituted 60% of all nidi at medical-preventive organizations.

The worst subjects of the Russian Federation in terms of the total number of epidemic nidi registered according to the current data in 2012 were Moscow (11 nidi in total; 9 measles nidi), Moscow Region (9 nidi in total; 5 measles nidi), Khabarovsk Territory (7 nidi), Irkutsk Region (7 nidi), Saint Petersburg (6 nidi), Nizhniy Novgorod Region (6 nidi), Khanty-Mansiysk Autonomous Area (5 nidi) and Volgograd Region (5 nidi).

Special attention in the activity of specialists of bodies and institutions of the Federal service on customers' rights protection and human well-being surveillance in 2012 (as in previous years) was paid to sanitary-and-epidemiologic surveillance and realization of measures aimed at maintaining sanitary-and-epidemiologic well-being in the process of preschool and school education.

On the one hand, this activity is relevant because of the increase in children's morbidity in several classes and groups of diseases and certain diseases; on the other – because of the material and technical state of children's educational institutions.

Realization of measures on the prevention of diseases in students and inmates, preservation and promotion of their health, including measures on the organization of their diet, was based on the regulations determined by:

- Decrees of the President of the Russian Federation #597 "On the measures of fulfilling state social policy" and #599 "On the measures of fulfilling state policy in education and science" of 07.05.2012;
- "National strategy of actions in behalf of children in 2012-2017" approved by the Decree of the President of the Russian Federation #761 of 1 June 2012;
- Order of the Government of the Russian Federation #1961-r "On the adoption of a plan of primary measures of fulfilling the most important conditions of the National strategy of actions in behalf of children in 2012-2017 until 2014" of 15.10.2012;

- Order of the Deputy Prime Minister of the Russian Federation V.Y. Surkov #VS-P8-2554 of 04.05.2012 on fulfilling the phased program (“Roadmap”) of eliminating queues to preschool institutions for children of 3-7 years of age in view of the level of expected expenses;
- list of orders of the President of the Russian Federation V.V. Putin on the organization of health recovery for children in 2012 of 7 August 2012 (#Pr-2215).
- record of the session “On the organization of children’s recreation” presided by the Prime Minister of the Russian Federation D.A. Medvedev of 1 June 2012 (#DM-P12-5).

Among other things, the Government of the Russian Federation is to guarantee 100% preschool education availability to children of 3-7 years of age by 2016 in compliance with the Decree of the President of the Russian Federation #599 “On the measures of fulfilling state policy in education and science” of 07.05.2012; in order to achieve this, it is planned to increase total financing of state scientific funds up to 25bn rubles by 2018.

Together with executive bodies of subjects of the Russian Federation, the Government of the Russian Federation is to assume measures aimed at eliminating acceptance queues to preschool educational institutions for children of 3-7 years of age and providing for the increase in forms and ways of receiving preschool education, including private preschool educational institutions, by September 2012. According to the results of a conference call of 29.08.2012 conducted by the Prime Minister of the Russian Federation D.A. Medvedev, the following was stated “On the preparedness of educational system to the beginning of the 2012-2013 school year”:

“The main goal of educational system’s modernization is to create conditions for the uninterrupted intellectual and creative development of the younger generation; this task predetermines a complex solution for educational institutions, from preschool institutions to universities, naturally”.

The realization of the phased program (“Roadmap”) of eliminating queues to preschool institutions for children of 3-7 years of age in view of the level of expected expenses started in 2012 in compliance with the Order of the Deputy Prime Minister of the Russian Federation V.Y. Surkov #VS-P8-2554 of 04.05.2012.

Analysis of materials shows that independent phased programs (“Roadmaps”) have been developed and fulfilled in almost all subjects of the Russian Federation.

“Roadmap” is approved and is being fulfilled as an individual program in 30 subjects of the Russian Federation (in Altai Territory, Volgograd and Kostroma Regions, Republic of Komi, Murmansk Regions, Republic of Khakassia, Novgorod and Penza Regions etc.).

Regional programs have developed in the framework of fulfilling “Roadmap” in several Regions.

“Roadmap” is being fulfilled in the framework of the existing regional programs of preschool education development by modifying and expanding them in 33 subjects of the Russian Federation: Jewish Autonomous Region, Kamchatka Territory, Republic of Karachay-Cherkessia, Novosibirsk Region, Republic of Karelia etc.

Realization of “Roadmap” measures in 2012 had positive dynamics for the increase in the number of preschool institutions in the Russian Federation in whole.

The total number of preschool organizations in 2012 was 50,309.

1,945 preschool institutions were put into operation in 2012.

Increase in the total number of preschool organizations is primarily caused by the following:

- newly built kindergartens (385 institutions for 53,357 children);
- return of some buildings of preschool organizations into the preschool education system (386 institutions for 42,049 children).

949 preschool institutions for 79,353 children more were reopened after renovation and reconstruction.

Increase in the number of institutions allowed shortening queues to preschool institutions by 75,617 children. At the same time, the number of children awaiting acceptance to preschool institutions is 2,110,658 (18.8%):

- children of 0-3 years of age – 1,600,166 (by 01.01.2012 – 1,565,581);
- children of 3-7 years of age – 510,492 (by 01.01.2012 – 602,694).

Total occupancy percentage of preschool institutions reduced by 2.5% (from 104.6 to 102.1%).

The issue of placing children to preschool institutions is especially daunting in the following Regions:

- in Siberian Federal District – 27.3% of children await acceptance to preschool institutions (Republic of Tuva – 32%, Krasnoyarsk Territory – 44.5%, Irkutsk Region – 32%, Omsk Region – 32.6%, Republic of Altai – 31%);
- in Ural Federal District – 26.5% of children await acceptance to preschool institutions (Khanty-Mansiysk Autonomous Area – 38.7%, Sverdlovsk Region – 34%, Yamalo-Nenets Autonomous Area – 32.2%);
- in Southern Federal District – 21.4% (Volgograd Region – 33%).

The issue is less daunting in Northwestern (11.8%) and Central (13%) Federal Districts.

However, the problem of providing available preschool education remains in place.

Slow reduction of the specific weight of children awaiting acceptance to preschool institutions is caused by the following reasons:

- insufficient building and putting into operation of new kindergartens;
- untimely recommission of children's institutions remaining under capital repair and reconstruction;
- insufficient financing from budgets of different levels, which could fully solve issues of preschoolers' health protection in organized groups;
- building of residential buildings and blocks in the setting of no advanced building of community facilities, including kindergartens;
- lack of land to build preschool institutions in the densely built-up residential areas.

Federal Law #52-FL of 05.06.2012 “On the introduction of modifications in Article 28 of the Federal Law “On the sanitary-and-epidemiologic well-being of population” and articles 6.7 and 23.1 of the Administrative Offences Code of the Russian Federation” was issued on 5 June 2012.

That Federal Law specified the legal control sphere of Article 28 of the Federal Law #52-FL of 30.03.1999 “On the sanitary-and-epidemiologic well-being of population”; requirements of children's recreation and health-improvement were added to the sanitary-and-epidemiologic requirements of children's upbringing and education.

Article 6.7 of the Administrative Offences Code of the Russian Federation was modified; the modification stipulated that the administrative fine will rise up to 7,000 rubles for public officers and to 70,000 rubles for corporate bodies.

Moreover, administrative responsibility for the repeated violation of the mentioned requirements within a year has been established in the form of administrative fine of 15,000 for public officers and 150,000 rubles or administrative suspension of activity for up to 90 days for corporate bodies.

Thus, the Federal Law is aimed at strengthening administrative responsibility of public officers and corporate bodies violating sanitary-and-epidemiologic requirements of the children's recreation and health-improvement.

Relevance of these changes is caused by priority areas in the organization of health campaign for children and adolescents; by the end of the summer 2012 health-improvement campaign it included:

- expansion of the network of children's and juvenile labor and recreation camps, other forms of children's and adolescents' activity;
- development of various forms of tourism;
- formation of a modern model of organizing recreation and health-improvement of children on the principles of public-private partnership;
- introduction of new forms of recreation and leisure for adolescents;
- development of a system of measures of maintaining and developing children's recreation and health-improvement infrastructure;
- availability of recreation and health-improvement for all categories of children given their individual needs.

Despite anomalous natural phenomena which significantly influenced summer campaign, primarily, anomalous heat in the beginning of summer and fire hazard in the regions of Siberia and Far East, emergency situation and its consequences connected with abundant precipitation around the city of Krymsk and town of Novomikhaylovskiy of the Krasnodar Territory, the set objectives of safe summer recreation of children and their effective recovery were fulfilled.

According to the results of the summer 2012 health-improving campaign, pronounced health-improving effect is noted in 88% of cases (in 2011 – in 86.6%), 10.4% of children experienced low effect (in 2011 – 11.6%); no health-improving effect was noted in 1.6% of children (in 2011 – in 1.8%).

The best health-improving effect (96%) was in children resting in Krasnodar Territory and Tyumen Region.

Pronounced health-improving effect of more than 90% was registered in children in 28 subjects of the Russian Federation (in 2011 – in 15 Regions).

Pronounced health-improving effect of 80-90% was registered in children in 52 subjects of the Russian Federation (in 2011 – in 61 subjects).

The planned parameters within the realization of summer 2012 campaign objectives were fulfilled in:

- the number of educational institutions accepting children throughout the summer health-improving campaign;
- the coverage of children by summer recreation and health-improvement.

5,553,720 children (out of the planned 5,408,132) in total were covered by all types of recreation and health-improvement in the summer campaign. The target was exceeded by 2.7%.

The total number of children's health camps was 49,720 (out of the planned 49,483). The target was exceeded by 0.5%.

Moreover, summer recreation and health-improvement covered 1,476,862 orphans and in difficult life situation.

According to the “National strategy of actions in behalf of children in 2012-2017” (approved by the Decree #761 of 1 June 2012 of the President of the Russian Federation” and the “Plan of primary measures of fulfilling the most important conditions of the National strategy of actions in behalf of children in 2012-2017 until 2014” (approved by the Order #1961-r of 15.10.2012 of the Government of the Russian Federation), development of the “Strategy of developing children's goods industry until 2020 and a plan of measures of fulfilling it” is in progress.

Customs Union's technical regulations TR CU 007/2011 “On the safety of products for children and adolescents” and TR CU 008/2011 “On the safety of toys” came into effect in July 2012.

The following inspections were conducted in the framework of the new technical regulations TR CU 007/2011 “On the safety of products for children and adolescents” and TR CU 008/2011 “On the safety of toys” in 2012:

- 67 (8.1%) enterprises; violations of technical regulations were revealed in 10 (14.9%);
- 6,622 (9.6%) corporate bodies and sole proprietors; violations of technical regulations were revealed in 1,425 (21.5%).

The National strategy of actions in behalf of children in 2012-2017 mentions that juvenile alcoholism issues are among the most acute: almost ¼ of crimes are committed by drunken juveniles.

It is emphasized that adolescents of 10-18 years of age often are left without sufficient attention from the state. Juvenile alcoholism issues, including “beer alcoholism” require special attention.

The Federal Law #218-FL “On the amendment of the Federal Law “On the state regulation of production and turnover of ethyl alcohol, alcohol and alcohol-containing products” and certain legislative acts of the Russian Federation and on the recognition of the stale Federal Law “On the restrictions for retail and consumption (drinking) of beer and beer-based beverages” was passed on 18 July 2011; it toughens the state regulation of alcohol production, turnover and consumption; it introduces additional measures for restricting retail of alcohol products depending on point and time of sale and customer's age.

Alcohol damage constitutes considerable economic burden for particular people, families and the society in whole due to the medical expenses and labor productivity reduction associated with alcohol consumption and increasing morbidity rate, expenses associated with fires and property damage, lost income due to untimely death. According to the WHO, alcohol-associated expenses of the society constitute 2-5% of gross national product.

Harmful alcohol consumption causes many different diseases. Neuropsychic disorders caused mainly by alcohol consumption and involving alcoholism constitute more than 1/3 (34%) of all diseases and incapacitation cases worldwide. Considering only fatal cases associated with alcohol consumption, the 3 worst categories are involuntary injuries (25%), cardiovascular diseases (22%) and cancer (20%).

Low-alcohol production and beer sale increase considerably.

Analysis of drug abuse shows that the increase in beer and low-alcohol consumption is caused by adolescents and women of reproductive age. This largely conduces to the reduction in average life expectancy and increase in untimely death percentage.

Beer and low-alcohol beverages enjoy high popularity, reinforced by advertising, among youth and women. Adolescence is the most dangerous period in terms of alcohol addiction and alcoholization, especially in girls. The latest data indicate that juvenile alcoholism forms by consuming beer or low-alcohol beverages.

Out of all consumers, 33% of young boys and 20% of young women drink alcohol (including beer) daily or every other day. The share of regular beer drinkers is 76%.

There are several reasons why children and adolescents consume alcohol, the main being bad example set by adults. If at least one parent in a family is an alcoholic, with the lapse of time his/her children will regard drunkenness as a perfectly normal phenomenon and will then start bingeing on alcohol. Ca. 50% of alcoholics-to-be have been born and raised in a family with drinking parent/parents.

Another reason of children bingeing on alcoholic beverages is family miseducation. Such polar reasons as overprotection and neglect may be given.

The cinema and TV have played a big role in early alcohol consumption in recent years. Beer advertising had also been influencing immature psychic of adolescents until it was prohibited.

According to foreign data, the production of alcohol energy beverages (in particular, of those containing caffeine) is annually increasing by 20%.

Along with that, the combination of alcohol and tonic substances (e.g., caffeine) in the so called energy beverages rather popular among the young people recently excites body energy metabolism significantly, thus disturbing assimilation of other important macro- and micronutrients; this causes faster addiction to alcohol. Moreover, alcoholic beverages' tonic components causing energy metabolism stimulation increase the risk of toxic, mutagenic and carcinogenic action on a person manifold.

Low-alcohol beverages are purposefully created with taste features inherent in the traditional nonalcoholic fresheners; they contain a considerable amount of sugar, thus weakening intensity of organoleptic features of alcohol. They are produced in colorful attractive consumer package containing youth symbols, while the information on alcohol content is given in almost unreadable, small and low-contrast form. This creates a false image that of nonalcoholic products, close to the regular fresheners.

According to the national-representative survey "Global adult tobacco survey" (GATS) conducted by the WHO, Russia takes the 1st place in the world in tobacco consumption. This increases the risk of severe cardiovascular, bronchopulmonary, gastrointestinal, endocrine and oncologic diseases, reproductive system pathology etc.

Almost 40% (43.9mn people) of the adult population in Russia consume tobacco goods in Russia. Within the last 5 years, the highest increase in tobacco consumption has been noted among women, children and adolescents (threefold). More than 40% of women smokers continue smoking when pregnant; this leads to the increase in the share of children born ill and premature, risk of early miscarriage.

Low taxes and prices, active tobacco advertising, low information awareness on tobacco damage and tobacco smoke influence on a human and insufficient level of prophylaxis organization help to promote tobacco goods to the market in the Russian Federation and further increase in the number of its consumers.

A range of social, economic and ecological consequences is connected with tobacco consumption and tobacco smoke influence; tobacco-consumption-associated damage bears heavily on the society and the state.

Freedom of speech is protected by the Constitution in the Russian Federation. Availability of information on the world around allows a person surviving better and sometimes gives the only opportunity to integrate into the modern society; however, the types of information prohibited to be shared on the Internet by current legislation must not be shared freely.

Such a task was given to the Federal service on customers' rights protection and human well-being surveillance by the Government of the Russian Federation (Resolution of the Government of the Russian Federation #1,101 of 26.10.2012 "On the uniform automatized information system "Uniform

register of domain names, indices of web pages, information-telecommunication network “Internet” and network address which allow identifying web-sites in the information-communication network “Internet”). This is a priority task aimed at protecting children and adolescents in unstable mental condition, which, as practice shows, may urge them on an ill-considered step: suicide attempt.

The available data indicate the more than sixfold increase in suicide rate among children and adolescents after the Internet became widespread.

748 links to pages or web-sites with a note “suicide” have been referred to us by the Federal Service for Supervision in the Sphere of Telecom, Information Technologies and Mass Communications from 01.11.2012 onwards in the framework of fulfilling the aforementioned resolution.

Having studied the received materials, we have delivered 642 judgments on closing those web-site pages which contain information on the ways to commit suicide and/or appeals to commit suicide, 106 judgments – on the lack of forbidden information on the web-site page.

The forbidden information is most often posted in different social networks (e.g., “Vkontakte” – 85 judgments; “Mail.ru” – 49 judgments, LiveJournal – 20 judgments), the most famous search systems and video hostings (“Google” – 20 decision”, “Youtube” – 43 judgments, “Yandex” – 33 judgments etc.).

The most widespread type of the forbidden information is listing different ways to commit suicide (including most sophisticated) with detailed description of how to commit it.

The Federal service on customers' rights protection and human well-being surveillance passed the necessary statutory instrumental laws, conducted several meetings and established information interaction with the interested executive power bodies and Internet-community representatives. According to the meetings at the Federal service on customers' rights protection and human well-being surveillance, the propositions of clarifying criteria, according to which the information is considered forbidden, and of amending the current resolution were presented.

The Federal service on customers' rights protection and human well-being surveillance get such experts as psychologists, psychiatrists, culture experts, sociologists, philologists and pedagogues involved to increase the objectivity of the taken decisions. These experts assess particular cases collectively. Expert conclusions serve as a basis for deciding whether there is or there is no forbidden information on the ways to commit suicide and appeals to commit suicide.

The Federal service on customers' rights protection and human well-being surveillance is offering to expand the pool of experts involved into assessing the Internet-content in terms of forbidden information given suggestions of the Internet-community representatives.

Assessment, especially hygienic assessment of negative influence of the more and more aggressive cyberspace on population health, especially of children and adolescents, is becoming a new and relevant task.

The main goals and areas of activity aimed at improving health protection and maintaining sanitary-and-epidemiologic well-being are as follows:

- Reduction and maintenance of stably low morbidity rate of infections managed by specific immunoprophylaxis; prevention of infectious diseases' outbreaks.
- Measures on preventing spread of wild-polio-virus-caused poliomyelitis, protection of the poliomyelitis-free country status.
- Realization of measures of the measles liquidation in the Russian Federation in order to attain the endemic-measles-free territory status.
- Federal state sanitary-and-epidemiologic supervision of the children's and adolescents' upbringing, recreation and nutrition on the basis of analyzing real health condition parameters and morbidity rate of children and adolescents.
- Improvement of work in socio-hygienic monitoring, preparation and making of managerial decisions for maintaining sanitary-and-epidemiologic well-being of children.
- Analysis of the law enforcement practice when conducting state sanitary-and-epidemiologic surveillance.