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## The science and the experience on service of medical preventative care in Sakha (Yakutia) Republic's Rospotrebnadzor system

### ABSTRACT

In the article the authors presented the data of longitudinal scientific investigation in hygienics, sanitary and epidemiology. The sanitary- hygienic' and monitoring of consumer services' quality management is based on object and objective appraisal of factual data and analytical index, which build in system perspective in medico-ecological remediation in anthropogenic technologically disturbed and territories of different medical geographical zones.

It is shown that the state sanitary and epidemiological supervision (together with the state environmental control, industrial and geological), forming a social and hygienic monitoring (SHM) and interacting with a single service environmental monitoring, on the integral field ensures the effectiveness of the environmental system assessment (negative factors) and the risks to public health, development of forecasts and preventive recommendations.

**Keywords:** inventory analysis, standards (of general education - preventative medicine and quality management), scientific and process approaches, practical experience, preventative medicine, results rating, insertion, originality, value add and validation, medico-ecological value.

In recent years, at the turn of the XXI-century it has been approved [1] state requirements for all medical specialties of sanitary-epidemiological service.

Standards [5,6,7,8,9,10,19] defined the modern requirements to the format of the activity of specialists' medical and prophylactic business "and the need for scientific and methodological support has gained urgency with the introduction of social and hygienic monitoring (SHM) for identification and study of environmental factors and health risk assessment.

Fragmentary data on scientific and practical activities of employees of the Sakha Republic sanitary-epidemiological service (Yakutia) have been presented in the scientific potential [11] The institutions of the State Sanitary and Epidemiological Service of the Ministry of Health of Russia, and further regional offices and centers of hygiene and epidemiology of the Federal Service for Supervision in the Sphere consumer rights protection and human Well-being [4]. Scientific and applied research aspects of optimization [2] fit into the mechanism of coordination of basic and applied projects leading scientific institutions [3], with the definition and use of regional background values disturbances of public health [15] with regard to health and environmental innovations [17] in the industrial areas development in the Republic of Sakha (Yakutia). This multifactorial approach [16,18] in the system of accreditation of testing laboratories and testing laboratory centers formed for Quality Assurance (2000-2015.) In preventive medicine, including: quantitative chemical analysis from 281335 to 345940 Research, toxic-hygienic studies of 31259 to 33341 (tests), microbiology (bacteriology, virology, serology, parasitology) research from 702,422 to 794,734, the measurement of physical factors, including non-ionizing radiation from 71717 to 107 910 measurements, radiological measurements from 121360 to 160131 measurements. Marked quantitative characteristics with a high degree of confidence to the adoption of adequate, timely and forward-looking solutions that contribute to realization of scientific and practical problems [12,13,20,21].

Sanitary and epidemiological monitoring, which are constantly service professionals, provides great opportunities for research that laid the basis for the work itself.

This realization of the potential and development of scientific and methodological approaches to provide for Supervision of Consumer Rights Protection and Human Well-being, including the development of technologies and methods of organization of the state sanitary and epidemiological supervision in the conditions of the Far North and in the sparsely populated areas. Analysis of health indicators due to changing environmental factors, the research status of human immune status to assess the possibility of the disease, its flow and quality control of the formation of anti-infective (post-vaccination) immunity. Background comprehensive study of the sanitary conditions of the environment in industrialized cities and the state of health of the population of Yakutia based targeted approaches and measures to ensure the hygienic safety. As a major step in the field of preventive health care public policy of sanitary-epidemiological service is designed to carry out scientific and methodological support of the development and implementation of sanitary and hygienic maintenance of departmental and inter-departmental targeted programs.

Considerable scientific potential of sanitary-epidemiological service Yakutia puts on one of the first places in the Far East Federal District, and made her work specialists are appreciated at national congresses, conferences, forums and demand abroad.

His scientific work on the agreed, fundamental and applied areas of Yakutia experts sanepidsluzhby performed in collaboration with various scientific institutions (Institute of Epidemiology and Microbiology of the WSF SB RAMS - DE Savilov professor and VA Astafjevs, Irkutsk Institute of Siberia and the Far East - professor AS Maramovich, AD Botvinkin and M. Chesnokov, Novosibirsk State research Center of Virology and biotechnology "Vector" - Academician LS Sandakhchiev professor SV Netyosov and researchers EF Belanov, VE Repin;. NIIP Omsk, Central Research Institute of epidemiology in Moscow - professor GV B.L.Cherkassky and Yushchenko, St. Petersburg Pasteur EPRI, Khabarovsk NIEM - professor VV richer and Associate professor I.E . Trotsenko). In Yakutia Service cooperates with the Health Institute of Applied Ecology of the North Institute of the PC (I) and the Institute of Biological Problems Cryolithozone. The research results were published in France, Japan, Argentina and Brazil, Germany, England, the USA and Japan. A certain number of works carried out under the auspices of the Academy of Sciences RS (I) - Academician BM Kershengolts, with scientists and NEFU YSC SB RAS.

According to its own content specialists of sanitary-epidemiological service is protected by 15 master's and two doctoral dissertations, each represented by a specific scientific school (Vladivostok, Khabarovsk, Irkutsk, Tomsk, Novosibirsk, Omsk, Moscow, St. Petersburg, Vladivostok), besides the stock materials research findings formed the basis of 27 dissertations scientists universities and research institutes from different Russian cities.

In the scientific arsenal of services PC State Prize (I) in the field of health and medical science to them. PA Petrov 2005 - "Research and practical provision of sanitary and epidemiological welfare of population of the Republic of Sakha (Yakutia) in the standard setting, and in emergency situations." The assets of the combined cycle of scientific publications (monographs, collections of scientific articles, a special supplement to the journal of microbiology, epidemiology and immunobiology of Medical Sciences, edited by the Chief Medical Officer of the Russian Federation, Academician GG Onishchenko. Material certifying the practical significance and the degree of utilization of the results, patronized etc. .m.n., prof. IY Yegorov), united by a common orientation on the scientific support of the formation and development of sanitary-epidemiological service in the Far North.

Particular attention should be comprehensiveness cycle works - regional issues of hygiene, sanitation, epidemiology and medical ecology: infectious aggressive environment zooantroponozam as incubators and genetic boiler pathogens (in relation to animal and human), micro-organisms and viruses, the influence of natural and anthropogenic factors on the sanitary and epidemiological situation. Sufficient examination is given the most intensive areas for industrial and economic development: the Central, South and Western Yakutia, the group Vilyuysky District and District, Kolyma ulus and the Arctic in general. Out of focus control and supervision of research is not excluded the quality of drinking water, food and air. Specialists services developed recommendations for monitoring, control and improvement of sanitary-epidemiological situation in the country. Published results have attracted the attention of

epidemiologists, health officers, hygienists, biologists, ecologists and physicians in clinical practice not only in Russia but also abroad. Cited authors (impakt-factor) is widely known in the scientific community.

A special section of the scientific work related to the implementation of mega-projects: the ESPO pipeline, railway, uranium deposits in the Aldan district of Cancún HPP Elga coal deposit and diamond properties in the Peace, Nakyn, "Lower Lena", "Diamonds of Anabar", "Verhne-munskoe mine "become objects of study inquisitive service specialists. Comprehensive assessment and forecast of sanitary, epidemiological, radiation environment (water, air, soil, viruses, bacteria) in the vast territory - is the collection, description and review of materials research and situation forecast not only for the future but also the assessment of the sanitary and epidemiological well-being of shift workers.

In the field of attention of the researchers was a pragmatic study of the most dangerous consequences of unsustainable human impacts on the environment in connection with the development of natural resources. The forward-looking statements and the assessment of possible risks in the areas of megaprojects were attentive, anticipating, preventive, applied nature.

A unique series of works made in collaboration with the Veterinary Service (candidate of veterinary sciences, chief state veterinary doctors on the basis of material assets tactical and strategic approaches: TD Karataeva, LI Makarova and Associate Professor of the Yakut State Agricultural Academy, candidate of veterinary sciences VS . Karpov).

Another area of research specialists of sanitary-epidemiological service of Yakutia in the format of "benefit-harm" - the study of the remains of extinct animals. The fact is that the permafrost - is a wonderful natural refrigerator, store the oldest, "canned" natural microbial communities, the ancient bank of genes and molecules. The importance of research into the cryosphere viable microbiota associated with the probability of finding them pathogens and the need to develop preventive measures in the event of their release due to thawing soils este-stvennogo.

On the occasion of the international exhibition "EXPO-2005" in Japan, a joint team of scientists and experts of «Center of Sanitary Inspection in the PC (I),» YSC SB RAMS, North-Eastern Federal University and the Government of the Republic Center of Virology and Biotechnology "Vector "Institute of Siberia and the Far East was made the original series histomorphological and microbiological studies the main exhibit - the head Yukagir mammoth. The results are given not only an answer to the subject as possible, epizootic and epidemic danger of a biological object, but also enriched the paleontological science previously no known facts. The outcome of the interdepartmental community began work on the formation of the "Atlas of histomorphological studies mammoth remnants" and the program for further paleonto-microbiological research.

Among the research topics to which ownership of the specialists of sanitary-epidemiological service, especially the etiology and epidemiology of intestinal infections, viral hepatitis in Yakutia, the problem Viliuisk encephalitis, algorithmic base metodicheskikh guidance for practitioners has been formed on the basis of the data obtained. A special place in the scientific study dealing with the problem of occupational diseases and forecasting of emergency situations related to graves in the permafrost zone. In Yakutia, was first obtained by the dead material from smallpox, buried in the permafrost zone, the analysis of historical data, the old-timers polls. It was found that frozen theoretically variola virus can maintain vital functions for at least 250 years, and then dumping can pose a danger to the public and should be under special control, especially in revitalization of economic activities and an accelerated development of the Arctic.

study the circulation of microorganisms in the urban ecosystem and microbiological research of snow cover in the northern latitudes were held. It was first diagnosed with the fact of dissemination of snow potentially pathogenic microorganisms, marked the point of characterizing the state of environmental pollution and contamination sources.

Today, ongoing research and training of researchers. The postgraduate study O.A.Ushkareva, L.S.Burnasheva, E.I.Lvova, A.N.Rumyantseva, L.M.Kornilova. Of particular note is successfully defended her thesis on O.N.Sofronovoy iersiniozov problems with 79.3% and novelty V.K.Yadrihinskoy a factor of reliability impact of environmental factors on the incidence of the population of intestinal infections by 62-90%.

This review [14] includes fragmentary-abstractive presentation of enormous work being done by service specialists. Subject-sizing specifics involves and declares the number of follow-up, deployed, thematic publications: environmental hygiene, northern epidemiology, medical and social monitoring and law, medical ecology.

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