Materials of Conferences

THE ROLE OF ENVIRONMENTAL MONITORING IN PRESERVING THE HEALTH OF THE POPULATION

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Environmental protection and rational use of its resources in conditions of rapid growth in industrial production has become one of the most pressing problems of today. Environmental Sustainability provides a rational use of natural resources and protect ecological systems upon which the survival and prosperity of mankind. Humanity is faced with serious problems of depletion of many natural resources, the almost universal contamination of the environment, the negative impact of these phenomena on human health. At the present stage of multivariate effects of chemical pollutants it is important to determine their combined effect on the human body, to examine the contribution of individual contaminants, to assess the risk for public health. It became possible through an integrated definition of anthropotechnogenic load on the environment and risk assessment methodology. However, accurately estimate levels of risk are impossible without the creation of modern systems of environment quality control.

Indicators of are the disease burden calculated by WHO experts show the role of environmental factors in forming public health. Of the 102 major diseases and groups of diseases and injuries, causing the level of ill-health of the population, 85 have environmental components.

This situation, as well as countries' international obligations to implement the principles of sustainable development, causes the inclusion of ecological well-being issues in national policy and strategy. They provide programmatic activities to improve the environment, prevention of air pollution, indoor air, water and soil, saving and promotion of health, the creation of appropriate infrastructure. Implementation of public policy for the environmental well-being of the population would prevent the development of environmentally sensitive diseases, reduce the environmental burden of disease and improve quality of life.

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ECOLOGICAL CHARACTERISTICS OF THE ENVIRONMENT OF THE REPUBLIC OF KAZAKHSTAN TO ASSESS THE STATE OF AIR

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One of the most important aspects of the environmental characteristics of the environment is the level of air pollution. The problem of environmental pollution in the Republic of Kazakhstan has attracted increasing attention in connection with the steady growth of the total power of energy, industrial production and transportation – the main sources of emissions. Immediate danger of air pollution in urban areas is associated with adverse effects on human health.

Causes high levels of air pollution are outdated production technology, inefficient sewage treatment plants, poor quality of fuel, poor use of renewable and non-conventional energy sources. The most of the population from industrial centers live in areas of high impact of harmful emissions. In developing projects of maximum permissible emissions design organizations are not considered carcinogenic substances, persistent organic compounds, resulting in difficult work to integrate these chemicals and laboratory monitoring. There has been an increase in emissions of priority pollutants such as sulfur dioxide, nitrogen dioxide, carbon monoxide.

This situation requires immediate adoption of adequate measures to reduce concentrations of harmful substances in the air environment. The Republic of Kazakhstan has developed the concept of ecological safety for 2004-2015 on December 3, 2003 № 1241, which focuses on prevention of critical situation (hazardous) to human health.

In this connection should be equipped with stationary sources of effective treatment systems from nitrogen oxides, carbon, sulfur, modernization of the technological and sanitary measures, the application alternative fuels, improving the functional structure of the city planning and traffic management.

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