



Environment and Health

What does the term "Epidemiological state of the environment" mean?

The epidemiological state of the environment means both the direct pathological effects of the effects of chemical elements, radiation and certain biological agents on health and well-being, and the consequences (often indirect) of the impact of the physical, psychological, social and aesthetic environment in a broader sense, including buildings and urban development, land use, and transport (as defined by WHO, the European Charter). WHO identifies the five main environmental conditions of a healthy environment in which a high quality of human life is possible: clean air, safe quality and sufficient drinking water, safe and nutritional balanced nutrition, safe and quiet housing, and ecosystem resilience.

How should the impact of various factors on health be interpreted?

The state of health is determined by the following factors: genetic, lifestyle, living standards, nutrition, the epidemiological state of the environment, professional factors, socio-economic conditions (including health care work). The level of mutual influence of various factors depends on each specific disease and is the subject of numerous scientific researches, therefore this question is quite complicated. A too simplistic approach to determining the causes of diseases can lead to their misinterpretation, based either on revaluation or on underestimation of cause-effect relationships. In many cases, there is a lack of clarity in determining the relative influence of various environmental factors in the formation of the disease. Often this misunderstanding creates excessive anxiety and stress and distorts the procedure for determining priority measures. Thus, communication tools need to be carefully prepared to translate key research messages into practical policy measures.

What should be focus on: prevention or treatment?

In all matters related to health protection, the use of the preventive principle is of key importance. Very often, prevention is cheaper and, in all cases, it is more effective than treatment. Where prevention is possible, the choice in its favor should become a moral imperative. The principles of health protection should be included in all new investment projects and development programs, because rehabilitation activities to minimize the negative impact on health of already implemented measures are inevitably more expensive and much more difficult to implement. Today, the advance development and adoption of standards for new technologies and goods is actively encouraged, as well as a thorough impact assessment of the programs and projects on health and environment.

What should be done to minimize or prevent negative environmental effects on health?

Effective development and implementation of environmental health policies and programs depend on the rationality of approaches to managing the environmental epidemiology, which in turn is determined by the effectiveness of cooperation between departments and units responsible for the

state of the environment and health, as well as other organizations at the local, national and regional levels. It is necessary to develop and implement a policy in the field of environmental epidemiology based on the intersectoral principles of cooperation, which should be stipulated in appropriate legislative acts and put on a systematic basis. Methods of environmental and health impact assessment should be implemented in the development of policies, programs and projects. In the next CAREC program's "Environment and Health" news releases, we will focus on selected environmental health issues, such as air quality and health, water and health, waste and health, sustainable development goals (SDGs), etc.

Used literature:

1. Handbook on Environmental Management (UNDP, RBEC), 2003
2. The course of the educational program "Environmental Epidemiology", the CAREC program "Environment and Health".
3. Websites of WHO, UNDP, UNEP

Prepared by Irina Bekmirzaeva, Environment and Health Program Manager, CAREC