



EXPOSURE TO PESTICIDE - SAFETY PROBLEM

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Introduction. Despite the popularity and widespread use of pesticides, there are serious concerns about the health risks arising from farmers' exposure to the preparation and application of pesticides or in treated fields and residues from agri-food products and drinking water consumed by the population. Pesticides contain active ingredients - dangerous and harmful toxic chemicals that can affect human health. The dangers to humans and animals due to pesticides are mainly related to the active ingredient. By their nature, most pesticides have a high degree of toxicity because they are intended to kill certain organisms and thus create a high risk. The direct influence of pollutants on the health of the population consists in the changes that occur in the body. Chronic intoxications can manifest as hepatitis, gastritis, bronchitis, polyneuritis, etc.

Material and methods. The study was conducted on the basis of statistical data of the National Bureau of Statistics of the Republic of Moldova, Form 2 - Report on the stock and use of phytosanitary products of the National Agency for Food Safety.

Results. Exposure to pesticides poses a continuing health hazard, especially in the agricultural work environment. Some active ingredients in pesticides have the characteristics of endocrine disruptors. In 2019, a quantity of 2100 tons of pesticides was used in the territory of the republic, and the number of products reaching 932. Out of the total number of 932 pesticides used in the country in the agricultural field, 179 are produced, including 19 active substances from the class products with negative effects on the endocrine system. For example, products containing the active ingredient fenoxicarb were used in a number of 6. Pesticides that disrupt the endocrine system are the largest group of endocrine disruptors compared to other chemical groups. Health care involves understanding the risk factors for the occurrence of various diseases. It should be mentioned that, lately, more and more frequently appear conditions for the simultaneous penetration of one and the same harmful agent through the respiratory tract, through the gastrointestinal tract and through the skin. In other cases, different harmful factors may act on the body at the same time. As a result of estimating the morbidity of the population, there was a high frequency of tumors, diseases of the circulatory, respiratory and digestive system.

The study is conducted in order to determine and monitoring chemicals that affect the endocrine system, used in Moldova and to which the country's population is exposed. Knowledge and determination of environmental risk factors are of particular importance for promoting and maintaining the health of the population.

Conclusions. In this context, the use of pesticides has raised serious concerns not only about the potential effects on human health, but also on the impact on wildlife and sensitive ecosystems. No pesticide is not without dangers when applied or manipulated! The phenomenon of the effects of endocrine disruptors on the health of the population remains a global challenge and a source of concern for the Public Health Service. Hygienic assessment of pesticide use processes, elaboration and implementation of preventive measures are a priority in reducing health risks.