19. Pesticides in Foods Harming Your Health Kovtun Yevheniia, Olesia Starkova

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Introduction. Pesticides are poisons and, unfortunately, they can harm more than just the "pests" at which they are targeted. They are toxic, and exposure to pesticides can not only cause a number of health effects.

Material and methods. The symptoms are evident shortly after exposure or can arise within 48 hours. They can present as: respiratory tract irritation, sore throat and/or cough, allergic reaction, eye and skin irritation, nausea, vomiting, headache, loss of consciousness, extreme weakness, seizures and/or death.

Pesticides are found as common contaminants in soil, air, water and on non-target organisms in our urban landscapes. Once there, they can harm plants and animals ranging from beneficial soil microorganisms and insects, non-target plants, fish, birds, and other wildlife.

Exposure to pesticides can occur in many ways. Exposure can occur in agriculture, through the treatment of crops, plants and grain stores. It can occur in forestry, gardening, professional and domestic pest control and through the spraying and use of amenities e.g. our parks, pavements and playgrounds.

Exposure can also occur through the treatment of wood with preservatives, the treatment of boat hulls with anti-fouling agents, and the treatment of livestock with anti-parasitic preparations, e.g. sheep dip etc.

In addition, pesticide residues found on, and in, our food also puts us at risk.

In countries of the first world, it has been observed that a diet containing fresh fruit and vegetables far outweigh potential risks from eating very low residues of pesticides in crops . Increasing evidence shows that eating fruit and vegetables regularly reduces the risk of many cancers, high blood pressure, heart disease, diabetes, stroke, and other chronic diseases.

Scientists discussed the nutritional properties of apples and blueberries in the US diet and concluded that their high concentrations of antioxidants act as protectants against cancer and heart disease.

Pesticides are often considered a quick, easy, and inexpensive solution for controlling weeds and insect pests in urban landscapes. However, pesticide use comes at a significant cost. Pesticides have contaminated almost every part of our environment. Pesticide residues are found in soil and air, and in surface and ground water across the countries, and urban pesticide uses contribute to the problem.

Pesticide contamination poses significant risks to the environment and non-target organisms ranging from beneficial soil microorganisms, to insects, plants, fish, and birds. Contrary to common misconceptions, even herbicides can cause harm to the environment.

The best way to reduce pesticide contamination (and the harm it causes) in our environment is for all of us to do our part to use safer, non-chemical pest control (including weed control) methods.

Conclusion: Thus, pesticides will continue to play their role in agriculture. However, the effects of pesticides on human health and the environment remain a concern. In accordance with the principles of good agricultural practice, regardless of the economic status of the country. Farmers should limit the amount of pesticides needed to the minimum necessary to protect crops.