

P22. Human Health Effects of Biocidal Products

Muhsin AKBABA¹, Ramazan Azim OKYAY²

¹Çukurova University Department of Public Health

²Ceyhan Community Health Center

To ensure the welfare of people and to reinforce the domination on nature, elimination of threats originating from natural environment or directly people themselves by using new technologies is the most popular search of our age. As a result of this quest, one of the facts emerging is biocidal products.

The health effects of disinfectants may vary according to chemical structure of the formulations, exposure types and amount of intake. For example, while phenolic disinfectants may cause itching, irritation, local burns, headaches, vomiting and diarrhea, and kidney damage in severe cases; in addition to their various irritant effects, aldehydes may cause carcinogenic effects in case of long-term exposure.

As a result of exposure to preservatives, a wide range of health outcomes can occur such as irritation in the skin, mucous membranes and eyes, teratogenic or carcinogenic effects etc.

Acute effects of pesticides may vary from irritation, dermatitis to death depending on systemic absorption. Symptoms are nonspecific and may be misdiagnosed as gastroenteritis, colds, fever and so on. Long-term exposure to pesticides may result in cancer, birth defects, neurotoxicity and neurobehavioral disorders.

Biocidal products other than disinfectants, preservatives and pesticides are remarkable with environmental effects rather than human health effects. In this group degradation inhibitory products used to control growth and placement of organisms racking boats, aquaculture equipment and other water used structures and products used for preservation and disinfection of human or animal carcasses are available.

To prevent the adverse effects of biocidal products the following principles should be complied with:

- Biocidals that have minimal toxicity should be used.
- The use of personal protective equipment as shown on the label of the biocidal product is required for the prevention of exposure.
- Pesticide containers should not be used for other purposes.
- The use of unlicensed products should be prevented.
- The consciousness of society about the health effects of these products should be increased.