MICROBIOLOGICAL, CHEMICAL AND PHYSICAL CONTAMINATIONS OF FOODSTUFFS

Mirjana M .Đermanović^{1,2} Branislav Zeljković¹, Ljubica Bojanić^{1,2}

¹ Institut za javno zdravstvo Republike Srpske, Banja Luka, Bosna i Hercegovina

² Medicinski fakultet - Studijski program Farmacija, Univerzitet u Banjoj Luci, Bosna i Hercegovina

Availability of a sufficient amount of safe food is a basic human right and precondition of healthy eating and of the population's health preservation. Unsafe food causes many acute and life-long diseases, ranging from diarrhoeal diseases to various forms of cancer. The regular public health control of harmful substances in food enables prompt recognition of risk in food, since their presence in food even in legally allowed concentration increases the risk of health damage in people, especially in sensitive population groups such as pregnant women, infants, little children, the elderly and immunodeficient people. Foodborne illness can be caused by microbiological, chemical or physical hazards. Microbiological and chemical contaminations of foodstuffs represent a risk for the occurrence of food born transmissive diseases.

The data on chemical and microbiological food safety is taken from the annual report on the health condition of the population of the Republic of Srpska (in 2017), prepared by the Public Health Institute of the Republic of Srpska.



Of the total number (5356) of foods inspected for physical and chemical safety, 51,1% (2736) of samples come from imports 10,8% (578) trade, and 38,1% (2040) from production. Results of laboratory inspection of food show that of the total number of samples inspected for chemical and physical safety 3,5 % of samples were non-compliant. Of the total number of foods (16900) inspected for microbiological safety, 9,5% (1601) of samples come from imports, 16,5% (2780) trade, and 74,1% (12521) from production. Results of laboratory inspection of food show that of the total number of samples inspected for microbiological safety 0,59% (100 samples) of samples were non-compliant.





Microbiological and chemical contaminations of foodstuffs represent a risk for occurrence of food born transmissive diseases. In developing countries, microbiological contamination of foodstuffs represents one of the leading causes of illness and death in up to five-year old children.

