



### 34. THE IMPACT OF MODERN HOUSEHOLD CHEMICALS ON HUMAN HEALTH IN THE REPUBLIC OF MOLDOVA

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**Introduction.** In the modern world, household chemicals are an integral part of the life of every person, therefore the influence of household chemicals on human health is an actual problem. Modern household chemicals include such dangerous chemicals as: chlorine, phosphates, formaldehyde, phenol, phthalates (DIDP, DNOP), polymers, silicates. According to research, household chemicals cause the greatest harm to the skin, respiratory and reproductive systems. The respiratory system is most affected by volatile substances such as acetone, benzene, formaldehyde, which are part of cleaning sprays. The harm of these substances is associated with a high risk of developing asthma. The harm of detergents designed to remove grease and mold is directly linked to the development of eczema and dermatitis. A group of chemicals called endocrine disrupting chemicals (EDCs), found in many cleaning products, can affect the quality of sperm and eggs.

**Aim of study.** The aim of the study was to find out the awareness of part of the population of the Republic of Moldova about the dangers of household chemicals, about compliance with protective measures when using household chemicals.

**Methods and materials.** For the purpose of the study a social questionnaire was created. The survey included 150 people, aged from 16 to 50 years, male and female, from different localities of the Republic of Moldova.

**Results.** The majority of respondents were women – 68,6%, compared to men-31,4%. Age of the people ranged from 16 to 50 years, with an average age of  $28.4 \pm 0.3$  years. According to the survey, 97% of respondents use household chemicals every day. Unfortunately, only 25% of respondents read the chemical composition of detergents when purchasing. According to the data obtained, 88% of respondents are aware of the possible dangers of household chemicals. Approximately 68% of respondents know about safety measures when using household chemicals, but only 17% of respondents comply with these measures. Regrettably, only 24% of people (most of whom are students and medical workers) know how to provide first aid for acute poisoning from household chemicals. Also, approximately 61% of respondents know about the existence of alternative household cleaning products.

**Conclusion.** The use of modern household chemicals by the majority of the studied population in the Republic of Moldova can have serious health consequences, since most people do not pay attention to the composition of household chemicals when purchasing, do not know about safety measures when using household chemicals and the existence of alternative cleaning methods.