## Abstract

The aim of the study was to evaluate the numbers, severity and causes of accidents, occurring in the households due to the cleaning products.

Among the groups of potentially dangerous cleaning products, the highest proportion of accidents was caused by cleaning products containing sodium hypochloride (37 %), descalers containing acids (29 %) and dishwasher tablets (25 %). A lower percentage of inquiries appeared due to hydroxides containing drain cleaning products (7 %).

In the year 2009, there were 251 inquiries to the Toxicological Information Centre due to cleaning products in defined categories studied. Among them, there were 133 children and 118 adult patients, who ingested cleaning product accidentally (86%) or for suicidal purposes (3%); inhaled (9%) or had an eye contact with the product (2%).

There were 23% children and 27% adults hospitalized; the children most frequently due to accidental ingestion of hydroxides (92%), the adults due to the inhalation of irritant vapors (64%). Among them 14% children (86% due to the ingestion of cleaning products containing hydroxides) have been examined using the endoscopy (in the total anesthesia), in addition to 5% adults.

The study has shown that the most common cause of the accidents in children is the distraction of the adults; nevertheless, the colorful and attractive labels contribute to the negative outcome. It was found that the most endangered age group of children was the group <5 years. The kitchen was the most common place of accidents due to cleaning products (70%).

The labels and warning symbols play an important role. Only 176 responders out of 457 (38.5%) were able to recall the warning symbol at the label, 65.3% of them could give the full description (black cross in the orange field).

The results of this study served as a pre-requisite step to intervention programs to reduce unintentional poisonings.

**Key words:** cleaning products, accidents, acids, hydroxides, labels, warming symbols.