



## Patients with toxicological exposures consulted to Siriraj poison control center: The difference between age groups

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**Objective:** To explore age-related differences in poisoning cases reported to Siriraj Poison Control Center (SiPCC), Bangkok, Thailand.

**Methods:** This is a retrospective study that included all consultation cases to SiPCC from January 2010 to December 2012. Data were recorded into paper-based forms by pharmacists who were trained as specialists in poisons information, variables were abstracted by two physicians, and data validated by three toxicologists. Data was analysed by descriptive statistical methods using SPSS version 18.0.

**Results:** 4,515 of 4,591 cases were included. Cases were divided into three age categories: children (0-14 years old; 930 cases), adults (15-64 years old; 3,311 cases), and elderly (greater than 65 years old; 274 cases). Eighty-six percent of exposures in children were accidental. Conversely, most adult exposures (66%) were with suicidal intent. Most common interventions in adults were gastrointestinal decontamination (40%) and specific management (20%). Prominent reasons of exposure in elderly included ingestion as food (22%) and accidental ingestion of the substance from a non-original container (15%). The elderly were more likely to require intubation and enhanced elimination. The mortality rates in each age-group were 0.5%, 5.3%, and 5.8% respectively. The top three substances resulting in mortality were paraquat, carbamates, and glyphosate.

**Conclusion:** We report characteristics of patients with toxicological exposures broken down by age group. These results could guide age-specific interventions. This includes a focus on prevention in children and an emphasis on mental health, food safety, and poison control (particularly pesticides) in adult and elderly groups. Surprisingly, poisoning from non-original containers is not limited to paediatric exposures.