

involving children. Compared to other cases of disease and accidents, the numerical documentation of cases of poisoning is inadequate in Germany. Presently, there is no institution that could make available representative and meaningful data on the poisoning situation even the German Federal Statistical Office (DISTATIS).

**Method:** Owing to intensive scientific cooperation between the German Poison Information Centres (PIC) and the Poison and Product Documentation Centre at the Federal Institute for Risk Assessment (BfR DocCentre) as well as to international cooperation, harmonized and standardized elements for documentation and reporting procedures appropriate to account for poisoning accidents have been developed in different research projects.

**Results:** The evaluation for the 2005–2012 period that was based on published and processed figures for the Federal Republic of Germany has shown the following results:

Of about 230 000 telephone inquiries received in 2012, about 207 000 referred to exposure of humans due to relevant contacts with different noxae. An annual increase by 3–5% was recorded. Analyses for 2011 referring to subsets processed by means of standardized methods have shown the following results: Remedies were involved in about 39% of the cases recorded (of these, medicinal products for humans in 99%); chemical/physicochemical agents in about 26% (of these, cleaning and maintenance products in 46%); products of daily use in about 14% (of these, cosmetics in 40%); and plants in about 10%. More than 90% referred to acute and less than 5%, to chronic poisoning. Regarding the degree of severity of poisoning, an asymptomatic course was reported for 44% of cases; minor manifestations were experienced in 30%, moderate ones, in 6%, and severe manifestations, in 2% of the cases recorded. Fatal cases were rare (<0.1%). The majority of cases (67%) were caused by poisoning accidents, followed by suicidal action (20%) in second position, abuse and industrial poisoning (4%) in third position. 1% of the cases of poisoning were attributed to adverse drug reactions (ADR) and mistaking a medicinal product for another one. Infants aged 1–2 years have the highest risk of poisoning.

**Conclusion:** Proposals for a national monitoring scheme of poisoning incidents have already been developed by a panel of the BfR Committee for the Assessment of Poisonings. It is an ambitious aim to be able to prepare annual reports in a way similar to what has been achieved in the USA by means of the report of the National Poison Data System (NPDS) maintained by the American Association of Poison Control Centers (AAPCC).

**Keywords:** Epidemiology, Poison center, Intoxication

## 280. Characteristics of salicylate ingestions reported to the toxic registry

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**Background:** Acetylsalicylic acid (ASA) overdose may result in morbidity and mortality and is an important public health issue. The Toxicology Investigators Consortium (Toxic) Registry was analyzed to determine the demographic characteristics, dosage, and outcome of all salicylate ingestions reported to the registry since its inception.

**Methods:** We queried the Toxic Registry database for all cases from January 1, 2010 to April 1, 2014. Inclusion criteria included aspirin exposure. Data collected included age, gender, nature of

exposure (e.g. intentional), presence of co-ingestants, dose, serum salicylate concentration (SSC), use of activated charcoal (AC), gastric lavage (GL), whole bowel irrigation (WBI), sodium bicarbonate administration (SB), endotracheal intubation (ET), multiple-dose activated charcoal (MDAC), urinary alkalization (UA), hemodialysis (HD) and patient outcome. Regression analysis was used to determine if significant associations existed between SSC and AC, SB, UA, HD, and ET. Chi square analysis was performed to determine if significant associations existed between nature of exposure or presence of co-ingestants and AC, GL, WBI, SB, UA, MDAC, and HD.

**Results:** Over the 51-month study period, 775 cases met the inclusion criteria. Most cases were reported in females (64%), of whom 7 were pregnant (1%). The most common age range was 19–65 (54%). The majority of salicylate ingestions were intentional (84%) and were single agent exposures (57%). AC was administered in 17% of cases, GL was done in 1% of cases, and WBI in 0.4% of cases. MDAC was administered in 4% of cases, UA was performed in 17% of cases, and HD was initiated in 5% of cases. Dose was reported in 5% of cases and ranged from 0.325g to 325g with a median of 16.1g and a mean of 30.3g. SSC was reported in 16% of cases and ranged from 6mg/dL to 131mg/dL with a median of 45.5mg/dL and mean of 47.1mg/dL. Logistic regression demonstrated no statistically significant relationship between SSC and administration of AC or WBI. Logistic regression demonstrated a significant positive association between SSC and SB, UA, HD, and ET (all  $p < 0.05$ ).

Chi square analysis demonstrated that intentional ingestions were more likely to be treated with AC, and single ingestions were less likely to be treated with AC, GL, SB, UA, and MDAC (all  $p < 0.05$ ).

**Conclusions:** Most salicylate ingestions reported to the Toxic Registry occurred in females, were intentional in nature, and were single agent exposures. Serum salicylate concentration was predictive of UA, HD, SB, and ET but not AC. Intentional overdose was predictive of AC. Limitations of our study include incomplete reporting of dose and SSC.

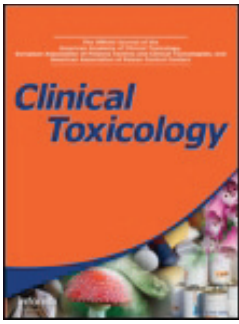
**Keywords:** Aspirin, Salicylate, Overdose

## 281. e-Cigarette exposures: regional poison center exposures trends

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**Background:** Electronic cigarettes (e-Cigarettes) are battery powered devices containing nicotine fluid in varying concentrations. They are designed to mimic smoking by inhaling the vaporized nicotine fluid instead of smoke. These fluids are marketed in a variety of container sizes, concentrations, and flavors, from apple to menthol. The containers may or may not be in child resistant packaging. e-Cigarettes may also be used for smoking cessation. Fluid concentrations range from 0–36 mg/mL. Currently, these devices and fluids are not FDA regulated. While some nicotine fluid is made in the United States, other fluids are imported from



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