Impact of reducing the threshold for acetylcysteine treatment in acute paracetamol poisoning: the recent United Kingdom experience


Background

On 3 September 2012, the licensed indication for acetylcysteine was changed in the United Kingdom (UK) so that all patients with a plasma paracetamol concentration above a "100 mg/L" (4 h post ingestion) nomogram treatment line after an acute paracetamol (acetaminophen) overdose should be treated. This is a lower threshold than that used in the United States, Canada, Australia, and New Zealand. Here we report the impact of this change in the UK on the management of patients with acute overdose in different paracetamol concentration ranges.
**Methods**

This is a cohort study, consisting of a retrospective analysis conducted on prospectively collected audit data in three UK hospitals. Following appropriate ethical and data protection authority approval, data for patients presenting within 24 h of an acute timed single paracetamol overdose were extracted. Numbers of admissions and use of antidote in relation to different paracetamol concentration bands (< 100 mg/L; 100–149 mg/L; 150–199 mg/L; and ≥ 200 mg/L at 4 h) were analyzed for one-year periods before and after the change.

**Results**

Comparing the year before with the year after the change, there was no change in the numbers of patients presenting to hospital within 24 h of acute timed paracetamol overdose (1246 before and 1251 after), but more patients were admitted (759 before and 849 after) and treated with acetylcysteine (389 before and 539 after). Of the 150 additional patients treated with acetylcysteine in the year following the change, 114 (76%, 95% CI: 68.4–82.6) were in the 100–149 group and 9 (6.0%, 95% CI: 2.8–11.1) in the 150–199 group.

**Conclusions**

Changes to national guidelines for managing paracetamol poisoning in the UK have increased the numbers of patients with acute overdose treated with acetylcysteine, with most additional treatments occurring in patients in the 100–149 mg/L dose range, a group at low risk of hepatotoxicity and higher risk of adverse reactions.


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**Pack size and paracetamol overdose: 16 years later**

**Bateman DN. Clin Toxicol  2014; 52: 821-3.**

In 1998 the United Kingdom limited the availability of paracetamol sold over-the-counter in an effort to reduce serious paracetamol overdose. Since that time debate has continued on the effectiveness of this policy in reducing what is acknowledged as a major public health problem. This commentary reviews recent publications on this topic which suggest that the effects were small. Reasons for this are discussed using data from recent work.


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**Should computerised tomography replace endoscopy in the evaluation of symptomatic ingestion of corrosive substances?**


**Introduction**

Corrosive ingestions are common, although most ingestions do not result in clinically significant effects. Limited guidance is available on the role of endoscopy and/or computerised tomography (CT) in the investigation of individuals with corrosive ingestion, and the present data regarding predictors of poor outcome are confusing. Furthermore, whilst there are many case series describing the use of endoscopy in corrosive ingestions, no clear ideal time frame has been established as to when it should be undertaken. More recently, CT has been used to grade injuries, but there are few studies on its role in managing corrosive injuries, and those studies that have been reported are conflicting in their results.

**Methods**

A Medline search was performed with the terms 'Caustic ingestion' and 'Corrosive ingestion'
and a second search by adding the words 'Endoscopy', 'CT', and 'Computerised tomography' as a subject term or keyword. These searches revealed a total of 277 reviews and papers, of which 33 original papers were relevant for analysis. Three further papers were identified during the analysis of these papers and a PubMed search of the same terms added one further paper, bringing the total to 37. There have been no prospective, randomised controlled trials directly comparing endoscopy and CT. Only two retrospective studies compared the use of CT and that of endoscopy. Thirty-five studies examined whether an endoscopy is always needed, and if so, within what time frame this should be done:

**CT or endoscopy?**

A review of these studies suggests that the data regarding the use of CT in these circumstances are not yet of sufficient weight to replace endoscopy as the first-line investigation in corrosive ingestion-related injury.

**Who needs investigation after corrosive ingestion?**

We believe that signs and symptoms indicate the likelihood of clinically significant injury in adults. Specifically, any evidence of oropharyngeal burns, drooling, vomiting, pain or dysphagia clearly indicates the need for an endoscopy. In children, it appears that an even greater degree of caution is needed.

**How soon after ingestion should investigation be performed?**

For whom an endoscopy is required, it is prudent to enable surgery and other specifics regarding management of corrosives to be decided quickly (< 12 h). There are many incidences where endoscopy has been done safely beyond 48 h although this is not needed frequently.

**Management recommendations**

Asymptomatic patients, particularly adults with a normal clinical examination and who can eat and drink normally, can be discharged safely without endoscopy. Endoscopy is preferred over CT in the assessment of risk in symptomatic patients with corrosive ingestion. If patients have any oropharyngeal injury and in particular symptoms of drooling, vomiting, dysphagia or pain (retrosternal or otherwise), the risk of having a high-grade injury is higher, and urgent endoscopy should be performed to grade the injury and determine whether surgical intervention is required. Patients who have non-specific symptoms, such as cough, should also undergo endoscopy, but this is less urgent.

**Conclusions**

Despite the lack of high-quality clinical trial data, the available evidence and clinical experience support the use of early endoscopy (< 12 h) in patients who are symptomatic after ingestion of a corrosive substance. We propose a clinical guideline that can be used to help plan management of corrosives.

Full text available from: [http://dx.doi.org/10.3109/15563650.2014.957310](http://dx.doi.org/10.3109/15563650.2014.957310)

**Fluoropolymer-associated illness**

**Hays HL, Spiller H. Clin Toxicol 2014; 52: 848-55.**

**Context**

Isolated outbreaks of respiratory illness associated with fluoropolymer-containing products, such as waterproofing agents and sealants, have occurred for many years in many different countries. Despite this, an assured mechanism of illness is not defined, representing a barrier to the prevention of future occurrences.

**Objective**

To discuss the epidemiology of the respiratory illness outbreaks, proposed mechanisms of
toxicity and clinical outcomes from exposure to these products.

**Methods**

We performed a literature review using OVID Medline (January 1946 through December 2012) and PubMed (January 1950 through December 2012) using the search terms "fluoropolymer", "fluorochemical", "leather proofing", "leather protectant", "weatherproofing agent", and "waterproofing agent". Bibliographies of identified articles were screened for additional relevant studies, including non-indexed reports.

**Results**

Fluoropolymer-associated respiratory illnesses often resemble polymer fume fever: acute respiratory symptoms predominate and are accompanied by flu-like symptoms. Outbreaks occasionally follow marketing of a new or reformulated product. Treatment with basic and supportive measures is sufficient in many cases, including fresh air and supplemental oxygen. Inhaled beta-2 adrenergic agonists and corticosteroids have been used. Toxicity may result from the fluoropolymer itself or the solvent in which it is delivered. Factors which may influence toxicity include fluoropolymer particle size, emission rate, methods of application, environmental conditions, and personal health.

**Conclusion**

Exposure to fluoropolymer-containing waterproofing agents can cause lung injury and usually produce abrupt onset of respiratory and flu-like symptoms. Most victims improve with supportive care and supplemental oxygen. Serious outcomes, including acute respiratory distress syndrome and death, are uncommon. Proprietary information on the exact composition of most fluoropolymer-containing products is often unavailable, and this hinders identification of an exact cause of disease. The etiology is most likely multifactorial. Future research should focus on determining the exact mechanism of illness and establishing safe exposure limits.


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**A model to improve the accuracy of US Poison Center data collection**


**Context**

Over 2 million human exposure calls are reported annually to United States regional poison information centers. All exposures are documented electronically and submitted to the American Association of Poison Control Center's National Poison Data System. This database represents the largest data source available on the epidemiology of pharmaceutical and non-pharmaceutical poisoning exposures. The accuracy of these data is critical; however, research has demonstrated that inconsistencies and inaccuracies exist.

**Objective**

This study outlines the methods and results of a training program that was developed and implemented to enhance the quality of data collection using acetaminophen exposures as a model.

**Methods**

Eleven poison centers were assigned randomly to receive either passive or interactive education to improve medical record documentation. A task force provided recommendations on educational and training strategies and the development of a quality-measurement scorecard to serve as a data collection tool to assess poison center data.
quality. Poison centers were recruited to participate in the study. Clinical researchers scored the documentation of each exposure record for accuracy.

**Results**

Two thousand two hundred cases were reviewed and assessed for accuracy of data collection. After training, the overall mean quality scores were higher for both the passive (95.3%; + 1.6% change) and interactive intervention groups (95.3%; + 0.9% change). Data collection accuracy improved modestly for the overall accuracy score and significantly for the substance identification component. There was little difference in accuracy measures between the different training methods.

**Conclusion**

Despite the diversity of poison centers, data accuracy, specifically substance identification data fields, can be improved by developing a standardized, systematic, targeted, and mandatory training process. This process should be considered for training on other important topics, thus enhancing the value of these data in relation to public health safety.

Full text available from: [http://dx.doi.org/10.3109/15563650.2014.953169](http://dx.doi.org/10.3109/15563650.2014.953169)

**Medication errors reported to U.S. Poison Control Centers, 2000–2012**


**Context**

Previous studies of medication errors have largely focused on healthcare facilities and have not reported generalizable national trends among out-of-hospital medication errors.

**Objective**

We sought to understand U.S. trends in medication errors, including the age-related risks, the involved medications, and the medical outcomes.

**Materials and methods**

We performed a retrospective analysis of National Poison Data System (NPDS) data from the American Association of Poison Control Centers for years 2000–2012. Medication error cases were analyzed by age, gender, pharmaceutical involved, substance rank, dosing error type, management site, level of healthcare received, and medical outcome. Trends in medication error rates were analyzed using Poisson regression.

**Results**

From 2000 to 2012, the NPDS recorded 2,913,924 calls reporting unintentional pharmaceutical-related errors that met inclusion criteria. Non-healthcare facility calls comprised 99.2% calls related to unintentional therapeutic errors. Eighty-seven percent of medication errors were managed on site. The annual medication error rate for all callers per 10,000 U.S. population increased significantly ($p < 0.0001$) by 69.8% from 2000 (4.98 calls per 10,000 population) to 2012 (8.46 calls per 10,000 population). Among adults aged 20 years and older, age was positively correlating ($r = 0.96$) with the rate of medication error. Analgesics were the most frequent pharmaceutical class involved in medication errors for ages 6–49 ($N = 221,061$). Among ages 20–49 years, opioid-related medication errors decreased by 7.9% from 2010 to 2012. Cardiovascular drugs were the leading source of injury among all ages ($N = 14,440$) and also the leading pharmaceutical class involved in medication errors among adults 50 years and older ($N = 187,760$).

**Conclusion**

Medication errors continue to be a source of preventable injury with increasing incidence
Incidents of potential public health significance identified using national surveillance of US poison center data (2008–2012)

**Background**
The Centers for Disease Control and Prevention (CDC) and the American Association of Poison Control Centers conduct national surveillance on data collected by US poison centers to identify incidents of potential public health significance (IPHS). The overarching goals of this collaboration are to improve CDC's national surveillance capacity for public health threats, identify early markers of public health incidents and enhance situational awareness. The National Poison Data System (NPDS) is used as a surveillance system to automatically identify data anomalies.

**Purpose**
To characterize data anomalies and IPHS captured by national surveillance of poison center data over 5 years.

**Methods**
Data anomalies are identified through three surveillance methodologies: call-volume, clinical effect, and case-based. Anomalies are reviewed by a team of epidemiologists and clinical toxicologists to determine IPHS using standardized criteria. The authors reviewed IPHS identified by these surveillance activities from 2008 through 2012.

**Results**
Call-volume surveillance identified 384 IPHS; most were related to gas and fume exposures \(n = 229\); 59.6%) with the most commonly implicated substance being carbon monoxide (CO) \(n = 92\); 22.8%). Clinical-effect surveillance identified 138 IPHS; the majority were related to gas and fume exposures \(n = 58\); 42.0%) and gastrointestinal complaints \(n = 84\); 16.2%), and the most commonly implicated substance was CO \(n = 20\); 14.4%). Among the 11 case-based surveillance definitions, the botulism case definition yielded the highest percentage of identified agent-specific illness.

**Conclusions**
A small proportion of data anomalies were designated as IPHS. Of these, CO releases were the most frequently reported IPHS and gastrointestinal syndromes were the most commonly reported illness manifestations. poison center data surveillance may be used as an approach to identify exposures, illnesses, and incidents of importance at the national and state level.

Full text available from: http://dx.doi.org/10.3109/15563650.2014.953171

MT-45, a new psychoactive substance associated with hearing loss and unconsciousness

**Background**
MT-45 (1-cyclohexyl-4-(1,2-diphenylethyl)piperazine) is an opioid analgesic drug candidate developed in the 1970s that has recently been introduced as a new psychoactive substance (NPS) on the "recreational" drug market. We describe a case series of non-fatal intoxications
associated with MT-45 within the Swedish STRIDA project.

**Study design**
Observational case series of consecutive patients with admitted or suspected intake of NPS presenting to hospitals in Sweden from November 2013 to February 2014.

**Patients and methods**
Blood and urine samples were collected from intoxicated patients presenting to emergency departments and intensive care units over the country. NPS analysis was performed by an LC–MS/MS multi-component method. Clinical data were collected when caregivers consulted the Poisons Information Centre and also retrieved from medical records.

**Case series**
Among nine intoxications where MT-45 was detected in the biological samples, four cases were indicated to only involve MT-45, while one or several psychoactive substances were found along with MT-45 in the others. All patients were men aged 17–32 years and they commonly presented with opioid-like adverse symptoms, such as unconsciousness and respiratory depression. Naloxone appeared to have utility in the treatment of MT-45 intoxication in several cases. Three patients complained of bilateral hearing loss that in one case persisted after two weeks.

**Conclusion**
MT-45 should be added to the growing list of harmful NPS causing life-threatening poisonings, and rapid actions taken to make it a controlled substance.

Full text available from: [http://dx.doi.org/10.3109/15563650.2014.943908](http://dx.doi.org/10.3109/15563650.2014.943908)

**Serotonin toxicity from antidepressant overdose and its association with the T102C polymorphism of the 5-HT2A receptor**

Abstract and full text available from: [http://dx.doi.org/10.1038/tpj.2013.47](http://dx.doi.org/10.1038/tpj.2013.47)

**Neurological manifestation of recreational fatal and near-fatal diethylene glycol poisonings: case series and review of literature**

Abstract and full text available from: [http://dx.doi.org/10.1097/MD.0000000000000062](http://dx.doi.org/10.1097/MD.0000000000000062)

**Long-term prognosis of patients with carbon monoxide poisoning: a nationwide cohort study**

Abstract and full text available from: [http://dx.doi.org/10.1371/journal.pone.0105503](http://dx.doi.org/10.1371/journal.pone.0105503)
Ethnic differences in self-poisoning across South London
Abstract and full text available from: http://dx.doi.org/10.1027/0227-5910/a000258

Use of antiepileptic drugs during pregnancy and risk of spontaneous abortion and stillbirth: population based cohort study
Abstract and full text available from: http://dx.doi.org/10.1136/bmj.g5159

Pregnancy and fetal outcomes following natalizumab exposure in pregnancy. A prospective, controlled observational study
Abstract and full text available from: http://dx.doi.org/10.1177/1352458514546790

Electronic cigarettes: review of use, content, safety, effects on smokers and potential for harm and benefit
Abstract and full text available from: http://dx.doi.org/10.1111/add.12659

The prevalence of respiratory symptoms among mushroom workers in Ireland
Abstract and full text available from: http://occmed.oxfordjournals.org/content/early/2014/08/19/occmed.kqu110.abstract

Large outbreaks of ciguatera after consumption of brown marbled grouper
Abstract and full text available from: http://dx.doi.org/10.3390/toxins6072041
A 21st century roadmap for human health risk assessment
Abstract and full text available from: http://dx.doi.org/10.3109/10408444.2014.931923

Risk assessment in the 21st century: roadmap and matrix
Abstract and full text available from: http://dx.doi.org/10.3109/10408444.2014.931924

The use of mode of action information in risk assessment: quantitative key events/dose-response framework for modeling the dose-response for key events
Abstract and full text available from: http://dx.doi.org/10.3109/10408444.2014.931925
TOXICOLOGY

General


Analytical toxicology
Andersen DW, Linnet K. Screening for anabolic steroids in urine of forensic cases using fully automated solid phase extraction and LC-MS-MS. J Anal Toxicol 2014; online early: doi: 10.1093/jat/blu098:


Meyer MR. Trends in analyzing emerging drugs of abuse. From seized samples to body samples. Anal Bioanal Chem 2014; online early: doi: 10.1007/s00216-014-8082-3:


Wink CS, Meyer MR, Braun T, Turcant A, Maurer HH. Biotransformation and detectability of the designer drug 2,5-dimethoxy-4-propylphenethylamine (2C-P) studied in urine by GC-MS, LC-MS, and LC-high-resolution-MS. Anal Bioanal Chem 2014; online early: doi: 10.1007/s00216-014-8083-2:


Biomarkers


Carcinogenicity

Cardiototoxicity

Alomari MA, Khbour O, Alzoubi KH, Shqair DM, Eisenberg T.
Central and peripheral cardiovascular changes immediately after waterpipe smoking.

Chalbot M-CG, Jones TA, Kavouras IG.
Trends of non-accidental, cardiovascular, stroke and lung cancer mortality in Arkansas are associated with ambient PM10 reductions.

Myocardial rupture following carbon monoxide poisoning.

Eroglu M, Uz O, Isliak Z, Yalcin M, Yildirim AO, Kardesoglu E.
Carbon monoxide poisoning increases Tpeak-Tend dispersion and QTc dispersion.

Gao X, Wang H-S.
Impact of bisphenol A on the cardiovascular system – Epidemiological and experimental evidence and molecular mechanisms.

Hasnain M, Vieweg WV.
QTc interval prolongation and torsade de pointes associated with second-generation antipsychotics and antidepressants: a comprehensive review.
CNS Drugs 2014; online early: doi: 10.1007/s40263-014-0196-9:

Hay E, Shkolovski V, Blaer Y, Shlakhover V, Katz A.
Intravenous methylphenidate: an unusual way to provoke ST elevation myocardial infarction.

Myocardial infarction and occupational exposure to motor exhaust: a population-based case-control study in Sweden.

Major RW, Pierides M, Squire IB, Roberts E.
Bodybuilding, exogenous testosterone use and myocardial infarction.
QJM 2014; online early: doi: 10.1093/qjmed/hcu156:

Martinez A, Dobos N, Rotella J-A, Greene SL.
Life-threatening cardiovascular toxicity following ingestion of Chinese herbal medicine.

McKeever RG, Vearrier D, Jacobs D, LaSala G, Okaneku J, Greenberg M.
K2–Not the spice of life; synthetic cannabinoids and ST elevation myocardial infarction: a case report.
J Med Toxicol 2014; online early: doi: 10.1007/s13181-014-0424-1:

Pan A, Clark ML, Ang L-W, Yu MC, Yuan J-M, Koh W-P.
Environ Health Perspect 2014; online early: doi: 10.1289/ehp.1307662:

Singh P, Maldonado-Duran JM.
Drug-induced QT prolongation as a result of an escitalopram overdose in a patient with previously undiagnosed congenital long QT syndrome.


Dermal toxicity

Hong C, Sangle SR, Coghlan JG, D'Cruz DP.
Scleroderma and breast implants.
QJM 2014; online early: doi: 10.1093/qjmed/hcu156:

Mussani F, DeKoven JG.
Unilateral hand allergic contact dermatitis due to occupational exposure.
J Cutan Med Surg 2014; 18: 283-6:

Rzymski P, Klimaszyk P, Poniedziałek B, Karczewski J.
Health threat associated with Caucasian giant hogweeds: awareness among doctors and general public in Poland.
Cutan Ocul Toxicol 2014; 2014:

Developmental toxicity

Cragan JD.
Medication use during pregnancy.
Br Med J 2014; 349:

Dallaire R, Dewailly T, Ayotte P, Forget-Dubois N, Jacobson SW, Jacobson JL, Muckle G.
Growth in Inuit children exposed to polychlorinated biphenyls and lead during fetal development and childhood.

Pregnancy and fetal outcomes following natalizumab exposure in pregnancy. A prospective, controlled observational study.
Mult Scler 2014; online early: doi: 10.1177/135245851456790:

Estevan C, Fuster E, Del Río E, Pamies D, Vilanova E, Soborg MA.
The organophosphorus pesticide chlorpyrifos and its metabolites alter the expression of biomarker genes of differentiation in D3 mouse embryonic stem cells in a comparable way to other model neurodevelopmental toxicants.
Chem Res Toxicol 2014; online early: doi: 10.1021/tr500051k:

Sources and contents of air pollution affecting term low birth weight in Los Angeles County, California, 2001–2008.
Environ Res 2014; online early: doi: 10.1016/j.envres.2014.05.003:

Prenatal exposure to perfluoralkyl substances and the risk of congenital cerebral palsy in children.
Am J Epidemiol 2014; online early: doi: 10.1093/aje/kwu179:
Developmental toxicity
Robledo CA, Yeung E, Mendola P, Sundaram R, Maisog J, Sweeney AM, Barr DB, Buck Louis GM.
Preconception maternal and paternal exposure to persistent organic pollutants and birth size: the LIFE study.
Environ Health Perspect 2014; online early: doi: 10.1289/ehp.1308016:

In utero exposure to mixtures of xenoestrogens and child neuropsychological development.

Driving under the influence of alcohol and other drugs
Lemos NP.
Driving under the influence of synthetic cannabinoid receptor agonist XLR-11.

Starkey NJ, Charlton SG.
The effects of moderate alcohol concentrations on driving and cognitive performance during ascending and descending blood alcohol concentrations.
Hum Psychopharmacol 2014; 29: 370-83.

Verster JC, Bervoets AC, De Klerk S, Vreman RA, Olivier B, Roth T, Broekhuis KA.
Effects of alcohol hangover on simulated highway driving performance.
Psychopharmacology 2014; 231: 2999-3008.

Epidemiology
Ailshire JA, Crimmings EM.
Fine particulate matter air pollution and cognitive function among older US adults.

Bashir F, Ara J, Kumar S.
Deliberate self poisoning at National Poisoning Control Centre.

Bohnenberger KA, Krenzeloer EP.
Retrospective review of trend in modafinil overexposures reported to American poison information centers.

Brophy TJ, Spiller HA, Casavant MJ, Chounthirath T, Smith MD, Xiang H.
Medication errors reported to U.S. Poison Control Centers, 2000-2012.

Castaneto MS, Gorelick DA, Desrosiers NA, Hartman RL, Pirard S, Huestis MA.
Synthetic cannabinoids: epidemiology, pharmacodynamics, and clinical implications.
Drug Alcohol Depend 2014; online early: doi: 10.1016/j.drugalcdep.2014.08.005:

Cheng M-H, Chen C-C, Chiu H-F, Yang C-Y.
Fine particulate air pollution and hospital admissions for asthma: a case-crossover study in Taipei.
J Toxicol Environ Health A 2014; 77: 1075-83.

Chevrier J, Warner M, Gunier RB, Brambilla P, Eskenazi B, Mocarelli P.
Serum dioxin concentrations and thyroid hormone levels in the Seveso Women's Health Study.

Courtney KE, Ray LA.
Methamphetamine: an update on epidemiology, pharmacology, clinical phenomenology, and treatment literature.
Drug Alcohol Depend 2014; online early: doi: 10.1016/j.drugalcdep.2014.08.002:

Cross S, Bhugra D, Dargan PI, Wood DM, Greene SL, Craig TJ.

Gao X, Wang H-S.
Impact of bisphenol A on the cardiovascular system – Epidemiological and experimental evidence and molecular mechanisms.


Hassanian-Moghaddam H, Zamani N, Rahimi M, Shadnia S, Pajoumand A, Sarjami S.
Acute adult and adolescent poisoning in Tehran, Iran; the epidemiologic trend between 2006 and 2011.
Arch Iran Med 2014; 17: 534-8.

He M, Li W-C, Sun D-M, Ma K-J, Zhao Z-Q, Li B-X, Li L.
Epitome of China's unnatural deaths: a historically retrospective study of forensic autopsy cases in Shanghai public security bureau from 1990 to 1999.

Karunanayake RK, Dissanayake DM, Karunanayake AL.
A study of snake bite among children presenting to a paediatric ward in the main teaching hospital of North Central Province of Sri Lanka.
BMC Res Notes 2014; 7: 482.

Klimas J, O'Reilly M, Egan M, Tobin H, Bury G.
Urban overdose hotspots: a 12-month prospective study in Dublin ambulance services.

Clin Toxicol 2014; online early: doi: 10.3109/15563650.2014.953171:

Mbeledogu CN, Cecil EV, Millett C, Saxena S.
Hospital admissions for unintentional poisoning in preschool children in England; 2000-2011.
Arch Dis Child 2014; online early: doi: 10.1136/archdischild-2013-305298:
Epidemiology


Rajapakse T, Griffiths KM, Christensen H, Cotton S.

Randhawa M, Al-Ghamdi M, Whaas M, Aljamaan M, Al-Jaizani R.

Forensic toxicology
Anand JS, Gieron J, Lechowicz W, Schetz D, Kala M, Waldman W.


He M, Li W-C, Sun D-M, Ma K-J, Zhao Z-Q, Li B-X, Li L.

Togni LR, Lanaro R, Resende RR, Costa JL.

Vignali C, Morini L, Chen Y, Stramesi C, Groppi A.

Genotoxicity
Elebари M, Jafarian-Dehkordi A, Kahookar A, Moradi S.

Ihlaseh-Catalano SM, Bailey KA, Cardoso AP, Ren H, Fry RC, de Camargo JL, Wolf DC.
Dose and temporal effects on gene expression profiles of urothelial cells from rats exposed to diuron. Toxicology 2014; online early: doi: 10.1016/j.tox.2014.08.005.

Kabasencwe W, Skinner M.

Hepatotoxicity
Agollo MC, Miszputen SJ, Diamet J.

Amacher DE.

Antoine DJ, Dear JW, Goldring CE, Park BK.

Björnsson ES.


Chalasani NP, Hayashi PH, Bonkorsky HL, Navarro VJ, Lee WM, Fontana RJ, on behalf of the Practice Parameters Committee of the American College of Gastroenterology.

Hagiwara S, Kaneko M, Murata M, Ikegami T, Oshima K.
A survival case of severe liver failure caused by acetylsalicylic acid that was treated with living donor liver transplantation. Hippokratia 2014; 18: 71-3.

Howland RH.
**Hepatotoxicity**


**Inhalation toxicity**


**Kinetics**


**Mechanisms of toxicity**


**Medication errors**


**Metabolism**


**Nephrotoxicity**


Nephrotoxicity
Naha K, Surynarayana J, Aziz RA, Shastry BA.
Amlodipine poisoning revisited: acidosis, acute kidney
injury and acute respiratory distress syndrome.

Rostas SE, Kubiak DW, Calderwood MS.
High-dose intravenous vancomycin therapy and the risk of
nephrotoxicity.

Neurotoxicity
Barnhill LM, Bronstein JM.
Pesticides and Parkinson's disease: is it in your genes?

Betts KS.
More evidence for PBDEs as neurotoxicants: cohort study
 corroborates earlier findings.
Environ Health Perspect 2014; 122: A221.

Brooks JB, Rocha LF, Fragoso YD.
Long-term effects of mercury intoxication in the peripheral
nervous system.

Cooper JM, Newby DA, Whyte IM, Carter G, Jones AL,
Isbister GK.
Serotonin toxicity from antidepressant overdose and its
association with the T102C polymorphism of the 5-HT 2A
receptor.

Elkoussi A, Yosry M, Marhan S, Marwa A, Mariam N.
Hazards of glue abuse-1. Physicochemical properties and
neurotoxicity.

Franklin TR, Wetherill RR, Jagannathan K, Johnson B,
Mumma J, Hager N, Rao H, Childress AR.
The effects of chronic cigarette smoking on gray matter
volume: influence of sex.

Galassi G, Georgouloupolou E, Ariatti A.
Amiodarone neurotoxicity: the other side of the medal.

Gutherz SB, Kulick CV, Soper C, Kondratyev A, Gale K,
Forcelli PA.
Brief postnatal exposure to phenoxyisobutyl impairs passive
avoidance learning and sensorimotor gating in rats.

Haberzettl R, Fink H, Bert B.
Role of 5-HT1A- and 5-HT2A receptors for the murine model
of the serotonin syndrome.

Imam YZB, Kamran S, Karim H, Elalamy O, Sokrab T,
Osmay Y, Delev D.
Neurological manifestation of recreational fatal and near-
fatal diethylene glycol poisonings: case series and review
of literature.
Medicine (Baltimore) 2014; 93: e62.

Lin CM, Liu CK.
Reversible cerebral periventricular white matter changes
with corpus callosum involvement in acute toluene-
poisoning.
J Neuroimaging 2014; online early:
doi: 10.1111/jon.12155:
Liu J, Chen Y, Gao D, Jing J, Hu Q.
Prenatal and postnatal lead exposure and cognitive
development of infants followed over the first three years
of life: a prospective birth study in the Pearl River Delta
region, China.
Neurotoxicology 2014; online early:
doi: 10.1016/j.neuro.2014.07.001:
Ma Q, Ying M, Sui X, Zhang H, Huang H, Yang L, Huang X,
Zhuang Z, Liu J, Yang X.
Chronic copper exposure causes spatial memory
impairment, selective loss of hippocampal synaptic proteins,
and activation of PKR/eIF2alpha pathway in mice.
J Alzheimers Dis 2014; online early: doi: 10.3233/JAD-
140216:
Ophir A, Karakis I, Richter ED, Abarbanel JM, Wormser U,
Aschner M, Finkelstein Y.
An uncommon pattern of polyneuropathy induced by
lifetime exposures to drift containing organophosphate
pesticides.
Neurotoxicology 2014; online early:
doi: 10.1016/j.neuro.2014.08.004:
Pomier Y, Krzyzanowska W, Smaga I, Pomier-
Charniolo L, Stankowicz P, Budziszewska B.
Ethylene glycol ethers induce oxidative stress in the rat brain.
Neurotox Res 2014; online early: doi: 10.1007/s12640-
014-9486-8:
Prager EM, Pidoplichko VI, Aroniadou-Anderjaska V,
Apland JP, Braga MFM.
Pathophysiological mechanisms underlying increased
anxiety after soman exposure: reduced GABAergic inhibition
in the basolateral amygdala.
Neurotoxicology 2014; online early:
doi: 10.1016/j.neuro.2014.08.007:
Rao H, Harshman B, Mahajan A, Pashankar F.
Acute neurotoxicity related to high dose systemic
methotrexate chemotherapy.
Sadeghian A, Taheri MS, Haghhighatkhah H, Kharrazi M.
Patterns of brain injury in poisoning and intoxication.
Swale DR, Sun B, Tong F, Bloomquist JR.
Neurotoxicity and mode of action of N,N-diethyl-meta-
toluamide (DEET).
Tiwari M, Bhagia LJ, Shaikh I, Rohila D.
Role of δ-aminoevulinic acid dehydratase (ALAD) gene
polymorphism in lead induced nephrotoxicity.
van Lingen CP, Ettema HB, Van Der Straeten C, Kollen BJ,
Verheyen CC.
Self-reported neurological clinical manifestations of metal
toxicity in metal-on-metal hip arthropasty.
HIP Int 2014; online early: doi: 10.5301/hipint.5000179:
Wilson WW, Shapiro LP, Bradner JM, Caudle WM.
Developmental exposure to the organochlorine insecticide
endosulfan damages the nigrostriatal dopamine system in
male offspring.
**Neurotoxicity**


**Occupational toxicology**


Koureas M, Tsezou A, Tsakalof A, Orfanidou T, Hadjichristodoulou C. Increased levels of oxidative DNA damage in pesticide sprayers in Thessaly Region (Greece). Implications of pesticide exposure. Sci Total Environ 2014; 496: 358-64.


**Ocular toxicity**

Abbud EB, Al-Falah M. Nine years of retained perfluoro-n-octane in the anterior chamber after retinal detachment repair with no signs of ocular toxicity. Middle East Afr J Ophthalmol 2014; 21: 279-82.

**Ocular toxicity**


**Paediatric toxicity**


**Paediatric toxicology**


**Poisons information and poison information centres**


**Polymorphisms**


**Psychiatric aspects**


**Reprotoxicity**

Barrett JR. BPA and reproductive health: reviewing the current state of the science. Environ Health Perspect 2014; 122: A223.


**Risk assessment**

Risk assessment

Embry MR, Bachman AN, Bell DR, Boobis AR, Cohen SM, Dellarco M, Dewhurst IC, Doerger NG, Hines RN, Moretto A, Pastoor TP, Phillips RD, Rowlands JC, Tanir JY, Wolf DC, Doe JE.


Mughal MR, Houpt J, Kluchinsky TA.


Oltmanns J, Bunke D, Jenseit W, Heidorn C.

The impact of REACH on classification for human health hazards. Regul Toxicol Pharmacol 2014; online early: doi: 10.1016/j.yrtph.2014.08.005:


Simon TW, Simons SS, Jr., Preston RJ, Boobis AR, Cohen SM, Doerger NG, Fennier-Crisp PA, McQuillan TS, McQueen CA, Rowlands JC, RISK21 Dose-Response Subteam.


Suicide

da Cruz Pires MC, da Silva TPS, dos Passos MP, Sougey EB, Bastos Filho OC.


Eberlein CK, Frielin H, Köhnlein T, Hillemacher T, Bleich S.


A case of severe chlorite poisoning successfully treated with early administration of methylene blue, renal replacement therapy, and red blood cell transfusion: case report. Medicine (Baltimore) 2014; 93: e60.

Gupta A, Agarwal A, Ram J.


Hall CA, Lydon HL, Dalton CH, Chipman JK, Graham JS, Chilcott RP.


Ivanov V, Sarmanayev S, Akhmetov I.


Lee K-W, Park S-Y.


Redshaw CL, Tufft N.

**MANAGEMENT**

**General**
Richards JR, Derlet RW.
Beta-blocker and antipsychotic treatment of toxicity from so-called designer drugs.
Pharmacotherapy 2014; 34: e159-e161.

**Antidotes**

**Acetylcysteine**
Impact of reducing the threshold for acetylcysteine treatment in acute paracetamol poisoning: the recent United Kingdom experience.

Impact of N-acetylcysteine treatment on changes in serum electrolyte levels and hemostatic parameters in patients with acetaminophen overdose.

**Activated charcoal**
Cooper JM, Duffull SB, Salao AS, Isbister GK.
The pharmacokinetics of sertraline in overdose.

**Antivenom**
Andreosso A, Smout MJ, Seymour JE.
Dose and time dependence of box jellyfish antivenom.
J Venom Anim Toxins Incl Trop Dis 2014; 20: 34.

Bhattacharya S, Chakraborty M, Mukhopadhyay P, Kundu PP, Mishra R.
Viper and cobra venom neutralization by alginate coated multicomponent polyvalent antivenom administered by the oral route.

Singh HP.
Efficacy of scorpion antivenom in children-Author's reply.
Indian Pediatr 2014; 51: 500.

**Chelating agents**

**DMSA**
van Eijkeren JCH, Olie JDN, Bradberry SM, Vale JA, de Vries I, Clewell HJ, III, Meulenbelt J, Hunault CC.
Modelling the effect of DMSA chelation therapy in patients intoxicated by lead.

**Hyperbaric oxygen therapy**
Weaver LK.
Hyperbaric oxygen therapy for carbon monoxide poisoning.
Undersea Hyperb Med 2014; 41: 339-54.

**Lipid emulsion therapy**
Bedocs P, Capacchione J, Potts L, Chugani R, Weiszhar Z, Szebeni J, Buckenmaier CC.
Hypersensitivity reactions to intravenous lipid emulsion in swine: relevance for lipid resuscitation studies.
Anesth Analg 2014; online early: doi: 10.1213/ANE.0000000000000396:

Veli SB, Atanasov VN, Angelov JS, Kanev KP.
Simultaneous application of intravenous fat emulsion and charcoal hemoperfusion in quetiapine overdose case.

**Methylthioninium chloride (Methylene blue)**
Lee KK, Imazumi N, Chamberland SR, Alder NN, Boelesterl UA.
Targeting mitochondria with methylene blue protects mice against acetaminophen-induced liver injury.
Hepatology (Baltimore, Md) 2014; online early: doi: 10.1002/hep.27385:

Mirakbari SM.
Methylene blue unresponsive methemoglobinemia.

**Pralidoxime**
Validation of a high performance liquid chromatography method for determination of pralidoxime in human plasma.

**Extracorporeal treatments**
Gosselin S, Juurlink DN, Kielstein JT, Ghannoum M, Lavergne V, Nolin TD, Hoffman RS, on behalf of the EXTRIP workgroup.
Extracorporeal treatment for acetaminophen poisoning: recommendations from the EXTRIP workgroup.

**Haemodialysis**
Heise CW, Beutler D, Bosak A, Orme G, Loli A, Graeme K.
Massive atenolol, lisinopril, and chlorthalidone overdose treated with endoscopic decontamination, hemodialysis, impella percutaneous left ventricular assist device, and ECMO.
J Med Toxicol 2014; online early: doi: 10.1007/s13181-014-0419-y:

**Haemoperfusion**
Veli SB, Atanasov VN, Angelov JS, Kanev KP.
Simultaneous application of intravenous fat emulsion and charcoal hemoperfusion in quetiapine overdose case.

**Insulin**
Yi HY, Lee JY, Lee WS, Sung WY, Seo SW.
Comparison of the therapeutic effect between sodium bicarbonate and insulin on acute propafenone toxicity.

**Naloxone**
Anon.
Naloxone now available for emergency home use.

Davis CS, Banta-Green CJ, Coffin P, Dailey MW, Walley AY.
Intranasal naloxone for opioid overdose reversal.
Prehosp Emerg Care 2014; online early: doi: 10.3109/10903127.2014.942484:

**Sodium bicarbonate**
Yi HY, Lee JY, Lee WS, Sung WY, Seo SW.
Comparison of the therapeutic effect between sodium bicarbonate and insulin on acute propafenone toxicity.
DRUGS

General

Anon.
Drug-induced nail disorders.

Amacher DE.
Female gender as a susceptibility factor for drug-induced liver injury.

Björnsson ES.
Incidence and outcomes of DILI in Western patients.

Combined liver and lung transplantation with extended normothermic lung preservation in a patient with end-stage emphysema complicated by drug-induced acute liver failure.

Chalasani NP, Hayashi PH, Bonkovsky HL, Navarro VJ, Lee WM, Fontana RJ, on behalf of the Practice Parameters Committee of the American College of Gastroenterology.
ACG clinical guideline: the diagnosis and management of idiosyncratic drug-induced liver injury.

Cragan JD.
Medication use during pregnancy.

Griffin E, Corcoran P, Cassidy L, O'Carroll A, Perry IJ, Bonner B.
Characteristics of hospital-treated intentional drug overdose in Ireland and Northern Ireland.

Gurpinar T, Vural K, Ay B, Yildirim G, Olmez E.
Retrospective evaluation of the drug use in pregnancy in Manisa.

Habertzell R, Fink H, Bert B.
Role of 5-HT1A- and 5-HT2A receptors for the murine model of the serotonin syndrome.

Heise CW, Beutler D, Bosak A, Orme G, Loli A, Graeme K.
Massive atenolol, lisinopril, and chloralhydrate overdose treated with endoscopic decontamination, hemodialysis, impella percutaneous left ventricular assist device, and ECMO.

Kleiner DE.
Liver histology in the diagnosis and prognosis of drug-induced liver injury.

Klimas J, O'Reilly M, Egan M, Tobin H, Bury G.
Urban overdose hotspots: a 12-month prospective study in Dublin ambulance services.

Meyer MR.
Trends in analyzing emerging drugs of abuse From seized samples to body samples.
Anal Bioanal Chem 2014; online early:

Randhawa M, Al-Ghamdi M, Whaas M, Aljamaan M, Al-Jaizani R.
Admissions due to drug related problems at the emergency department of a tertiary hospital in Alkhobar, Saudi Arabia.

Vuolo M, Kelly BC, Wells BE, Parsons JT.
Correlates of prescription drug market involvement among young adults.
Drug Alcohol Depend 2014; online early:

Wang G-Q, Deng Y-Q, Hou F-Q.
Overview of drug-induced liver injury in China.

Acetaminophen (see paracetamol)

Adrenaline

August DA, Sui J, Coté CJ.
Unintentional epidural injection of 88 µg.kg⁻¹ of epinephrine.

Alphamethyltryptamine

Richardson L, Quick D.
Seizures and extreme agitation leading to a 48-hour intensive care unit stay post alphamethyltryptamine (AMT) ingestion in two young men.
Anaesthesia 2014; 69 Suppl s3: 52.

Amfetamines and MDMA (ecstasy)

Courtney KE, Ray LA.
Methamphetamine: an update on epidemiology, pharmacology, clinical phenomenology, and treatment literature.
Drug Alcohol Depend 2014; online early:
doi: 10.1016/j.drugalcdep.2014.08.062.

Togni LR, Lanaro R, Resende RR, Costa JL.
The variability of ecstasy tablets composition in Brazil.

Antiarhythmic drugs

Amiodarone

Galassi G, Georgouloupolou E, Ariatti A.
Amiodarone neurotoxicity: the other side of the medal.

Propafenone

Yi HY, Lee JY, Lee WS, Sung WY, Seo SW.
Comparison of the therapeutic effect between sodium bicarbonate and insulin on acute propafenone toxicity.
Am J Emerg Med 2014; online early:
doi: 10.1016/j.ajem.2014.07.010:
**Antibiotics**

**Azithromycin**
Clinical and histological features of azithromycin-induced liver injury.
Clin Gastroenterol Hepatol 2014; online early: doi: 10.1016/j.cgh.2014.07.054:

**Colistin**
Continuous renal replacement therapy-related strategies to avoid colistin toxicity: a clinically orientated review.

**Nitrofurantoin**
štuhec M.
Auditory hallucinations associated with nitrofurantoin use: case report and review of the literature.
Wien Klin Wochenschr 2014; online early: doi: 10.1007/s00508-014-0577-6:

**Vancomycin**
Rostas SE, Kubiak DW, Calderwood MS.
High-dose intravenous vancomycin therapy and the risk of nephrotoxicity.

**Anticoagulants**
Ebright J, Mousa SA.
Oral anticoagulants and status of antidotes for the reversal of bleeding risk.

**Lamotrigine**
Kornhall D, Nielsen EW.
Failure of ketamine anesthesia in a patient with lamotrigine overdose.

**Levetiracetam**
Bunnell K, Pucci F.
Levetiracetam-induced neutropenia following traumatic brain injury.
Brain Inj 2014; online early: doi: 10.3109/02699052.2014.947622:

**Phenytoin**
Bax K, Tijssen J, Rieder MJ, Filler G.
Rapid resolution of tacrolimus intoxication-induced AKI with steroids and phenytoin.
Ann Pharmacother 2014; online early: doi: 10.1177/1060028014546184:

**Valproate**
Huo T, Chen X, Lu X, Qiu L, Liu Y, Cai S.
An effective assessment of valproate sodium-induced hepatotoxicity with UPLC-MS and HNMR-based metabonomics approach.

**Antidepressants**
Cooper JM, Newby DA, Whyte IM, Carter G, Jones AL, Isbister GK.
Serotonin toxicity from antidepressant overdose and its association with the T102C polymorphism of the 5-HT2A receptor.

Hasnain M, Vieweg WV.
QTc interval prolongation and torsade de pointes associated with second-generation antipsychotics and antidepressants: a comprehensive review.
CNS Drugs 2014; online early: doi: 10.1007/s40263-014-0196-9:

**Antifungal drugs**
**Voriconazole**
Chandrasekar P, Rupali P, Patel D.
Voriconazole toxicity masquerading as septic shock.
Leuk Lymphoma 2014; online early: doi: 10.3109/10428194.2014.955023:

**Antihistamines**
**Promethazine**
Dalhoff K, Askamer G.
Promethazine used as a recreational drug in Denmark.

**Antihypertensive drugs**
Redshaw CL, Tuft N.
Treatment of a complex mixed overdose of antihypertensive medication 1A02, 2C04, 2C05.

**Antineoplastics**
Connor TH, Lawson CC, Polovich M, McDiamid MA.
Reproductive health risks associated with occupational exposures to antineoplastic drugs in health care settings: a review of the evidence.
J Occup Environ Med 2014; online early: doi: 10.1097/JOM.0000000000000249:
Antipsychotics

Hasnain M, Vieweg WV. QTc interval prolongation and torsade de pointes associated with second-generation antipsychotics and antidepressants: a comprehensive review. CNS Drugs 2014; online early: doi: 10.1007/s40263-014-0196-9:

Olanzapine


Quetiapine


Risperidone


Baclofen


Barbiturates

Phenobarbital


Benzodiazepines


Midazolam


Benzylpiperazine


Beta-blockers

Propranolol


Caffeine


Calcium channel blockers


Amlodipine


Cannabis (marijuana)

Fogang YF, Camara M, Mbonda PC, Toffa D, Touré K. Late onset epilepsy associated with marijuana abuse: a case report with MRI findings. PAMJ 2014; 17: 158.


Cannabis (marijuana)

Cocaine


Cytoxic drugs
Methotrexate


Designer drugs

Forrester MB. NBOMe designer drug exposures reported to Texas poison centers. J Addict Dis 2014; online early: doi: 10.1080/10550874.2014.950027:


Kiyatkin EA, Kim AH, Wakabayashi KT, Baumann MH, Shaham Y. Effects of social interaction and warm ambient temperature on brain hyperthermia induced by the designer drugs methylene and MDPV. Neuropsychopharmacology 2014; online early: doi: 10.1038/npp.2014.191:


Richards JR, Derlet RW. Beta-blocker and antipsychotic treatment of toxicity from so-called designer drugs. Pharmacotherapy 2014; 34: e159-e161.


Wink CS, Meyer MR, Braun T, Turcant A, Maurer HH. Biotransformation and detectability of the designer drug 2,5-dimethoxy-4-propylphenethylamine (2C-P) studied in urine by GC-MS, LC-MS, and LC-high-resolution-MS. Anal Bioanal Chem 2014; online early: doi: 10.1007/s00216-014-8083-2:

DMT

Gamma hydroxybutyrate
**Gamma-hydroxybutyrate**
Post mortem concentrations of endogenous gamma hydroxybutyric acid (GHB) and *in vitro* formation in stored blood and urine samples.

**Herbal medicines, ethnic remedies and dietary supplements**
Agollo MC, Misaputen SJ, Diament J.
Hypericum perforatum-induced hepatotoxicity with possible association with copaiba (Copaifera langsdorffii Desf): case report.

Chong YK, Ching CK, Ng SW, Tse ML, Mak TW.
Recipes and general herbal formulae in books: causes of herbal poisoning.

Du Plooy W, Mathibe L.
Hospitalization of patients due to traditional medicine poisoning.

Toxic effects of rhamnus alaternus: a rare case report.

Martinez A, Dobos N, Rotella J, Martinez A, Greene SL.
Life-threatening cardiovascular toxicity following ingestion of Chinese herbal medicine.

**Heroin (diacetylmorphine)**
Anon.
Heroin use leads to anthrax.
JAMA 2014; 312: 590.

**Iron**
Porter JB, Garbowsk M.
The pathophysiology of transfusional iron overload.

Salt S, Zaghboul N, Patel A, Shah T, Iacobas I, Calderwood S.
Transfusion related iron overload in pediatric oncology patients treated at a tertiary care centre and treatment with chelation therapy.
Pediachr Blood Cancer 2014; online early; doi: 10.1002/pbc.25189.

**Ketamine**
Serum brain-derived neurotrophic factor and nerve growth factor decreased in chronic ketamine abusers.

**Levamisole**
Ammar AT, Livak M, Witsil JC.
Old drug new trick: levamisole-adulterated cocaine causing acute kidney injury.

**Heroin (diacetylmorphine)**
Anon.
Heroin use leads to anthrax.
JAMA 2014; 312: 590.

**Iron**
Porter JB, Garbowsk M.
The pathophysiology of transfusional iron overload.

Salt S, Zaghboul N, Patel A, Shah T, Iacobas I, Calderwood S.
Transfusion related iron overload in pediatric oncology patients treated at a tertiary care centre and treatment with chelation therapy.
Pediachr Blood Cancer 2014; online early; doi: 10.1002/pbc.25189.

**Ketamine**
Serum brain-derived neurotrophic factor and nerve growth factor decreased in chronic ketamine abusers.

**Levamisole**
Ammar AT, Livak M, Witsil JC.
Old drug new trick: levamisole-adulterated cocaine causing acute kidney injury.

**Lithium**
Bregman A, Fritz K, Xiong GL.
Lactulose-associated lithium toxicity: a case series.
J Clin Psychopharmacol 2014; online early; doi: 10.1097/JCP.0000000000000206.

**Liraglutide**
Bowler M, Nethercott DR.
Two lessons from the empiric management of a combined overdose of liraglutide and amitriptyline.

**Methcathinone**
Rojek S, Klys M, MacIow-Glab M, Kula K, Strona M.
Cathinones derivatives-related deaths as exemplified by two fatal cases involving methcathinone with 4-methylmethcathinone and 4-methylethcathinone.

**Methoxetamine**
Zawilska JB.
Methoxetamine – A novel recreational drug with potent hallucinogenic properties.
Toxicol Lett 2014; online early; doi: 10.1016/j.toxlet.2014.08.011.

**Methylphenidate**
Gahr M, Kolle MA.
Methylphenidate intoxication: somnolence as an uncommon clinical symptom and proof of overdosing by increased serum levels of ritalinic acid.

Hay E, Shklovski V, Blaer Y, Shlakhover V, Katz A.
Intravenous methylphenidate: an unusual way to provoke ST elevation myocardial infarction.

**Modafinil**
Bohnenberger KA, Krenzeloc EP.
Retrospective review of trend in modafinil overexposures reported to American poison information centers.

**Monoclonal antibodies**
**Cetuximab**
Case report about fatal or near-fatal hypersensitivity reactions to cetuximab: anticituximabige as a valuable screening test.
Clin Med Insights Oncol 2014; 8: 91-4.
**Natalizumab**

**NSAIDs**
**Ibuprofen**

**Nicotine**


**Opioids**


**Buprenorphine**

**Fentanyl**


**Methadone**

**Paracetamol (acetaminophen)**


Paracetamol (acetaminophen)
Impact of N-acetylcysteine treatment on changes in serum electrolyte levels and hemostatic parameters in patients with acetaminophen overdose.

Gosselin S, Juurlink DN, Kielstein JT, Ghannoum M, Lavergne V, Nolin TD, Hoffman RS, on behalf of the EXTRIP workgroup.
Extracorporeal treatment for acetaminophen poisoning: recommendations from the EXTRIP workgroup.

Lee KK, Imai H, Chamberland SR, Alder NN, Boelsterli UA.
Targeting mitochondria with methylene blue protects mice against acetaminophen-induced liver injury.

The B-RafV600E inhibitor dabrafenib selectively inhibits RIP3 and alleviates acetaminophen-induced liver injury.

Tiegs G, Karimi K, Brune K, Arck P.
New problems arising from old drugs: second-generation effects of antidepressants.

Circulating microRNA profiles in human patients with acetaminophen hepatotoxicity or ischemic hepatitis.

Psychotropic drugs
Howland RH.
Psychotropic medication use: what will it do to my liver?

Salicylates
Hagiwara S, Kaneko M, Murata M, Ikekami T, Oshima K.
A survival case of severe liver failure caused by acetylsalicylic acid that was treated with living donor liver transplantation.

SSRIs and SNRIs
Beaune S, Curis E, Casalino E, Juvin P, Mégargne B.
Do serotonin reuptake inhibitors worsen outcome of patients referred to the emergency department for deliberate multdrug exposure?

Citalopram
Oransay K, Hocaoğlu N, Buyukelgöz M, Tuncok Y, Kalkan S.
The role of adenosine receptors and endogenous adenosine in citalopram-induced cardiovascular toxicity.

Escitalopram
Singh P, Maldonado-Duran JM.
Drug-induced QT prolongation as a result of an escitalopram overdose in a patient with previously undiagnosed congenital long QT syndrome.

Sertraline
Cooper JM, Duffull SB, Saias AS, Isbister GK.
The pharmacokinetics of sertraline in overdose and the effect of activated charcoal.

Venlafaxine
Vignali C, Morini L, Chen Y, Stramesi C, Groppi A.
Distribution of venlafaxine and O-desmethylvenlafaxine in a fatal case.

Steroids
Andersen DW, Linnet K.
Screening for anabolic steroids in urine of forensic cases using fully automated solid phase extraction and LC-MS-MS.
J Anal Toxicol 2014; online early: doi: 10.1093/jat/bku098:

Substance abuse
Arshi B, Shaw S.
Subacute ascending numbness.

Brandt SA, Taverna EC, Hallock RM.
A survey of nonmedical use of tranquilizers, stimulants, and pain relievers among college students: patterns of use among users and factors related to abstinence in non-users.
Drug Alcohol Depend 2014; online early: doi: 10.1016/j.drugalcdep.2014.07.034:

Cicero TJ, Ellis MS, Surratt HL, Kurtz SP.
Drug Alcohol Depend 2014; 142: 98-104.

Dalhoff K, Askaner G.
Promethazine used as a recreational drug in Denmark.

Fernández P, Regenjo M, Bermejo AM, Fernández AM, Lorenzo RA, Carro AM.
Analysis of drugs of abuse in human plasma by dispersive liquid-liquid microextraction and high-performance liquid chromatography.
J Appl Toxicol 2014; online early: doi: 10.1002/jat.3035:

Gigengack R.
"My body breaks. I take solution." Inhalant use in Delhi as pleasure seeking at a cost.
**Substance abuse**
Lentiform fork sign: a magnetic resonance finding in a case of acute metabolic acidosis.

Serum brain-derived neurotrophic factor and nerve growth factor decreased in chronic ketamine abusers.

National study of illicit drug use in Slovakia based on wastewater analysis.

McKeever AE, Spaeth-Brayton S, Sheerin S.
The role of nurses in comprehensive care management of pregnant women with drug addiction.

Meyer R, Patel AM, Rattana SK, Quock TP, Mody R, Patel M, Specchio LM, Grilli G, Macarini L.
Dependence potential of the synthetic cannabinoids JWH-073, JWH-081, and JWH-210: in vivo and in vitro approaches.

Lemos NP.
Driving under the influence of synthetic cannabinoid receptor agonist XLR-11.

McKeever RG, Vearrier D, Jacobs D, LaSala G, Okaneku J, Greenberg M.
K2–Not the spice of life; synthetic cannabinoids and ST elevation myocardial infarction: a case report.
J Med Toxicol 2014; online early: doi: 10.1007/s13181-014-0424-1:

**Tricyclic antidepressants**
Amitriptyline
Bowler M, Nethercott DR.
Two lessons from the empiric management of a combined overdose of liraglutide and amitriptyline.

**Vitamins**
Calciferol
Oktem M, Erkan E, Laleli Y.
Is vitamin D toxicity really "rare,"

**CHEMICAL INCIDENTS AND POLLUTION**
Air pollution
Alshire JA, Crimmins EM.
Fine particulate matter air pollution and cognitive function among older US adults.

Atkinson RW, Carey IM, Kent AJ, van Staa TP, Anderson HR, Cook DG.
Long-term exposure to outdoor air pollution and the incidence of chronic obstructive pulmonary disease in a national English cohort.
Occup Environ Med 2014; online early: doi: 10.1136/oemed-2014-102266:

Azarmi F, Kumar P, Mulheron M.
The exposure to coarse, fine and ultrafine particle emissions from concrete mixing, drilling and cutting activities.

Brown DR, Alderman N, Weinberger B, Lewis C, Bradley J, Curtis L.
Outdoor wood furnaces create significant indoor particulate pollution in neighboring homes.
Inhal Toxicol 2014; 26: 628-35.

Chalbot M-CG, Jones TA, Kavouras IG.
Trends of non-accidental, cardiovascular, stroke and lung cancer mortality in Arkansas are associated with ambient PM2.5 reductions.

Cheng M-H, Chen C-C, Chiu H-F, Yang C-Y.
Fine particulate air pollution and hospital admissions for asthma: a case-crossover study in Taipei.
J Toxicol Environ Health A 2014; 77: 1075-83.
Air pollution
Chiu H-F, Chang C-C, Yang C-Y.
Relationship between hemorrhagic stroke hospitalization and exposure to fine particulate air pollution in Taipei, Taiwan.

Sources and contents of air pollution affecting term low birth weight in Los Angeles County, California, 2001–2008.
Environ Res 2014; online early:
doi: 10.1016/j.envres.2014.05.003:

Short-term exposure to air pollution and digital vascular function.
Am J Epidemiol 2014; online early:
doi: 10.1093/aje/kwu161:

Marginal structural models in occupational epidemiology: application in a study of ischemic heart disease incidence and PM2.5 in the US aluminum industry.
Am J Epidemiol 2014; online early:
doi: 10.1093/aje/kwu175:

Snow SJ, De Vizcaya-Ruiz A, Osornio-Vargas A, Thomas RF, Schladweiler MC, McGee J, Kodavanti UP.
The effect of composition, size, and solubility on acute pulmonary injury in rats following exposure to Mexico City ambient particulate matter samples.
J Toxicol Environ Health A 2014; 77: 1164-82.

Relation of long-term exposure to air pollution to brachial artery flow-mediated dilation and reactive hyperemia.
Am J Cardiol 2014; 113: 2057-63.

Exhaust fumes
Myocardial infarction and occupational exposure to motor exhaust: a population-based case-control study in Sweden.

Morgott DA.
Factors and trends affecting the identification of a reliable biomarker for diesel exhaust exposure.

Childhood asthma acute primary care visits, traffic, and trafﬁc-related pollutants.

Chemical incidents
Acrylonitrile exposure assessment in the emergency responders of a major train accident in Belgium: a human biomonitoring study.
Toxicol Lett 2014; online early:
doi: 10.1016/j.toxlet.2014.08.013:

Pollution and hazardous waste
Robledo CA, Yeung E, Mendola P, Sundaram R, Maisog J, Sweeney AM, Barr DB, Buck Louis GM.
Preconception maternal and paternal exposure to persistent organic pollutants and birth size: the LIFE study.
Environ Health Perspect 2014; online early:
doi: 10.1289/ehp.1308016:

Water pollution
Arain MB, Kazig TA, Baig JA, Afridi HI, Sarajuuddin, Brehman KD, Panhwar H, Arain SS.
Co-exposure of arsenic and cadmium through drinking water and tobacco smoking: risk assessment on kidney dysfunction.
Environ Sci Pollut Res 2014; online early:
doi: 10.1007/s11356-014-3339-0:

Toxicity assessment of the water used for human consumption from the Cameron/Tuba City abandoned uranium mining area prior/after the combined electrochemical treatment/advanced oxidation.
Environ Sci Pollut Res 2014; online early:
doi: 10.1007/s11356-014-3376-8:

CHEMICALS
General
Everett CJ.
Commentary on nephropathy and longitudinal studies of diabetes, and dioxins, furans, and dioxin-like PCBs.

Oltmanns J, Bunke D, Jenseit W, Heldorn C.
The impact of REACH on classification for human health hazards.
Regul Toxicol Pharmacol 2014; online early:
doi: 10.1016/j.yrtph.2014.08.005:

Osuna CE, Grandjean P, Weihe P, El-Fawal HAN.
Autoantibodies associated with prenatal and childhood exposure to environmental chemicals in Faroese children.
Toxicol Sci 2014; online early:
doi: 10.1093/toxsci/kfu163:

Simon TW, Simons SS, Jr., Preston RJ, Boobis AR, Cohen SM, Doerrer NG, Fenner-Crisp PA, McMullin TS, McQueen CA, Rowlands JC, RISK21 Dose-Response Subteam.
The use of mode of action information in risk assessment: quantitative key events/dose-response framework for modeling the dose-response for key events.

Acrylates
Kim YJ, Chung JK.
Bilateral eyelid contact dermatitis and toxic conjunctivitis due to acrylate-containing glue.

Acrylics
Etebari M, Jafarian-Dehkordi A, Kahookar A, Moradi S.
Assessment of the deoxyribonucleic acid damage caused by occupational exposure to chemical compounds in Isfahan Polyacryl Company.
**Acrylonitrile**
Acrylonitrile exposure assessment in the emergency responders of a major train accident in Belgium: a human biomonitoring study.
Toxicol Lett 2014; online early; doi: 10.1016/j.toxlet.2014.08.013:

**Aerosols**

**Alcohol (ethanol)**
Risk factors and consequences of alcohol consumption among college students.

Beasley TE, Evansky PA, Martin SA, McDaniel KL, Moser VC, Luebke RW, Norwood J, Jr., Rogers JM, Copeland C, Bushnell PJ.
Toxicological outcomes in rats exposed to inhaled ethanol during gestation.
Neurotoxicol Teratol 2014; 45: 59-69.

Benson S, Scholey A.
Effects of alcohol and energy drink on mood and subjective intoxication: a double-blind, placebo-controlled, crossover study.
Hum Psychopharmacol 2014; 29: 360-9.

Benson S, Verster JC, Alford C, Scholey A.
Effects of mixing alcohol with caffeinated beverages on subjective intoxication: A systematic review and meta-analysis.

Bertholet N, Adam A, Faouzi M, Boulou O, Yersin B, Daeppen J-B, Clerc D.
Admissions of patients with alcohol intoxication in the emergency department: a growing phenomenon.
Swiss Med Wkly 2014; 144: w13982.

Cabarcos P, Tabernerio MJ, Otero JL, Miguez M, Bermejo AM, Martello S, De Giovanni N, Chiarotti M.
Quantification of fatty acid ethyl esters (FAEE) and ethyl glucuronide (EIG) in meconium for detection of alcohol abuse during pregnancy: correlation study between both biomarkers.

Diestelkamp S, Arnaud N, Sack P-M, Wartberg L, Daubmann A, Thomasius R.
Brief motivational intervention for adolescents treated in emergency departments for acute alcohol intoxication - a randomized-controlled trial.

Marczinski CA.
Combined alcohol and energy drink use: hedonistic motives, adenosine, and alcohol dependence.

Miranda RC.
MicroRNAs and ethanol toxicity.

Starkey NJ, Charlton SG.
The effects of moderate alcohol concentrations on driving and cognitive performance during ascending and descending blood alcohol concentrations.
Hum Psychopharmacol 2014; 29: 370-83.

Verster JC, Bervoets AC, De Klerk S, Vreman RA, Olivier B, Roth T, Brookhuis KA.
Effects of alcohol hangover on simulated highway driving performance.
Psychopharmacology 2014; 231: 2999-3008.

Alcoholic ketosis: prevalence, determinants, and ketohepatitis in Japanese alcoholic men.
Alcohol Alcohol 2014; online early; doi: 10.1093/alcalc/agu048:

**Batteries**
Gürler M, Pehlivan S, Altuntas A, Karapirli M.
Evaluation of a battery ingestion case with the results of ICP/MS.

**Benzene**
Tchepel O, Días D, Costa C, Santos BF, Teixeira JP.
Modeling of human exposure to benzene in urban environments.

**Bisphenol A**
Barrett JR.
BPA and reproductive health: reviewing the current state of the science.
Environ Health Perspect 2014; 122: A223.

Braun JM, Lanphear BP, Calafat AM, Deria S, Khoury J, Howe CJ, Venners SA.
Early-life bisphenol A exposure and child body mass index: a prospective cohort study.
Environ Health Perspect 2014; online early; doi: 10.1289/ehp.1408258:

Gao X, Wang H-S.
Impact of bisphenol A on the cardiovascular system – Epidemiological and experimental evidence and molecular mechanisms.

Determinants of bisphenol A and phthalate metabolites in urine of Flemish adolescents.

Quesnot N, Bucher S, Froment B, Robin M-A.
Modulation of metabolizing enzymes by bisphenol A in human and animal models.
Chem Res Toxicol 2014; online early; doi: 10.1021/tr500087p:
Carbon black
Inhalation of carbon black nanoparticles aggravates pulmonary inflammation in mice.

Carbon monoxide
Afelayy JM, Edomwoyin NP, Esangbedo SE.
Carbon monoxide poisoning in a Nigerian home: case reports.

Myocardial rupture following carbon monoxide poisoning.
Case Rep Crit Care 2014; 8: 201701.

Erogül M, Üz O, Islak Z, Yıldırım AO, Kardesoglu E.
Carbon monoxide poisoning increases T\textsubscript{max}-T\textsubscript{end} dispersion and QT dispersion.

Can carbon monoxide-poisoned victims be organ donors?

Hatami M, Naftolin F, Khataee MA.
Abnormal fingernail beds following carbon monoxide poisoning: a case report and review of the literature.
J Med Case Reports 2014; 8: 263.

Long-term prognosis of patients with carbon monoxide poisoning: a nationwide cohort study.

Robertson B, Cohn AJ.
Think carbon monoxide.

Weaver LK.
Hyperbaric oxygen therapy for carbon monoxide poisoning.
Undersea Hyperb Med 2014; 41: 339-54.

Cement
Cohen SS, Sadoff MM, Jiang X, Fryzek JP, Garabrant DH.
A review and meta-analysis of cancer risks in relation to Portland cement exposure.
Occup Environ Med 2014; online early:
doi: 10.1136/oemed-2014-102193:

Corrosives
Bonnici KS, Wood DM, Dargan PI.
Should computerised tomography replace endoscopy in the evaluation of symptomatic ingestion of corrosive substances?
Clin Toxicol 2014; online early:
doi: 10.3109/15563650.2014.957310:

Sharma V, Rana SS, Chhabra P, Reddy YR, Bhasin DK.
Catastrophic complication of ingestion of corrosive substance.

Cosmetics
Desmedt B, Courselle P, De Beer JO, Rogiers V, Deconinck E, De Paepe K.
Illegal cosmetics on the EU market: a threat for human health?
Arch Toxicol 2014; 88: 1765-6.
E-cigarettes
Gupta S, Gandhi A, Manikonda R.
Accidental nicotine liquid ingestion: emerging paediatric problem.
Arch Dis Child 2014; online early:
doi: 10.1136/archdischild-2014-306750:

Hajek P, Etter J-F, Benowitz N, Eissenberg T, McRobbie H.
Electronic cigarettes: review of use, content, safety, effects on smokers and potential for harm and benefit.
Addiction 2014; online early: doi: 10.1111/add.12659:

Schipper EM, de Graaff LC, Koch BC, Brkic Z, Wilms EB, Alsm J, Schult SC.
Br J Clin Pharmacol 2014; online early:
doi: 10.1111/bcp.12495:

Ethylene glycol
Esprit S.
Antifreeze poisoning diagnosed from a falsely high arterial blood gas lactate level.
Anaesthesia 2014; 69: 74:

Pomierry B, Krzyzianowska W, Smaga I, Pomierry-Chamiolo L, Stankowicz P, Budziszewska B.
Ethylene glycol eters induce oxidative stress in the rat brain.
Neurotox Res 2014; online early: doi: 10.1007/s12640-014-9486-8:

Fire retardants
Metabolites of organophosphate flame retardants and 2-ethylhexyl tetrabromobenzoate (EH-TBB) in urine from paired mothers and toddlers.
Environ Sci Technol 2014; online early:
doi: 10.1021/es5025299:

Liu L-Y, Salamova A, Hites RA.
Halogenated flame retardants in baby food from the United States and from China and the estimated dietary intakes by infants.

Fluoride
Pharmacokinetics of fluoride in toddlers after application of 5% sodium fluoride dental varnish.
Pediatrics 2014; online early: doi: 10.1542/peds.2013-3501:

Fluoropolymers
Hays HL, Spiller H.
Fluoropolymer-associated illness.

Formaldehyde
Gelbke H-P, Gröters S, Morfeld P.
Lowest adverse effects concentrations (LOAECs) for formaldehyde exposure.
Regul Toxicol Pharmacol 2014; 70: 340-8:

effects of formaldehyde on lymphocyte subsets and cytokines in the peripheral blood of exposed workers.
PLoS ONE 2014; 9: e104069:

Incense
Pan A, Clark ML, Ang L-W, Yu MC, Yuan J-M, Koh W-P.
Environ Health Perspect 2014; online early:
doi: 10.1289/ehp.1307662:

Iodine
Rydbeck F, Bottai M, Toftai F, Persson LA, Kippler M.
Urinary iodine concentrations of pregnant women in rural Bangladesh: a longitudinal study.

Methanol
Rare alleles within the CYP2E1 (MEOS System) could be associated with better short-term health outcome after acute methanol poisoning.

Methyl vinyl ketone
Horiyama S, Takahashi Y, Hatai M, Honda C, Suwa K, Ichikawa A, Yoshikawa N, Nakamura K, Kunitomo M, Date S, Masujima T, Takayama M.
Methyl vinyl ketone, a toxic ingredient in cigarette smoke extract, modifies glutathione in mouse melanoma cells.

Nanoparticles
Inhalation of carbon black nanoparticles aggravates pulmonary inflammation in mice.

Nitrates
Nitrates and nitrite in the diet: how to assess their benefit and risk for human health.
Mol Nutr Food Res 2014; online early:
doi: 10.1002/mnfr.201400286:

Nitric acid
Guidotti TL.
Bronchiolitis obliterans.
Occup Med (Oxf) 2014; 64: 472.

Nitrous oxide
Arshi B, Shaw S.
Subacute ascending numbness.
Clin Toxicol 2014; 52: 905-6:

Nonylphenol
Nonylphenol in pregnant women and their matching fetuses: placental transfer and potential risks of infants.
**Oestrogens**
*In utero* exposure to mixtures of xenoestrogens and child neuropsychological development.

**Para-chloronitrobenzene**
Management of a patient with thermal burns and para-chloronitrobenzene poisoning.

**Paraphenylenediamine**
Elevli M, Civilibal M, Demirkol D, Gedik AH.
Paraphenylenediamine hair dye poisoning: an uncommon cause of rhabdomyolysis.

**Perfluorinated compounds**
Abourd EB, Al-Falah M.
Nine years of retained perfluoro-o-nctane in the anterior chamber after retinal detachment repair with no signs of ocular toxicity.

**Perfluorinated diphenyl ethers**
Betts KS.
More evidence for PBDEs as neurotoxicants: cohort study corroborates earlier findings.
Environ Health Perspect 2014; 122: A221.

**Polychlorinated biphenyls**
Growth in Inuit children exposed to polychlorinated biphenyls and lead during fetal development and childhood.

**Polychlorinated biphenyls**
Mori C, Nakamura N, Todaka E, Fujisaki T, Matsuno Y, Nakaoka H, Hanazato M.
Correlation between human maternal-fetal placental transfer and molecular weight of PCB and dioxin congeners/isomers.
**Solvents**

Gigengack R.

"My body breaks. I take solution." Inhalant use in Delhi as pleasure seeking at a cost.


Grasso D, Borreggine C, Perfetto F, Bertozzi V, Trivisano M, Specchio LM, Grilli G, Marcari L.

Lentiform fork sign: a magnetic resonance finding in a case of acute metabolic acidosis.


**Tert-amyl alcohol**

Anand JS, Gieron J, Lechowicz W, Schetz D, Kala M, Waldman W.

Acute intoxication due to tert-amyl alcohol-A case report.


**Tobacco**

Al-Mukhaini N, Ba-Omar T, Eltayeb E, Al-Shehi A.

Determination of heavy metals in the common smokeless tobacco asfal in Oman.


Alomari MA, Khabour OF, Alzoubi KH, Shqair DM, Eisenberg T.

Central and peripheral cardiovascular changes immediately after waterpipe smoking.


Arain MB, Kazi TG, Baig JA, Afridi HI, Sultani A, Rashid A, Hassan SS.

Co-exposure of arsenic and cadmium through drinking water and tobacco smoking: risk assessment on kidney dysfunction.


Bou Fakhreddine HM, Kanj AN, Kanj NA.

The growing epidemic of water pipe smoking: health effects and future needs.

Respir Med 2014; online early: doi: 10.1016/j.rmed.2014.07.014:


The effects of chronic cigarette smoking on gray matter volume: influence of sex.


Waterpipe effects on pulmonary function and cardiovascular indices: a comparison to cigarette smoking in real life situation.


Palamar JJ, Zhou S, Sherman S, Weitzman M.

Hookah use among US high school seniors.

Pediatrics 2014; 134: 227-34.

Sidiq JF, Shensa A, Primack BA.

Water pipe steam stones: familiarity and use among U.S. young adults.

Nicotine Tob Res 2014; online early: doi: 10.1093/ntr/ntu137:

**Toluene**

Lin CM, Liu CK.

Reversible cerebral periventricular white matter changes with corpus callosum involvement in acute toluene-poisoning.

J Neuroimag 2014; online early: doi: 10.1111/jon.12155:

**Triclosan**

MacIsaac JK, Gerona RR, Blanc PD, Apatira L, Friesen MW, Coppolino M, Janssen S.

Health care worker exposures to the antibacterial agent triclosan.


**METALS**

**General**

Al-Mukhaini N, Ba-Omar T, Eltayeb E, Al-Shehi A.

Determination of heavy metals in the common smokeless tobacco asfal in Oman.


Banjoko SO, Ige O, Olorunsoyo O.

The effects of occupational exposure to toxic metals on organ functions, expressions of 8-hydroxy-2-deoxyguanosine and cytokeratin - 19 fragments (cyfma 21-1 protein) and risk of lung cancer in some welders.


Evaluation of toxicological risk of foodstuffs contaminated with heavy metals in Swat, Pakistan.


Prochalska C, Megarbane B, El Balkhi S, Poupon J, Baud MJ, Garnier R.

Poisoning with gold potassium cyanide and other metallic cyanides in a jeweler.


Migration protocol to estimate metal exposure from mouthing copper and tin alloy objects.


**Arsenic**

Davis MA, Li Z, Gilbert-Diamond D, MacKenzie TA, Cottingham KL, Jackson BP, Lee JS, Baker ER, Marsit CJ, Karagas MR.

Infant toenails as a biomarker of in utero arsenic exposure.


Association of arsenic and metals with concentrations of 25-hydroxyvitamin D and 1,25-dihydroxyvitamin D among adolescents in Torreon, Mexico.

Environ Health Perspect 2014; online early: doi: 10.1289/ehp.1307861:

Halder D, Biswas A, Štejkovec Z, Chatterjee D, Nriagu J, Jacks G, Bhattacharya P.

Arsenic species in raw and cooked rice: implications for human health in rural Bengal.

**Arsenic**

**Barium**

**Beryllium**


**Cadmium**


**Cobalt**

**Copper**

**Iron**

**Lead**


Lead
The relation between occupational exposure to lead and blood pressure among employed normotensive men.

Tiwari M, Bhagia LJ, Shaikh I, Rohila D.
Role of δ-aminolevulinic acid dehydratase (ALAD) gene polymorphism in lead induced nephrotoxicity.

van Eijkeren JCH, Olie JDN, Bradberry SM, Vale JA, de Vries I, Clewell HJ, III, Meulenbelt J, Hunault CC.
Modelling the effect of DMSA chelation therapy in patients intoxicated by lead.

Weidenhamer JD, Kobunski PA, Kuepouo G, Corbin RW, Gottesfeld P.
Lead exposure from aluminum cookware in Cameroon.
Sci Total Environ 2014; 496C: 339-47.

Lithium
Bregman A, Fritz K, Xiong GL.
Lactulose-associated lithium toxicity: a case series.
J Clin Psychopharmacol 2014; online early: doi: 10.1097/JCP.0000000000000206:

Manganese
Blood manganese concentrations in Jamaican children with and without autism spectrum disorders.

Mercury
Brooks JB, Rocha LF, Fragoso YD.
Long-term effects of mercury intoxication in the peripheral nervous system.

Acute mercury poisoning presenting as fever of unknown origin in an adult woman: a case report.
J Med Case Reports 2014; 8: 266.

Gençpinar P, Büyükahtaçkin B, Ibisoglu Z, Genç S, Yılmaz A, Mihçi E.
Mercury poisoning as a cause of intracranial hypertension.
J Child Neurol 2014; online early: doi: 10.1177/0883073814538503:

Elevated prenatal methylmercury exposure in Nigeria: evidence from maternal and cord blood.

Shah AQ, Kazi TG, Afridi HT, Arain MB.
A population assessment of mercury exposure from two cities of Pakistan with respect to freshwater and marine fish consumption.
Toxicol Ind Health 2014; online early: doi: 10.1177/0748233714545503:

Strain J.
Eating fish for two.

Woods JS, Heyer NJ, Russo JE, Martin MD, Farin FM.
Genetic polymorphisms affecting susceptibility to mercury neurotoxicity in children: summary findings from the Casa Pia children's amalgam clinical trial.

Yan J, Inoue K, Asakawa A, Harada KH, Watanabe T, Hachiya N, Koizumi A.
Methylmercury monitoring study in Karakuwacho peninsula area in Japan.
Bull Environ Contam Toxicol 2014; 93: 36-41.

Nickel
Correlation between urinary nickel and testosterone plasma values in workers occupationally exposed to urban stressors.
Ann Ig 2014; 26: 237-54.

Uranium
Joksic AŠ, Katz SA.
Efficacy of hair analysis for monitoring exposure to uranium: a mini-review.

PESTICIDES
General
Araoud M, Neffati F, Douki W, Ben H, Akrout M, Najjar MF, Kenani A.
Clinical symptoms and plasma cholinesterase activity variations in agricultural workers exposed to pesticides.

Cumulative dietary exposure to a selected group of pesticides of the triazole group in different European countries according to the EFSA guidance on probabilistic modelling.
Food Chem Toxicol 2014; online early: doi: 10.1016/j.fct.2014.08.004:

Warren JL, Luben TJ, Sanders AP, Brownstein NC, Herring AH, Meyer RE.
An evaluation of metrics for assessing maternal exposure to agricultural pesticides.

Aluminium phosphide
Hugar BS, Praveen S, Hosahally JS, Kainoor S, Shetty AR.
Gastrointestinal hemorrhage in aluminium phosphide poisoning.
Herbicides

**Diuron**

Ihlaseh-Catalano SM, Bailey KA, Cardoso AP, Ren H, Fry RC, de Camargo JLV, Wolf DC.
Dose and temporal effects on gene expression profiles of urothelial cells from rats exposed to diuron.
Toxicology 2014; online early: doi: 10.1016/j.tox.2014.08.005.

**Glyphosate**

Coalova I, Ríos de Molina MDC, Chaufan G.
Influence of the spray adjuvant on the toxicity effects of a glyphosate formulation.

Jyoti W, Thabah MM, Rajagopalan S, Hamide A.
Esophageal perforation and death following glyphosate poisoning.

Tizhe EV, Ibrahim NDG, Fatihu MY, Igibokwe IO, George B-DJ, Ambali SF, Shallangwa JM.
Serum biochemical assessment of hepatic and renal functions of rats during oral exposure to glyphosate with zinc.

Organochlorine pesticides

**General**

Body mass index in young school-age children in relation to organochlorine compounds in early life: a prospective study.

**DDT**

Kabasenchew W, Skinner M.
DDT, epigenetic harm, and transgenerational environmental justice.

**Endosulfan**

Wilson WW, Shapiro LP, Bradner JM, Caudle WM.
Developmental exposure to the organochlorine insecticide endosulfan damages the nigrostriatal dopamine system in male offspring.

Organophosphorus insecticides

**General**

Can A.
Quantitative structure–toxicity relationship (QSTR) studies on the organophosphate insecticides.

An uncommon pattern of polyneuropathy induced by lifetime exposures to drift containing organophosphate pesticides.

**Acephate**

Suemizu H, Sota S, Kuronuma M, Shimizu M, Yamazaki H.
Pharmacokinetics and effects on serum cholinesterase activities of organophosphorous pesticides acephate and chlorpyrifos in chimeric mice transplanted with human hepatocytes.

**Chlorpyrifos**

Estevan C, Fuster E, Del Río E, Pamies D, Vilanova E, Sogorb MA.
The organophosphorus pesticide chlorpyrifos and its metabolites alter the expression of biomarker genes of differentiation in D3 mouse embryonic stem cells in a comparable way to other model neurodevelopmental toxicants.

**Peris-Sampedro F, Salazar JG, Cabré M, Reverte I, Domingo JL, Sánchez-Santed F, Colomina MT.**
Impaired retention in AjiPP Swedish mice six months after oral exposure to chlorpyrifos.
Chlorpyrifos

Methamidophos

Paraquat and diquat


Pesticide adjuvants

Pyrethroid insecticides
Deltamethrin

Rodenticides
Tetramine

Zinc phosphide

CHEMICAL WARFARE, BIOLOGICAL WARFARE AND RIOT CONTROL AGENTS
Biological warfare

Anthrax
Anon. Heroin use leads to anthrax. JAMA 2014; 312: 590.

Ricin

Chemical warfare
General


Agent orange

Mustard gas

Nerve agents

Soman
Prager EM, Pidoplichko VI, Aroniadou-Anderjaska V, Apland JP, Braga MFM.
Pathophysiological mechanisms underlying increased anxiety after soman exposure: reduced GABAergic inhibition in the basolateral amygdala.
Neurotoxicology 2014; online early: doi: 10.1016/j.neuro.2014.08.007:

PLANTS
General
Aconitum spp. (Aconite)
Soteras I, Soteras E, Subirats G, Caralt X, Herrera P, Pla M.
Aconite intoxication in a rural mountain hospital: presentation of a case study.

Aloe vera
Lee J, Lee MS, Nam KW.
Acute toxic hepatitis caused by an Aloe vera preparation in a young patient: a case report with a literature review.
Korean J Gastroenterol 2014; 64: 54-8.

Asclepias physocarpa (Balloon plant)
Ocular toxicity secondary to Asclepias physocarpa: the balloon plant.

Brugmansia spp. (Angel’s trumpet)
Kim Y, Kim J, Kim OJ, Kim WC.
Intoxication by angel’s trumpet: case report and literature review.
BMC Res Notes 2014; 7: 553.

Erycibe spp.
Toxicology and the chemical foundation of plants of Erycibe.
Regul Toxicol Pharmacol 2014; 70: 349-56.

Heracleum spp. (Caucasian giant hogweed)
Rzymski P, Klimaszuk P, Poniedziałek B, Karczewski J.
Health threat associated with Caucasian giant hogweeds: awareness among doctors and general public in Poland.
Cutan Ocul Toxicol 2014; 2014:

Mushrooms and other fungi
Hayes JP, Rooney J.
The prevalence of respiratory symptoms among mushroom workers in Ireland.
Occup Med (Oxf) 2014; online early: doi: 10.1093/occmed/kqu110:

Endotoxin
van der Mark M, Vermeulen R, Nijssen PCG, Mulleners WM, Sas AMG, van Laar T, Brouwer M, Huis A, Kromhout H.
Occupational exposure to pesticides and endotoxin and Parkinson disease in the Netherlands.
Occup Environ Med 2014; online early: doi: 10.1136/oemed-2014-102170:

Phaseolus vulgaris (White kidney bean)
Ogawa H, Date K.
The “white kidney bean incident” in Japan.

Ricinus communis (Castor beans)
Early plasma exchange for treating ricin toxicity in children after castor bean ingestion.
J Clin Apheresis 2014; online early: doi: 10.1002/jca.21351:

Salvia divinorum (Diviner’s sage)
Xavier Moreira F, Carvalho F, de Lourdes Bastos M, Guedes dePinho P.
Analytical investigation of legal high products containing Salvia divinorum traded in smartshops and internet.

ANIMALS
Fish/marine poisoning
Ciguatera
Chan TYK.
Large outbreaks of ciguatera after consumption of brown marbled grouper.

Jellyfish
Andreosso A, Smout MJ, Seymour JE.
Dose and time dependence of box jellyfish antivenom.
J Venom Anim Toxins Incl Trop Dis 2014; 20: 34.

Hymenoptera
Paoiocoli G, Folletti I, Torén K, Muzi G, Murgia N.
Hymenoptera venom allergy: work disability and occupational impact of venom immunotherapy.
BMJ Open 2014; 4: e00593:

Microorganisms
Place AR, Munday R, Munday JS.
Acute toxicity of karloloxins to mice.
Toxicon 2014; 90: 184-90.

Scorpions
Konca C, Tekin M, Colak P, Uckardes F, Turgut M.
An overview of platelet indices for evaluating platelet function in children with scorpion envenomation.

Singh HP.
Efficacy of scorpion antivenom in children-Author's reply.
Indian Pediatr 2014; 51: 500.

Snake bites
Albuquerque PL, Silva Junior GB, Jacinto CN, Lima JB, Lima CB, Amaral YS, Veras MD, Mota RM, Daher EF.
Acute kidney injury after snakebite accident treated in a tertiary care center.
Nephrology (Carlton) 2014; online early: doi: 10.1111/nep.12327:
Snake bites
Bhattacharya S, Chakraborty M, Mukhopadhyay P, Kundu PP, Mishra R.
Viper and cobra venom neutralization by alginate coated multicomponent polyanval antivenom administered by the oral route.
Gutiérrez JM.
Reducing the impact of snakebite envenoming in Latin America and the Caribbean: achievements and challenges ahead.

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