

Current Awareness in Clinical Toxicology

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CURRENT AWARENESS PAPERS OF THE MONTH

Do heroin overdose patients require observation after receiving naloxone?

Willman MW, Liss DB, Schwarz ES, Mullins ME. Clin Toxicol 2016; online early: doi: 10.1080/15563650.2016.1253846:

Context

Heroin use in the US has exploded in recent years, and heroin overdoses requiring naloxone are very common. After awakening, some heroin users refuse further treatment or transport to the hospital. These patients may be at risk for recurrent respiratory depression or pulmonary edema. In those transported to the emergency department, the duration of the observation period is controversial. Additionally, non-medical first responders and lay bystanders can administer naloxone for heroin and opioid overdoses. There are concerns about the outcomes and safety of this practice as well.

Objectives

To search the medical literature related to the following questions: (1) What are the medical risks to a heroin user who refuses ambulance transport after naloxone? (2) If the heroin user is treated in the emergency department with naloxone, how long must they

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be observed prior to discharge? (3) How effective in heroin users is naloxone administered by first responders and bystanders? Are there risks associated with naloxone distribution programs?

Methods

We searched PubMed and GoogleScholar with search terms related to each of the questions listed above. The search was limited to English language and excluded patents and citations. The search was last updated on September 31, 2016. The articles found were reviewed for relevance to our objective questions. Eight out of 1020 citations were relevant to the first 2 questions, 5 of 707 were relevant to the third question and 15 of 287 were relevant to the fourth question. *In the prehospital environment, does a heroin user revived with naloxone always require ambulance transport and what are the medical risks if ambulance transport is refused after naloxone?* The eight articles were all observational studies done either prospectively or retrospectively. Two studies focused on heroin overdoses and included 1069 patients not transported to the hospital. No deaths occurred in this group. In counting the patients from all eight studies, some of which included non-heroin opioid overdoses, there were 5443 patients treated without transport and four deaths from rebound opioid toxicity. The number needed to transport to save one life (NNT) is 1361. Adverse effects were mostly related to opioid withdrawal. *If a heroin user is treated in the ED, how long must the patient stay under observation before being safe for discharge?* Five articles addressing the duration of ED observation required for patients treated with naloxone for opioid overdoses. Although a wide range of observation durations were reported, one study supported observing patients for one hour. If after this period the patient mobilizes as usual, has normal vital signs, and a Glasgow Coma Scale of 15, they can be discharged safely. *What are the likely risks in heroin users following naloxone use by lay bystanders or first responders?* Of the 15 relevant papers, a systematic review reported a 100% survival rate in eleven studies and a range of 96-99% survival in the remaining four. Two other studies suffered from poor follow-up and had lower success rates of 83% and 89%. Few if any risks were associated with opioid overdose prevention programs in which lay people were trained to administer naloxone.

Conclusions

Patients revived with naloxone after heroin overdose may be safely released without transport to the hospital if they have normal mentation and vital signs. In the absence of co-intoxicants and further opioid use there is very low risk of death from rebound opioid toxicity. For those patients treated in the ED for opioid overdose, an observation period of one hour is sufficient if they ambulate as usual, have normal vital signs and a Glasgow Coma Scale of 15. Patients suffering opioid toxicity can be administered naloxone safely by first responders and trained lay people. Programs that train these individuals are likely safe and beneficial, however further research is necessary.

Full text available from: <http://dx.doi.org/10.1080/15563650.2016.1253846>

Exposures to traditional automatic dishwashing tablets and a comparison with exposures to soluble film tablets reported to the United Kingdom National Poisons Information Service 2008–2015

Day R, Eddleston M, Thomas SHL, Thompson JP, Vale JA. Clin Toxicol 2016; online early: doi: 10.1080/15563650.2016.1264588:

Introduction

Traditional automatic dishwashing tablets are contained within an external wrapper that requires removal prior to use.

Objective

To determine the toxicity of traditional tablets and to compare this with our previously reported experience of soluble film dishwashing tablets.

Methods

Telephone enquiries regarding traditional tablets were analysed retrospectively for the period January 2008 to December 2015.

Results

Traditional tablets: There were 503 enquiries relating to 492 patients who had been exposed to a traditional tablet. Most involved children aged 5 years or less (87.4%). The majority (78.6%) of patients did not develop symptoms after exposure; 21.1% developed minor (PSS 1) symptoms while one patient developed moderate features. Exposure occurred predominantly as a result of ingestion ($n = 476$, 96.7%); the most common feature in symptomatic patients ($n = 99$, 20.8%) was vomiting (70 [14.7%] cases). Significantly ($p < 0.0001$) more adults (44.9% of 49 adults; 95% CI = 31.9–58.7) were reported with features than children (18.2% of 434; 95% CI = 14.9–22.1). There were five cases of eye contact which resulted in eye pain in two patients and eye irritation in another. Only one of 11 patients exposed dermally developed features (a rash around the mouth).

Comparison with soluble film exposures: The percentage of patients that were reported with clinical symptoms following ingestion of a soluble film dishwashing tablet (31.7% of 473 patients; 95% CI = 27.7–36.0) was significantly greater ($p < 0.0001$) than that for a traditional tablet (20.9% of 483 patients; 95% CI = 17.5–24.8). Vomiting was the most commonly reported feature and occurred significantly ($p < 0.0001$) more frequently amongst patients who had ingested a soluble film tablet (25.5%; 95% CI = 21.8–29.6) than a traditional tablet (14.7%; 95% CI = 11.8–18.1).

Conclusions

Exposure to both traditional and soluble film tablets only rarely produced clinically significant symptoms (PSS ≥ 2). However, ingestion of a soluble film tablet was significantly more likely to result in clinical features than ingestion of a traditional tablet.

Full text available from: <http://dx.doi.org/10.1080/15563650.2016.1264588>

Modeling the effect of succimer (DMSA; dimercaptosuccinic acid) chelation therapy in patients poisoned by lead

van Eijkeren JCH, Olie JDN, Bradberry SM, Vale JA, de Vries I, Clewell HJ, III, Meulenbelt J, Hunault CC. Clin Toxicol 2016; online early: doi: 10.1080/15563650.2016.1263855:

Context

Kinetic models could assist clinicians potentially in managing cases of lead poisoning. Several models exist that can simulate lead kinetics but none of them can predict the effect of chelation in lead poisoning. Our aim was to devise a model to predict the effect of succimer (dimercaptosuccinic acid; DMSA) chelation therapy on blood lead concentrations.

Materials and methods

We integrated a two-compartment kinetic succimer model into an existing PBPK lead model and produced a Chelation Lead Therapy (CLT) model. The accuracy of the model's predictions was assessed by simulating clinical observations in patients poisoned by lead and treated with succimer. The CLT model calculates blood lead concentrations as the sum of the background exposure and the acute or chronic lead poisoning. The latter was due either to ingestion of traditional remedies or occupational exposure to lead-polluted ambient air. The exposure duration was known. The blood lead concentrations predicted by the CLT

model were compared to the measured blood lead concentrations.

Results

Pre-chelation blood lead concentrations ranged between 99 and 150 µg/dL. The model was able to simulate accurately the blood lead concentrations during and after succimer treatment. The pattern of urine lead excretion was successfully predicted in some patients, while poorly predicted in others.

Conclusions

Our model is able to predict blood lead concentrations after succimer therapy, at least, in situations where the duration of lead exposure is known.

Full text available from: <http://dx.doi.org/10.1080/15563650.2016.1263855>

Australian taipan (*Oxyuranus* spp.) envenoming: clinical effects and potential benefits of early antivenom therapy – Australian Snakebite Project (ASP-25)

Johnston CI, Ryan NM, O'Leary MA, Brown SGA, Isbister GK. Clin Toxicol 2016; online early: doi: 10.1080/15563650.2016.1250903:

Context

Taipans (*Oxyuranus* spp.) are medically important venomous snakes from Australia and Papua New Guinea. The objective of this study was to describe taipan envenoming in Australian and its response to antivenom.

Methods

Confirmed taipan bites were recruited from the Australian Snakebite Project. Data were collected prospectively on all snakebites, including patient demographics, bite circumstances, clinical effects, laboratory results, complications and treatment. Blood samples were taken and analysed by venom specific immunoassay to confirm snake species and measure venom concentration pre- and post-antivenom.

Results

There were 40 confirmed taipan bites: median age 41 years (2–85 years), 34 were males and 21 were snake handlers. Systemic envenoming occurred in 33 patients with neurotoxicity (26), complete venom induced consumption coagulopathy (VICC) (16), partial VICC (15), acute kidney injury (13), myotoxicity (11) and thrombocytopenia (7). Venom allergy occurred in seven patients, three of which had no evidence of envenoming and one died. Antivenom was given to 34 patients with a median initial dose of one vial (range 1–4), and a median total dose of two vials (range 1–9). A greater total antivenom dose was associated with VICC, neurotoxicity and acute kidney injury. Early antivenom administration was associated with a decreased frequency of neurotoxicity, acute kidney injury, myotoxicity and intubation. There was a shorter median time to discharge of 51 h (19–432 h) in patients given antivenom <4 h post-bite, compared to 175 h (27–1104 h) in those given antivenom >4 h. Median peak venom concentration in 25 patients with systemic envenoming and a sample available was 8.4 ng/L (1–3212 ng/L). No venom was detected in post-antivenom samples, including 20 patients given one vial initially and five patients bitten by inland taipans.

Discussion

Australian taipan envenoming is characterised by neurotoxicity, myotoxicity, coagulopathy, acute kidney injury and thrombocytopenia. One vial of antivenom binds all measurable venom and early antivenom was associated with a favourable outcome.

Full text available from: <http://dx.doi.org/10.1080/15563650.2016.1250903>

A critical review of the literature to conduct a toxicity assessment for oral exposure to methyl salicylate

Greene T, Rogers S, Franzen A, Gentry R. Crit Rev Toxicol 2016; online early: doi: 10.1080/10408444.2016.1236071:

Abstract and full text available from: <http://dx.doi.org/10.1080/10408444.2016.1236071>

Glyphosate epidemiology expert panel review: a weight of evidence systematic review of the relationship between glyphosate exposure and non-Hodgkin's lymphoma or multiple myeloma

Acquavella J, Garabrant D, Marsh G, Sorahan T, Weed DL. Crit Rev Toxicol 2016; 46: 28-43.

Abstract and full text available from: <http://dx.doi.org/10.1080/10408444.2016.1214681>

Prognostic value of hematological parameters in patients with paraquat poisoning

Zhou D-C, Zhang H, Luo Z-M, Zhu Q-X, Zhou C-F. Sci Rep 2016; 6: 36235.

Abstract and full text available from: <http://dx.doi.org/10.1038/srep36235>

A systematic review of mancozeb as a reproductive and developmental hazard

Runkle J, Flocks J, Economos J, Dunlop AL. Environ Int 2016; online early: doi: 10.1016/j.envint.2016.11.006:

Abstract and full text available from: <http://dx.doi.org/10.1016/j.envint.2016.11.006>

Pregnancy outcomes after maternal varenicline use; analysis of surveillance data collected by the European Network of Teratology Information Services

Richardson JL, Stephens S, Yates LM, Diav-Citrin O, Arnon J, Beghin D, Kayser A, Kennedy D, Cupitt D, te Winkel B, Peltonen M, Kaplan YC, Thomas SHL. Reprod Toxicol 2017; 67: 26-34.

Abstract and full text available from: <http://dx.doi.org/10.1016/j.reprotox.2016.11.010>

Focus on cannabinoids and synthetic cannabinoids

Le Boisselier R, Alexandre J, Lelong-Boulouard V, Debruyne D. Clin Pharmacol Ther 2016; online early: doi: 10.1002/cpt.563:

Abstract and full text available from: <http://dx.doi.org/10.1002/cpt.563>

No support for lipid rescue in oral poisoning: a systematic review and analysis of 160 published cases

Forsberg M, Forsberg S, Edman G, Höjer J. Hum Exp Toxicol 2016; online early: doi: 10.1177/0960327116679715:

Abstract and full text available from: <http://dx.doi.org/10.1177/0960327116679715>

Lung function before and after a large chlorine gas release in Graniteville, South Carolina

Clark KA, Karmaus WJJ, Mohr LC, Cai B, Balte P, Gibson JJ, Ownby D, Lawson AB, Vena JE, Svendsen ER. Ann Am Thorac Soc 2016; 13: 356-63.

Abstract and full text available from: <http://dx.doi.org/10.1513/AnnalsATS.201508-525OC>

Associations of blood mercury, inorganic mercury, methyl mercury and bisphenol A with dental surface restorations in the U.S. population, NHANES 2003–2004 and 2010–2012

Yin L, Yu K, Lin S, Song X, Yu X. Ecotoxicol Environ Saf 2016; 134: 213-25.

Abstract and full text available from: <http://dx.doi.org/10.1016/j.ecoenv.2016.09.001>

TOXICOLOGY

General

Galijatovic-Idrizbegovic A, Miller JE, Cornell WD, Butler JA, Wollenberg GK, Sistare FD, DeGeorge JJ.

Role of chronic toxicology studies in revealing new toxicities.

Regul Toxicol Pharmacol 2016; 82: 94-8.

Gosink M.

ToxReporter: viewing the genome through the eyes of a toxicologist.

Database (Oxford) 2016; online early: PMID:27888230:

Jankovic J, Albanese A.

Editorial: Toxins 2017.

Toxicon 2016; online early:

doi: 10.1016/j.toxicon.2016.11.248:

Joks R, Bluth MH.

Clinical toxicology and its relevance to asthma and atopy.

Clin Lab Med 2016; 36: 795-801.

Maddy JK, Ng PC, Sessions D, Bebartha VS.

A prospective observation study of medical toxicology consultation in a U.S. combat theater.

Mil Med 2016; 181: e1666-e1668.

Analytical toxicology

Bade R, Bijlsma L, Sancho JV, Baz-Lomba JA, Castiglioni S, Castrignanò E, Causanilles A, Gracia-Lor E, Kasprzyk-Hordern B, Kinyua J, McCall A-K, van Nuijs AL, Ort C, Plósz BG, Ramin P, Rousis NI, Ryu Y, Thomas KV, de Voogt P, Zuccato E, Hernández F.

Liquid chromatography-tandem mass spectrometry determination of synthetic cathinones and phenethylamines in influent wastewater of eight European cities.

Chemosphere 2016; online early:

doi: 10.1016/j.chemosphere.2016.10.107:

Bane V, Hutchinson S, Sheehan A, Brosnan B, Barnes P, Lehane M, Furey A.

LC-MS/MS method for the determination of tetrodotoxin (TTX) on a triple quadrupole mass spectrometer.

Food Addit Contam Part A Chem Anal Control Expo Risk Assess 2016; 33: 1728-40.

Bidny S, Gago K, Chung P, Albertyn D, Pasin D.

Simultaneous screening and quantification of basic, neutral and acidic drugs in blood using UPLC-QTOF-MS.

J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw118:

Bluth MH.

Drug testing and toxicology: redefining the plague of darkness.

Clin Lab Med 2016; 36: xi-xx.

Carson M, Kerrigan S.

Quantification of suvorexant in urine using gas chromatography/mass spectrometry.

J Chromatogr B Biomed Sci Appl 2016; online early: doi: 10.1016/j.jchromb.2016.10.042:

Cechova E, Seifertová M, Kukucka P, Vojta Š, Quaak I, de Cock M, van de Bor M, Kocan A.

An effective clean-up technique for GC/EI-HRMS determination of developmental neurotoxicants in human breast milk.

Anal Bioanal Chem 2016; online early:

doi: 10.1007/s00216-016-0059-y:

Chen F, Hu Z-Y, Parker RB, Laizure SC.

Measurement of caffeine and its three primary metabolites in human plasma by HPLC-ESI-MS/MS and clinical application.

Biomed Chromatogr 2016; online early:

doi: 10.1002/bmc.3900:

Chen P-S, Chen S-H, Chen J-H, Haung W-Y, Liu H-T, Kong P-H, Yang OHY.

Modifier-assisted differential mobility-tandem mass spectrometry method for detection and quantification of amphetamine-type stimulants in urine.

Anal Chim Acta 2016; 946: 1-8.

Feasel MG, Wohlfarth A, Nilles JM, Pang S, Kristovich RL, Huestis MA.

Metabolism of carfentanil, an ultra-potent opioid, in human liver microsomes and human hepatocytes by high-resolution mass spectrometry.

AAPS J 2016; 18: 1489-99.

Goggin MM, Tann C-M, Miller A, Nguyen A, Janis GC.

Catching fakes: new markers of urine sample validity and invalidity.

J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw119:

Görgens C, Guddat S, Thomas A, Wachsmuth P, Orlovius A-K, Sigmund G, Thevis M, Schänzer W.

Simplifying and expanding analytical capabilities for various classes of doping agents by means of direct urine injection high performance liquid chromatography high resolution/high accuracy mass spectrometry.

J Pharm Biomed Anal 2016; 131: 482-96.

Hegstad S, Kristoffersen L, Liane VH, Spigset O.

EtG and EtS in autopsy blood samples with and without putrefaction using UPLC-MS-MS.

J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw123:

Hess C, Krueger L, Unger M, Madea B.

Freeze-and-thaw stability and long-term-stability of 84 synthetic cannabinoids in serum.

Drug Test Anal 2016; online early: doi: 10.1002/dta.2133:

Hulse E, Shihana F, Buckley NA.

Radical 7 co-oximeter inaccuracies: reply.

Clin Toxicol 2016; online early:

doi: 10.1080/15563650.2016.1263858:

Kyriakou C, Marchei E, Scaravelli G, García-Algar O, Supervía A, Graziano S.

Identification and quantification of psychoactive drugs in whole blood using dried blood spot (DBS) by ultra-performance liquid chromatography tandem mass spectrometry.

J Pharm Biomed Anal 2016; 128: 53-60.

Liu C, Jia W, Li T, Hua Z, Qian Z.

Identification and analytical characterization of nine synthetic cathinone derivatives *N*-ethylhexedrone, 4-Cl-pentedrone, 4-Cl- α -EAPP, propylone, *N*-ethylnorpropylone, 6-MeO-bk-MDMA, α -PiHP, 4-Cl- α -PHP, and 4-F- α -PHP.

Drug Test Anal 2016; online early: doi: 10.1002/dta.2136:

Lu A, Scott KS, Chan-Hosokawa A, Logan BK.

Impact of expanding ELISA screening in DUID investigations to include carisoprodol/meprobamate and zolpidem.

J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw106:

Musshoff F, Fels H, Carli A, Piombino-Mascalì D.

The anatomical mummies of Mombello: detection of cocaine, nicotine, and caffeine in the hair of psychiatric patients of the early 20th century.
Forensic Sci Int 2017; 270: 20-4.

Olesti E, Pujadas M, Papaseit E, Pérez-Mañá C, Pozo ÓJ, Farré M, de la Torre R.
GC-MS quantification method for mephedrone in plasma and urine: application to human pharmacokinetics.
J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw120:

Orfanidis A, Mastrogianni O, Koukou A, Psarros G, Gika H, Theodoridis G, Raikos N.
A GC-MS method for the detection and quantitation of ten major drugs of abuse in human hair samples.
J Chromatogr B Biomed Sci Appl 2016; online early: doi: 10.1016/j.jchromb.2016.11.011:

Quadalti C, Galli C, Lazzari S.
Development of an *in vitro* test battery for the screening of the receptor-mediated mechanism and the spindle-poison mode of action of estrogenic compounds.
Environ Toxicol Pharmacol 2016; 48: 245-52.

Ramirez Fernandez MD, Wille SM, Hill V, Samyn N.
Determination of antidepressants in hair via UHPLC-MS/MS as a complementary informative tool for clinical and forensic toxicological assessments.
Ther Drug Monit 2016; 38: 751-60.

Santos MG, Tavares IMC, Barbosa AF, Bettini J, Figueiredo EC.
Analysis of tricyclic antidepressants in human plasma using online-restricted access molecularly imprinted solid phase extraction followed by direct mass spectrometry identification/quantification.
Talanta 2017; 163: 8-16.

Smith MP, Bluth MH.
Common interferences in drug testing.
Clin Lab Med 2016; 36: 663-71.

Tsaion K, Blauboer BJ, Hartung T.
Evidence-based absorption, distribution, metabolism, excretion (ADME) and its interplay with alternative toxicity methods.
ALTEX 2016; 33: 343-58.

Wohlfarth A, Vikingsson S, Roman M, Andersson M, Kugelberg FC, Green H, Kronstrand R.
Looking at flubromazolam metabolism from four different angles: metabolite profiling in human liver microsomes, human hepatocytes, mice and authentic human urine samples with liquid chromatography high-resolution mass spectrometry.
Forensic Sci Int 2016; online early: doi: 10.1016/j.forsciint.2016.10.021:

Zamani N, Hassanian-Moghaddam H.
RE: Methemoglobin measurements are underestimated by the Radical 7 CO-oximeter: experience from a series of moderate to severe propanol poisonings.
Clin Toxicol 2016; online early: doi: 10.1080/15563650.2016.1263856:

Zhang YV, Wei B, Zhu Y, Zhang Y, Bluth MH.
Liquid chromatography-tandem mass spectrometry: an emerging technology in the toxicology laboratory.
Clin Lab Med 2016; 36: 635-61.

Biomarkers

Lim SR, Hyun S-H, Lee SG, Kim J-Y, Kim S-H, Park S-J, Moon K-S, Sul D, Kim DH, Choi H-K.

Potential urinary biomarkers of nephrotoxicity in cyclophosphamide-treated rats investigated by NMR-based metabolic profiling.
J Biochem Mol Toxicol 2016; online early: doi: 10.1002/jbt.21871:

Lima JJ, Aguilar A, Sánchez FG, Díaz AN.
Enantiomeric fraction of styrene glycol as a biomarker of occupational risk exposure to styrene.
Chemosphere 2016; online early: doi: 10.1016/j.chemosphere.2016.10.120:

Silveira AT, Albuquerque AC, Lepera JS, Martins I.
Diazepam influences urinary bioindicator of occupational toluene exposure.
Environ Toxicol Pharmacol 2016; 48: 191-6.

Carcinogenicity

Anon.
Carcinogens report lists seven new substances.
Cancer Discov 2016; online early: doi: 10.1158/2159-8290.CD-NB2016-150:

Acquavella J, Garabrant D, Marsh G, Sorahan T, Weed DL.
Glyphosate epidemiology expert panel review: a weight of evidence systematic review of the relationship between glyphosate exposure and non-Hodgkin's lymphoma or multiple myeloma.
Crit Rev Toxicol 2016; 46: 28-43.

Togawa K, Le Cornet C, Feychting M, Tynes T, Pukkala E, Hansen J, Olsson A, Dalton SO, Nordby K-C, Uuksulainen S, Wiebert P, Woldbaek T, Skakkebaek NE, Fervers B, Schüz J.
Parental occupational exposure to heavy metals and welding fumes and risk of testicular germ cell tumors in offspring: a registry-based case-control study.
Cancer Epidemiol Biomarkers Prev 2016; 25: 1426-34.

Cardiotoxicity

Bostan HB, Rezaee R, Valokala MG, Tsarouhas K, Golokhvast K, Tsatsakis AM, Karimi G.
Cardiotoxicity of nano-particles.
Life Sci 2016; 165: 91-9.

Castanares-Zapatero D, Gillard N, Capron A, Haufroid V, Hantson P.
Reversible cardiac dysfunction after venlafaxine overdose and possible influence of genotype and metabolism.
Forensic Sci Int 2016; 266: e48-e51.

Draz EI, Oreby MM, Elsheikh EA, Khedr LA, Atlam SA.
Marijuana use in acute coronary syndromes.
Am J Drug Alcohol Abuse 2016; online early: doi: 10.1080/00952990.2016.1240800:

Gupta PN, Kumar BK, Velappan P, Sudheer MD.
Possible complication of bee stings and a review of the cardiac effects of bee stings.
BMJ Case Rep 2016; doi: 10.1136/bcr-2015-213974:

Jackobson G, Carmel NN, Lotan D, Kremer A, Justo D.
Reckless administration of QT interval-prolonging agents in elderly patients with drug-induced torsade de pointes.
Z Gerontol Geriatr 2016; online early: doi: 10.1007/s00391-016-1155-5:

Lubna NJ, Nakamura Y, Cao X, Wada T, Izumi-Nakaseko H, Ando K, Sugiyama A.

Cardiac safety profile of sildenafil: chronotropic, inotropic and coronary vasodilator effects in the canine isolated, blood-perfused heart preparations.

J Toxicol Sci 2016; 41: 739-44.

Nosè M, Bighelli I, Castellazzi M, Martinotti G, Carrà G, Lucii C, Ostuzzi G, Sozzi F, Barbui C.

Prevalence and correlates of QTc prolongation in Italian psychiatric care: cross-sectional multicentre study. Epidemiol Psychiatr Sci 2016; 25: 532-40.

Rawal G, Yadav S, Kumar R.

Paclitaxel induced acute ST elevation myocardial infarction: a rare case report.

J Clin Diagn Res 2016; 10: XD01-XD02.

Sinha A, Raheja H, Kupfer Y.

Myocardial infarction after accidental minoxidil poisoning.

Am J Ther 2016; online early:

doi: 10.1097/MJT.0000000000000536:

Smolders DME, Smolders WAP.

Case report and review of the literature: cardiomyopathy in a young woman on high-dose quetiapine.

Cardiovasc Toxicol 2016; online early:

doi: 10.1007/s12012-016-9390-y:

Tessitore E, Ramlawi M, Tobler O, Sunthorn H.

Brugada pattern caused by a flecainide overdose.

J Emerg Med 2016; online early:

doi: 10.1016/j.jemermed.2016.10.045:

Torres de Araújo Azi LM, Figueroa DG, Souza Simas AA.

Cardiac arrest after local anaesthetic toxicity in a paediatric patient.

Case Rep Anesthesiol 2016; 2016: 7826280.

Yasar S, Yildirim E, Koklu M, Gursoy E, Celik M, Yuksel UC.

A case of reversible cardiomyopathy associated with acute toluene exposure.

Turk J Emerg Med 2016; 16: 123-5.

Dermal toxicity

Disel NR, Acikalin A, Kekec Z, Sebe A.

Utilization of plasmapheresis for organophosphate intoxication: a case report.

Turk J Emerg Med 2016; 16: 69-71.

Kieliszak CR, Griffin JR, Pollinger TH, Junkins-Hopkins JM.

Pseudo-bullous dermatosis induced by topical anesthetic agent-clues to this localized toxic reaction.

Am J Dermatopathol 2016; online early:

doi: 10.1097/DAD.0000000000000670:

Liu W, Nie X, Zhang L.

A retrospective analysis of Stevens-Johnson syndrome/toxic epidermal necrolysis treated with corticosteroids.

Int J Dermatol 2016; 55: 1408-13.

McCarthy KD, Donovan RM.

Management of a patient with toxic epidermal necrolysis using silicone transfer foam dressings and a secondary absorbent dressing.

J Wound Ostomy Continence Nurs 2016; 43: 650-1.

Mitra A, Kim N, Spark D, Toner F, Craig S, Roper C, Meyer TA.

Use of an *in vitro* human skin permeation assay to assess bioequivalence of two topical cream formulations containing butenafine hydrochloride (1%, w/w).

Regul Toxicol Pharmacol 2016; 82: 14-9.

Developmental toxicology

Al-Sheyab NA, Al-Fuqha RA, Kheirallah KA, Khabour OF, Alzoubi KH.

Anthropometric measurements of newborns of women who smoke waterpipe during pregnancy: a comparative retrospective design.

Inhal Toxicol 2016; 28: 629-35.

Cechova E, Seifertová M, Kukucka P, Vojta Š, Quak I, de Cock M, van de Bor M, Kocan A.

An effective clean-up technique for GC/EI-HRMS determination of developmental neurotoxicants in human breast milk.

Anal Bioanal Chem 2016; online early:

doi: 10.1007/s00216-016-0059-y:

Pinney SE, Mesaros CA, Snyder NW, Busch CM, Xiao R, Aijaz S, Ijaz N, Blair IA, Manson JM.

Second trimester amniotic fluid bisphenol A concentration is associated with decreased birth weight in term infants.

Reprod Toxicol 2016; 67: 1-9.

Yoshida S, Ichinose T, Arashidani K, He M, Takano H, Shibamoto T.

Effects of fetal exposure to Asian sand dust on development and reproduction in male offspring.

Int J Environ Res Public Health 2016; 13: 1173.

Driving under the influence of alcohol and other drugs

Bean P, Brown G, Hallinan P, Becerra S, Lewis D.

Improved recovery of repeat intoxicated drivers using fingernails and blood spots to monitor alcohol and other substance abuse.

Traffic Inj Prev 2017; 18: 9-18.

Lu A, Scott KS, Chan-Hosokawa A, Logan BK.

Impact of expanding ELISA screening in DUID investigations to include carisoprodol/meprobamate and zolpidem.

J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw106:

Maximus S, Figueroa C, Pham J, Kuncir E, Barrios C.

DUI histories in intoxicated injured bicyclists.

J Trauma Acute Care Surg 2016; 81: 638-43.

Rooney B, Gouveia GJ, Isles N, Lawrence L, Brodie T, Grahovac Z, Chamberlain M, Trotter G.

Drugged drivers blood concentrations in England and Wales prior to the introduction of *per se* limits.

J Anal Toxicol 2016; online early:

doi: 10.1093/jat/bkw109:

Epidemiology

Acquavella J, Garabrant D, Marsh G, Sorahan T, Weed DL.

Glyphosate epidemiology expert panel review: a weight of evidence systematic review of the relationship between glyphosate exposure and non-Hodgkin's lymphoma or multiple myeloma.

Crit Rev Toxicol 2016; 46: 28-43.

Burkes R, Pfister G, Guinn B, Cavallazzi R.

Opioid overdose leading to intensive care unit admission: epidemiology and outcomes.

J Crit Care 2016; online early:

doi: 10.1016/j.jcrr.2016.10.024:

Clark LL, Taubman SB.

Acetaminophen overdoses, active component, U.S. Armed Forces, 2006-2015.
MSMR 2016; 23: 16-9.

Day R, Eddleston M, Thomas SHL, Thompson JP, Vale JA. Exposures to traditional automatic dishwashing tablets and a comparison with exposures to soluble film tablets reported to the United Kingdom National Poisons Information Service 2008–2015.
Clin Toxicol 2016; online early: doi: 10.1080/15563650.2016.1264588:

Dirlik M, Bostancioglu B. Deaths due to carbon monoxide poisoning in Aydin, western Turkey.
Death Stud 2016; online early: doi: 10.1080/07481187.2016.1259693:

Heise CW, Brooks DE. Ayahuasca exposure: descriptive analysis of calls to US Poison Control Centers from 2005 to 2015.
J Med Toxicol 2016; online early: doi: 10.1007/s13181-016-0593-1:

Kim E, Park Y, Ha H, Chung H. Patterns of drugs & poisons in southern area of South Korea in 2014.
Forensic Sci Int 2016; 269: 50-5.

Maxim LD, Niebo R, McConnell EE. Bentonite toxicology and epidemiology - a review.
Inhal Toxicol 2016; 28: 591-617.

Metz TD, Rovner P, Hoffman MC, Allshouse AA, Beckwith KM, Binswanger IA. Maternal deaths from suicide and overdose in Colorado, 2004-2012.
Obstet Gynecol 2016; online early: doi: 10.1097/AOG.0000000000001695:

Polanski P, Kaminska S, Sadkowska-Todys M. Foodborne infections and intoxications in Poland in 2014.
Przegl Epidemiol 2016; 70: 375-85.

Tagwireyi D, Chingombe P, Khoza S, Maredza M. Pattern and epidemiology of poisoning in the East African Region: a literature review.
J Toxicol 2016; 2016: 8789624.

Vakkalanka JP, Charlton NP, Holstege CP. Epidemiologic trends in loperamide abuse and misuse.
Ann Emerg Med 2016; online early: doi: 10.1016/j.annemergmed.2016.08.444:

Weichenthal SA, Lavigne E, Evans GJ, Godri Pollitt KJ, Burnett RT. Fine particulate matter and emergency room visits for respiratory illness: effect modification by oxidative potential.
Am J Respir Crit Care Med 2016; 194: 577-86.

Yoshikawa M, Sumikawa Y, Hida T, Kamiya T, Kase K, Ishii-Osai Y, Kato J, Kan Y, Kamiya S, Sato Y, Yamashita T. Clinical and epidemiological analysis in 149 cases of rhododendrol-induced leukoderma.
J Dermatol 2016; online early: doi: 10.1111/1346-8138.13694:

Forensic toxicology

Andresen-Streichert H, Iwersen-Bergmann S, Mueller A, Anders S.

Attempted drug-facilitated sexual assault-xylazine intoxication in a child.
J Forensic Sci 2016; online early: doi: 10.1111/1556-4029.13270:

Barbera N, Montana A, Indorato F, Arbouche N, Romano G. Evaluation of the role of toxicological data in discriminating between H₂S femoral blood concentration secondary to lethal poisoning and endogenous H₂S putrefactive production.
J Forensic Sci 2016; online early: doi: 10.1111/1556-4029.13291:

Berthet A, de Cesare M, Favrat B, Sporkert F, Augsburger M, Thomas A, Giroud C. A systematic review of passive exposure to cannabis.
Forensic Sci Int 2016; 269: 97-112.

Carson M, Kerrigan S. Quantification of suvorexant in urine using gas chromatography/mass spectrometry.
J Chromatogr B Biomed Sci Appl 2016; online early: doi: 10.1016/j.jchromb.2016.10.042:

Chan TYK. Fatal anaphylactic reactions to lignocaine.
Forensic Sci Int 2016; 266: 449-52.

Elliott SP, Burke T, Smith C. Determining the toxicological significance of pregabalin in fatalities.
J Forensic Sci 2016; online early: doi: 10.1111/1556-4029.13263:

Kim E, Park Y, Ha H, Chung H. Patterns of drugs & poisons in southern area of South Korea in 2014.
Forensic Sci Int 2016; 269: 50-5.

Musshoff F, Fels H, Carli A, Piombino-Mascalì D. The anatomical mummies of Mombello: detection of cocaine, nicotine, and caffeine in the hair of psychiatric patients of the early 20th century.
Forensic Sci Int 2017; 270: 20-4.

Ramirez Fernandez MD, Wille SM, Hill V, Samyn N. Determination of antidepressants in hair via UHPLC-MS/MS as a complementary informative tool for clinical and forensic toxicological assessments.
Ther Drug Monit 2016; 38: 751-60.

Robinson SD, Safavi-Hemami H. Insulin as a weapon.
Toxicol 2016; 123: 56-61.

Smith MP, Bluth MH. Forensic toxicology: an introduction.
Clin Lab Med 2016; 36: 753-9.

Wohlfarth A, Vikingsson S, Roman M, Andersson M, Kugelberg FC, Green H, Kronstrand R. Looking at flubromazolam metabolism from four different angles: metabolite profiling in human liver microsomes, human hepatocytes, mice and authentic human urine samples with liquid chromatography high-resolution mass spectrometry.
Forensic Sci Int 2016; online early: doi: 10.1016/j.forsciint.2016.10.021:

Genotoxicity

da Silva J.

DNA damage induced by occupational and environmental exposure to miscellaneous chemicals.
Mutat Res Rev Mutat Res 2016; 770: 170-82.

Nersesyan A, Kundi M, Waldherr M, Setayesh T, Mišák M, Wultsch G, Filipic M, Mazzaron Barcelos GR, Knasmueller S. Results of micronucleus assays with individuals who are occupationally and environmentally exposed to mercury, lead and cadmium.
Mutat Res Rev Mutat Res 2016; 770: 119-39.

Yilmaz S, Çalbayram NÇ. Exposure to anesthetic gases among operating room personnel and risk of genotoxicity: a systematic review of the human biomonitoring studies.
J Clin Anesth 2016; 35: 326-31.

Hepatotoxicity

Almazroo OA, Miah MK, Venkataramanan R. Drug metabolism in the liver.
Clin Liver Dis 2017; 21: 1-20.

Chen S-S, Yu K-K, Huang C, Li N, Zheng J-M, Bao S-X, Chen M-Q, Zhang W-H. The characteristics and clinical outcome of drug-induced liver injury in a Chinese hospital: a retrospective cohort study.
Medicine 2016; 95: e4683.

de Boer YS, Sherker AH. Herbal and dietary supplement-induced liver injury.
Clin Liver Dis 2017; 21: 135-49.

Franklin AE, Lovell MR, Boyle F. A case of opioid toxicity on conversion from extended-release oxycodone and naloxone to extended-release oxycodone in a patient with liver dysfunction.
J Pain Symptom Manage 2016; online early: doi: 10.1016/j.jpainsymman.2016.10.354.

Fu J, Zhang X, Chen P, Zhang Y. Endoplasmic reticulum stress is involved in 2,4-dichlorophenol-induced hepatotoxicity.
J Toxicol Sci 2016; 41: 745-56.

Gonzalez HC, Jafri S-M, Gordon SC. Management of acute hepatotoxicity including medical agents and liver support systems.
Clin Liver Dis 2017; 21: 163-80.

Iasella CJ, Johnson HJ, Dunn MA. Adverse drug reactions: type A (intrinsic) or type B (idiosyncratic).
Clin Liver Dis 2017; 21: 73-87.

Jungst C, Kim Y-J, Lammert F. Severe drug-induced liver injury related to therapy with dimethyl fumarate.
Hepatology 2016; 64: 1367-9.

Lee S-J, Lee YJ, Park K-K. The pathogenesis of drug-induced liver injury.
Expert Rev Gastroenterol Hepatol 2016; 10: 1175-85.

Lee SKY, Quinonez RB, Chuang A, Munz SM, Dabiri D. The case for improved interprofessional care: fatal analgesic overdose secondary to acute dental pain during pregnancy.
case Rep Dent 2016; 2016: 7467262.

Mohammed NEM, Messiha BAS, Abo-Saif AA.

Effect of amlodipine, lisinopril and allopurinol on acetaminophen-induced hepatotoxicity in rats.
Saudi Pharm J 2016; 24: 635-44.

Mosedale M, Watkins PB. Drug-induced liver injury: advances in mechanistic understanding that will inform risk management.
Clin Pharmacol Ther 2016; online early: doi: 10.1002/cpt.564:

Stine JG, Chalasani NP. Drug hepatotoxicity: environmental factors.
Clin Liver Dis 2017; 21: 103-13.

Teschke R, Danan G. Drug-induced liver injury: Is chronic liver disease a risk factor and a clinical issue?
Expert Opin Drug Metab Toxicol 2016; online early: doi: 10.1080/17425255.2017.1252749:

Teschke R, Andrade RJ. Drug, herb, and dietary supplement hepatotoxicity.
Int J Mol Sci 2016; 17: 1488.

Verneti LA, Vogt A, Gough A, Taylor DL. Evolution of experimental models of the liver to predict human drug hepatotoxicity and efficacy.
Clin Liver Dis 2017; 21: 197-214.

Wang J-X, Zhang C, Fu L, Zhang D-G, Wang B-W, Zhang Z-H, Chen Y-H, Lu Y, Chen X, Xu D-X. Protective effect of rosiglitazone against acetaminophen-induced acute liver injury is associated with down-regulation of hepatic NADPH oxidases.
Toxicol Lett 2016; 265: 38-46.

Inhalation toxicity

Brinkman EN, Stolwijk LJ, Lemmers PM, van Wolfswinkel L, Purvis P, Sury MR, de Graaff JC. A survey of the dose of inhalational agents used to maintain anaesthesia in infants.
Eur J Anaesthesiol 2016; online early: doi: 10.1097/EJA.0000000000000546:

Cheng J, Zhang L, Tang Y, Li Z. The toxicity of continuous long-term low-dose formaldehyde inhalation in mice.
Immunopharmacol Immunotoxicol 2016; 38: 495-501.

Cichocki JA, Morris JB. Inhalation dosimetry modeling provides insights into regional respiratory tract toxicity of inhaled diacetyl.
Toxicology 2016; online early: doi: 10.1016/j.tox.2016.11.007:

Fu Q-L, Du Y, Xu G, Zhang H, Cheng L, Wang Y-J, Zhu D-D, Lv W, Liu S-X, Li P-Z, Shi J-B, Ou C-Q. Prevalence and occupational and environmental risk factors of self-reported asthma: evidence from a cross-sectional survey in seven Chinese cities.
Int J Environ Res Public Health 2016; 13: 1084.

Huh J-W, Hong S-B, Do K-H, Koo HJ, Jang SJ, Lee M-S, Paek D, Park D-U, Lim C-M, Koh Y. Inhalation lung injury associated with humidifier disinfectants in adults.
J Korean Med Sci 2016; 31: 1857-62.

Maxim LD, Niebo R, McConnell EE. Bentonite toxicology and epidemiology - a review.
Inhal Toxicol 2016; 28: 591-617.

Kinetics

Gochfeld M.

Sex differences in human and animal toxicology: toxicokinetics.

Toxicol Pathol 2016; online early:
doi: 10.1177/0192623316677327:

Pariante G, Leibson T, Carls A, Adams-Webber T, Ito S, Koren G.

Pregnancy-associated changes in pharmacokinetics: a systematic review.

PLoS Med 2016; 13: e1002160.

Schoretsanitis G, Haen E, Gründer G, Stegmann B, Schruers KR, Hiemke C, Lammertz SE, Paulzen M.

Pharmacokinetic drug-drug interactions of mood stabilizers and risperidone in patients under combined treatment.

J Clin Psychopharmacol 2016; 36: 554-61.

Mechanisms of toxicity

Quadalti C, Galli C, Lazzari G.

Development of an *in vitro* test battery for the screening of the receptor-mediated mechanism and the spindle-poison mode of action of estrogenic compounds.

Environ Toxicol Pharmacol 2016; 48: 245-52.

Medication errors

Cairns R, Brown JA, Buckley NA.

A decade of Australian methotrexate dosing errors.

Med J Aust 2016; 205: 486.

Snijder RA, Knappe JT, Egberts TC, Timmerman AM.

Hypertensive crisis during norepinephrine syringe exchange.

A A Case Rep 2016; online early:

doi: 10.1213/XAA.0000000000000458:

Metabolism

Almazroo OA, Miah MK, Venkataramanan R.

Drug metabolism in the liver.

Clin Liver Dis 2017; 21: 1-20.

Feasel MG, Wohlfarth A, Nilles JM, Pang S, Kristovich RL, Huestis MA.

Metabolism of carfentanil, an ultra-potent opioid, in human liver microsomes and human hepatocytes by high-resolution mass spectrometry.

AAPS J 2016; 18: 1489-99.

Sattar A, Xie S, Hafeez MA, Wang X, Hussain HI, Iqbal Z, Pan Y, Iqbal M, Shabbir MA, Yuan Z.

Metabolism and toxicity of arsenicals in mammals.

Environ Toxicol Pharmacol 2016; 48: 214-24.

Schwarz DA, George MP, Bluth MH.

Precision medicine in toxicology.

Clin Lab Med 2016; 36: 693-707.

Nephrotoxicity

Cárdenas-González M, Osorio-Yáñez C, Gaspar-Ramírez O, Pavkovic M, Ochoa-Martínez A, López-Ventura D, Medeiros M, Barbier OC, Pérez-Maldonado IN, Sabbisetti VS, Bonventre JV, Vaidya VS.

Environmental exposure to arsenic and chromium in children is associated with kidney injury molecule-1.

Environ Res 2016; 150: 653-62.

Hosohata K.

Role of oxidative stress in drug-induced kidney injury.

Int J Mol Sci 2016; 17: 1826.

Lim SR, Hyun S-H, Lee SG, Kim J-Y, Kim S-H, Park S-J, Moon K-S, Sul D, Kim DH, Choi H-K.

Potential urinary biomarkers of nephrotoxicity in cyclophosphamide-treated rats investigated by NMR-based metabolic profiling.

J Biochem Mol Toxicol 2016; online early:

doi: 10.1002/jbt.21871:

Mason H, Tan P, Kirkland G, Jose M.

Tiger snake envenomation related severe acute kidney injury: 2 case report.

Nephrology (Carlton) 2016; 21: 256-7.

Mossoba ME, Flynn TJ, Vohra S, Wiesenfeld P, Sprando RL.

Evaluation of "dream herb," *Calea zacatechichi*, for nephrotoxicity using human kidney proximal tubule cells.

J Toxicol 2016; 2016: 9794570.

Shimizu MHM, Gois PHF, Volpini RA, Canale D, Luchi WM, Froeder L, Heilberg IP, Seguro AC.

N-acetylcysteine protects against star fruit-induced acute kidney injury.

Ren Fail 2016; online early:

doi: 10.1080/0886022X.2016.1256315:

Weidemann DK, Weaver VM, Fadrowski JJ.

Toxic environmental exposures and kidney health in children.

Pediatr Nephrol 2016; 31: 2043-54.

Neurotoxicity

Alberti P.

Chemotherapy-induced peripheral neurotoxicity outcome measures: the issue.

Expert Opin Drug Metab Toxicol 2016; online early: doi:

10.1080/17425255.2017.1258400:

Asaoka N, Kawai H, Nishitani N, Kinoshita H, Shibui N, Nagayasu K, Shirakawa H, Kaneko S.

A new designer drug 5F-ADB activates midbrain dopaminergic neurons but not serotonergic neurons.

J Toxicol Sci 2016; 41: 813-6.

Cechova E, Seifertová M, Kukucka P, Vojta Š, Quaak I, de Cock M, van de Bor M, Kocan A.

An effective clean-up technique for GC/EI-HRMS determination of developmental neurotoxicants in human breast milk.

Anal Bioanal Chem 2016; online early:

doi: 10.1007/s00216-016-0059-y:

Elkhamary SM, Fahmy DM, Galvez-Ruiz A, Asghar N, Bosley TM.

Spectrum of MRI findings in 58 patients with methanol intoxication: long-term visual and neurological correlation.

Egypt J Radiol Nucl Med 2016; 47: 1049-55.

Fujiwara S, Yoshioka Y, Matsuda T, Nishimoto H, Ogawa A, Ogasawara K, Beppu T.

Relation between brain temperature and white matter damage in subacute carbon monoxide poisoning.

Sci Rep 2016; 6: 36523.

Guariglia SR, Stansfield KH, McGlothlan J, Guilarte TR.

Chronic early life lead (Pb²⁺) exposure alters presynaptic vesicle pools in hippocampal synapses.

BMC Pharmacol Toxicol 2016; 17: 56.

Juurmaa J, Menke RAL, Vila P, Müürsepp A, Tomberg T, Ilves P, Nigul M, Johansen-Berg H, Donaghy M, Stagg CJ, Stepens A, Taba P.

Grey matter abnormalities in methcathinone abusers with a Parkinsonian syndrome.
Brain Behav 2016; 6: e00539.

Kak M, Mikhail F, Yano ST, Guan R, Lukas RV.
Buzz juice: neurological sequelae of synthetic cannabinoids.
J Clin Neurosci 2016; online early:
doi: 10.1016/j.jocn.2016.10.046:

Kitamoto T, Tsuda M, Kato M, Saito F, Kamijo Y, Kinoshita T.
Risk factors for the delayed onset of neuropsychologic sequelae following carbon monoxide poisoning.
Acute Med Surg 2016; 3: 315-9.

Liu P, Wu C, Chang X, Qi X, Zheng M, Zhou Z.
Adverse associations of both prenatal and postnatal exposure to organophosphorous pesticides with infant neurodevelopment in an agricultural area of Jiangsu Province, China.
Environ Health Perspect 2016; 124: 1637-43.

Takehige H, Ueno Y, Sasaki F, Namera A, Matsukawa T, Yokoyama K, Hattori N.
Acute hippocampal and chronic diffuse white matter involvement in severe methanol intoxication.
Neurology 2016; 87: 2382-3.

Occupational toxicology

da Silva J.

DNA damage induced by occupational and environmental exposure to miscellaneous chemicals.
Mutat Res Rev Mutat Res 2016; 770: 170-82.

de Jesus LF, Moreira FR.
Impact of exposure to low levels of mercury on the health of dental workers.
Acta Sci Health Sci 2016; 38: 219-29.

Dobrakowski M, Boron M, Kasperczyk S, Kozłowska A, Kasperczyk A, Plachetka A, Pawlas N.
The analysis of blood lead levels changeability over the 5-year observation in workers occupationally exposed to lead.
Toxicol Ind Health 2016; online early:
doi: 10.1177/0748233716674380:

Dodge DG, Beck BD.
Historical state of knowledge of the health risks of asbestos posed to seamen on merchant ships.
Inhal Toxicol 2016; online early:
doi: 10.1080/08958378.2016.1244228:

Donald CE, Scott RP, Blaustein KL, Halbleib ML, Sarr M, Jepson PC, Anderson KA.
Silicone wristbands detect individuals' pesticide exposures in West Africa.
R Soc Open Sci 2016; 3: 160433.

Downes MA, Taliana KE, Muscat TM, Whyte IM.
Sodium azide ingestion and secondary contamination risk in healthcare workers.
Eur J Emerg Med 2016; 23: 68-70.

Fu Q-L, Du Y, Xu G, Zhang H, Cheng L, Wang Y-J, Zhu D-D, Lv W, Liu S-X, Li P-Z, Shi J-B, Ou C-Q.
Prevalence and occupational and environmental risk factors of self-reported asthma: evidence from a cross-sectional survey in seven Chinese cities.
Int J Environ Res Public Health 2016; 13: 1084.

Guardiola JJ, Beier JI, Falkner KC, Wheeler B, McClain CJ, Cave M.
Occupational exposures at a polyvinyl chloride production facility are associated with significant changes to the plasma metabolome.
Toxicol Appl Pharmacol 2016; 313: 47-56.

Kalahasthi R, Barman T.
Effect of lead exposure on the status of reticulocyte count indices among workers from lead battery manufacturing plant.
Toxicol Res (Camb) 2016; 32: 281-7.

Kolena B, Petrovicová I, Šidlovská M, Pilka T, Neuschlová M, Valentová I, Rybansky L, Trnovec T.
Occupational phthalate exposure and health outcomes among hairdressing apprentices.
Hum Exp Toxicol 2016; online early:
doi: 10.1177/0960327116678295:

Lima JJ, Aguilar A, Sánchez FG, Díaz AN.
Enantiomeric fraction of styrene glycol as a biomarker of occupational risk exposure to styrene.
Chemosphere 2016; online early:
doi: 10.1016/j.chemosphere.2016.10.120:

Nersesyan A, Kundi M, Waldherr M, Setayesh T, Mišík M, Wultsch G, Filipic M, Mazzaron Barcelos GR, Knasmueller S.
Results of micronucleus assays with individuals who are occupationally and environmentally exposed to mercury, lead and cadmium.
Mutat Res Rev Mutat Res 2016; 770: 119-39.

O'Connor R, McCarthy S, Murphy M, Bourke J.
Airborne contact urticaria resulting from occupational exposure to sodium benzoate.
Contact Derm 2016; 75: 101.

Pacheco C, Magalhaes R, Fonseca M, Silveira P, Brandao I.
Accidental intoxication by dichloromethane at work place: clinical case and literature review.
J Acute Med 2016; 6: 43-5.

Sarnat-Kucharczyk M, Pojda-Wilczek D, Mrukwa-Kominek E.
Diagnostic methods in ocular argyrosis: case report.
Doc Ophthalmol 2016; 133: 129-38.

Silveira AT, Albuquerque AC, Lepera JS, Martins I.
Diazepam influences urinary bioindicator of occupational toluene exposure.
Environ Toxicol Pharmacol 2016; 48: 191-6.

Togawa K, Le Cornet C, Feychting M, Tynes T, Pukkala E, Hansen J, Olsson A, Dalton SO, Nordby K-C, Uuksulainen S, Wiebert P, Woldbaek T, Skakkebaek NE, Fervers B, Schüz J.
Parental occupational exposure to heavy metals and welding fumes and risk of testicular germ cell tumors in offspring: a registry-based case-control study.
Cancer Epidemiol Biomarkers Prev 2016; 25: 1426-34.

Wnek S, Berg M, Skelton S, Lemond L, Goad P.
Hazards after the storm: floodwater drainage pump stations and exposure to hydrogen sulfide.
J Occup Environ Hyg 2016; online early:
doi: 10.1080/15459624.2016.1252842:

Ocular toxicity

Sarnat-Kucharczyk M, Pojda-Wilczek D, Mrukwa-Kominek E.
Diagnostic methods in ocular argyrosis: case report.
Doc Ophthalmol 2016; 133: 129-38.

Paediatric toxicology

Aktar F, Aktar S, Yolbas I, Tekin R.

Evaluation of risk factors and follow-up criteria for severity of snakebite in children.

Iran J Pediatr 2016; 26: e5212.

Bogen DL, Whalen BL, Kair LR, Vining M, King BA.

Wide variation found in care of opioid-exposed newborns.

Acad Pediatr 2016; online early:

doi: 10.1016/j.acap.2016.10.003:

Brinkman EN, Stolwijk LJ, Lemmers PM, van Wolfswinkel L, Purvis P, Sury MR, de Graaff JC.

A survey of the dose of inhalational agents used to maintain anaesthesia in infants.

Eur J Anaesthesiol 2016; online early:

doi: 10.1097/EJA.0000000000000546:

Cárdenas-González M, Osorio-Yáñez C, Gaspar-Ramírez O, Pavkovic M, Ochoa-Martínez A, López-Ventura D, Medeiros M, Barbier OC, Pérez-Maldonado IN, Sabbisetti VS, Bonventre JV, Vaidya VS.

Environmental exposure to arsenic and chromium in children is associated with kidney injury molecule-1.

Environ Res 2016; 150: 653-62.

Gajda-Wyrebek J, Kuzma K, Switka A, Jarecka J, Beresinska M, Postupolski J.

Exposure of Polish children to Southampton food colours.

Food Addit Contam Part A Chem Anal Control Expo Risk Assess 2016; online early:

doi: 10.1080/19440049.2016.1254819:

Gibson KS, Stark MS, Kumar D, Bailit JL.

The relationship between gestational age and the severity of neonatal abstinence syndrome.

Addiction 2016; online early: doi: 10.1111/add.13703:

Gleason KM, Valeri L, Shankar AH, Hasan MOSI, Quamruzzaman Q, Rodrigues EG, Christiani DC, Wright RO, Bellinger DC, Mazumdar M.

Stunting is associated with blood lead concentration among Bangladeshi children aged 2-3 years.

Environ Health 2016; 15: 103.

Grosso S, Ferranti S, Gaggiano C, Grande E, Loi B, Di Bartolo R.

Massive lamotrigine poisoning. A case report.

Brain Dev 2016; online early:

doi: 10.1016/j.braindev.2016.11.003:

Grüne B, Piontek D, Pogarell O, Grübl A, Groß C, Reis O, Zimmermann US, Kraus L.

Acute alcohol intoxication among adolescents—the role of the context of drinking.

Eur J Pediatr 2016; online early: doi: 10.1007/s00431-016-2797-4:

Hajjar MJ, Al-Salam A.

Organochlorine pesticide residues in human milk and estimated daily intake (EDI) for the infants from eastern region of Saudi Arabia.

Chemosphere 2016; 164: 643-8.

Heard K, Anderson V, Dart RC, Kile D, Lavonas E, Green JL.

Serum acetaminophen protein adduct concentrations in pediatric emergency department patients.

J Pediatr Gastroenterol Nutr 2016; online early: doi:

10.1097/MPG.0000000000001459:

John A, Marchant AL, Fone DL, McGregor JI, Dennis MS, Tan JO, Lloyd K.

Recent trends in primary-care antidepressant prescribing to children and young people: an e-cohort study.

Psychol Med 2016; 46: 3315-27.

Kendrick D, Majsak-Newman G, Benford P, Coupland C, Timblin C, Hayes M, Goodenough T, Hawkins A, Reading R.

Poison prevention practices and medically attended poisoning in young children: multicentre case-control study.

Injury Prev 2016; online early: doi: 10.1136/injuryprev-2015-041828:

Kluger M, Penrose S, Bjorksten AR, Chalkiadis G.

Accuracy of dispersing tramadol capsules for oral administration in young children.

Anaesth Intensive Care 2016; 44: 742-4.

Kumar S, Choudhary A, Ali M, Gupta V, Muralidharan J, Singhi SC.

Sulfonylurea poisoning in a healthy toddler.

Indian J Pediatr 2016; online early: doi: 10.1007/s12098-016-2249-1:

Le Bot B, Lucas J-P, Lacroix F, Glorennec P.

Exposure of children to metals via tap water ingestion at home: contamination and exposure data from a nationwide survey in France.

Environ Int 2016; 94: 500-7.

Liu P, Wu C, Chang X, Qi X, Zheng M, Zhou Z.

Adverse associations of both prenatal and postnatal exposure to organophosphorous pesticides with infant neurodevelopment in an agricultural area of Jiangsu Province, China.

Environ Health Perspect 2016; 124: 1637-43.

Maharaj VR, Paul JF, Finkelstein Y.

Sweet and minty: a 2 year old with a fatal household ingestion.

Pediatr Emerg Care 2016; 32: 892-6.

Martins E, Varea A, Hernández K, Sala M, Girardelli A, Fasano V, Disalvo L.

Blood lead levels in children aged between 1 and 6 years old in La Plata, Argentina. Identification of risk factors for lead exposure.

Arch Argent Pediatr 2016; 114: 543-8.

Myridakis A, Chalkiadaki G, Fotou M, Kogevinas M, Chatzi L, Stephanou EG.

Exposure of preschool-age Greek children (RHEA cohort) to bisphenol A, parabens, phthalates, and organophosphates.

Environ Sci Technol 2016; 50: 932-41.

Nascimento SN, Göethel G, Baierle M, Barth A, Brucker N, Charão MF, Moro AM, Gauer B, Sauer E, Durgante J, Arbo MD, Thiesen FV, Saint' Pierre TD, Gioda A, Moresco R, Garcia SC.

Environmental exposure and effects on health of children from a tobacco-producing region.

Environ Sci Pollut Res 2016; online early:

doi: 10.1007/s11356-016-8071-5:

Nielsen ES, Rasmussen L, Poulsen MH, Thomsen PH, Nørgaard M, Laursen T.

Trends in off-label prescribing of sedatives, hypnotics and antidepressants among children and adolescents – a Danish, nationwide register-based study.

Basic Clin Pharmacol Toxicol 2016; online early: doi:

10.1111/bcpt.12706:

Papadopoulou E, Sabaredzovic A, Namork E, Nygaard UC, Granum B, Haug LS.

Exposure of Norwegian toddlers to perfluoroalkyl substances (PFAS): the association with breastfeeding and maternal PFAS concentrations.
Environ Int 2016; 94: 687-94.

Perlroth NH, Branco CWC.

Current knowledge of environmental exposure in children during the sensitive developmental periods.
J Pediatr (Rio J) 2016; online early:
doi: 10.1016/j.jpmed.2016.07.002:

Rebahi H, Ba-Mhamed S, Mouaffak Y, Younous S, Bennis M. Clinico-epidemiological features of severe scorpion envenomation in a pediatric Moroccan population.
Anesth Analg 2016; 123: 340.

Regina A, Lee D, Sud P, Crevi D.

Flumazenil use for isolated ataxia in a child.
Pediatr Emerg Care 2016; 32: e13.

Sheridan DC, Hendrickson RG, Lin AL, Fu R, Horowitz BZ. Adolescent suicidal ingestion: national trends over a decade.

J Adolesc Health 2016; online early:
doi: 10.1016/j.jadohealth.2016.09.012:

Torres de Araújo Azi LM, Figueroa DG, Souza Simas AA. Cardiac arrest after local anaesthetic toxicity in a paediatric patient.

Case Rep Anesthesiol 2016; 2016: 7826280.

Vazquez M, Paul AZ, Tay ET, Tsung JW.

Evaluation and monitoring of a child with hydrocarbon pneumonitis using point-of-care lung ultrasound in the pediatric emergency department.
Pediatr Emerg Care 2016; 32: 642-4.

Vierge M, Laborie S, Bertholet-Thomas A, Carlier M-C, Picaud J-C, Claris O, Bacchetta J.

Neonatal intoxication to vitamin D in premature babies: a series of 16 cases.
Pediatr Nephrol 2016; 31: 1917.

Weidemann DK, Weaver VM, Fadrowski JJ.

Toxic environmental exposures and kidney health in children.
Pediatr Nephrol 2016; 31: 2043-54.

Wu F, Marin SJ, McMillin GA.

Stability of 21 cocaine, opioid and benzodiazepine drug analytes in spiked meconium at three temperatures.
J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw113:

Ye L, Wang Z.

Establishment of evaluation system of intake doses in children with coumarin derivative rodenticide intoxication: report of 44 cases.
Pediatr Nephrol 2016; 31: 1977.

Reprotoxicity

Diav-Citrin O, Shechtman S, Arnon J, Wajenberg R, Borisch C, Beck E, Richardson JL, Bozzo P, Nulman I, Ornoy A. Methylphenidate in pregnancy: a multicenter, prospective, comparative, observational study.
J Clin Psychiatry 2016; 77: 1176-81.

Jeelani R, Bluth MH, Abu-Soud HM.

Toxicology in reproductive endocrinology.
Clin Lab Med 2016; 36: 709-20.

Richardson JL, Stephens S, Yates LM, Diav-Citrin O, Arnon J, Beghin D, Kayser A, Kennedy D, Cupitt D, te Winkel B, Peltonen M, Kaplan YC, Thomas SHL.

Pregnancy outcomes after maternal varenicline use; analysis of surveillance data collected by the European Network of Teratology Information Services.
Reprod Toxicol 2017; 67: 26-34.

Runkle J, Flocks J, Economos J, Dunlop AL.

A systematic review of mancozeb as a reproductive and developmental hazard.
Environ Int 2016; online early:
doi: 10.1016/j.envint.2016.11.006:

Wang A, Padula A, Sirota M, Woodruff TJ.

Environmental influences on reproductive health: the importance of chemical exposures.
Fertil Steril 2016; 106: 905-29.

Wu L, Jin L, Shi T, Zhang B, Zhou Y, Zhou T, Bao W, Xiang H, Zuo Y, Li G, Wang C, Duan Y, Peng Z, Huang X, Zhang H, Xu T, Li Y, Pan X, Xia Y, Gong X, Chen W, Liu Y.

Association between ambient particulate matter exposure and semen quality in Wuhan, China.
Environ Int 2016; online early:
doi: 10.1016/j.envint.2016.11.013:

Risk assessment

Cochran RC, Ross JH.

A method for quantitative risk appraisal for pesticide risk assessments.

J Toxicol Environ Health A 2016; online early:
doi: 10.1080/15287394.2016.1224747:

Ingre-Khans E, Ågerstrand M, Beronius A, Rudén C.

Transparency of chemical risk assessment data under REACH.

Environ Sci Process Impacts 2016; online early:
doi: 10.1039/c6em00389c:

Suicide

Almeida OP, McCaul K, Hankey GJ, Yeap BB, Golledge J, Flicker L.

Suicide in older men: the health in men cohort study (HIMS).
Prev Med 2016; 93: 33-8.

Alves VM, Francisco LC, de Melo AR, Novaes CR, Belo FM, Nardi AE.

Trends in suicide attempts at an emergency department.
Rev Bras Psiquiatr 2016; online early: doi: 10.1590/1516-4446-2015-1833:

Arensman E, Bennardi M, Larkin C, Wall A, McAuliffe C, McCarthy J, Williamson E, Perry IJ.

Suicide among young people and adults in Ireland: method characteristics, toxicological analysis and substance abuse histories compared.
PLoS ONE 2016; 11: e0166881.

Ho CSH, Ong YL, Tan GHN, Yeo SN, Ho RCM.

Profile differences between overdose and non-overdose suicide attempts in a multi-ethnic Asian society.
BMC Psychiatry 2016; 16: 379.

Metz TD, Rovner P, Hoffman MC, Allshouse AA, Beckwith KM, Binswanger IA.

Maternal deaths from suicide and overdose in Colorado, 2004-2012.
Obstet Gynecol 2016; online early:
doi: 10.1097/AOG.0000000000001695:

Page A, Liu S, Gunnell D, Astell-Burt T, Feng X, Wang L, Zhou M.

Suicide by pesticide poisoning remains a priority for suicide prevention in China: analysis of national mortality trends 2006–2013.

J Affect Disord 2016; 208: 418-23.

Sheridan DC, Hendrickson RG, Lin AL, Fu R, Horowitz BZ. Adolescent suicidal ingestion: national trends over a decade.

J Adolesc Health 2016; online early:
doi: 10.1016/j.jadohealth.2016.09.012:

MANAGEMENT

General

Firoozabadi AS, Nasri-Nasrabadi Z, Marashi SM.

Management of indoxacarb poisoning in a regional setting. Indian J Crit Care Med 2016; 20: 627-8.

Gonzalez HC, Jafri S-M, Gordon SC.

Management of acute hepatotoxicity including medical agents and liver support systems.

Clin Liver Dis 2017; 21: 163-80.

Iyengar ARS, Pande AH.

Organophosphate-hydrolyzing enzymes as first-line of defence against nerve agent-poisoning: perspectives and the road ahead.

Protein J 2016; 35: 424-39.

Mallik S, Singh SR, Sahoo S, Mohanty MK.

Ornament induced complications in snake bites: revisiting the "Do it RIGHT" approach. PMC5084587.

J Family Med Prim Care 2016; 5: 474-6.

Mohammed NEM, Messiha BAS, Abo-Saif AA.

Effect of amlodipine, lisinopril and allopurinol on acetaminophen-induced hepatotoxicity in rats.

Saudi Pharm J 2016; 24: 635-44.

Panahi Y, Aslani J, Hajjhashemi A, Kalkhorani M, Ghanei M, Sahebkar A.

Effect of *Aloe vera* and pantoprazole on gastroesophageal reflux symptoms in mustard gas victims: a randomized controlled trial.

Pharm Sci 2016; 22: 190-4.

Sehra S, Jaggi S, Sehra D, Aggarwal R, Saraswat V, Juneja D.

Management of sitagliptin and metformin combination toxic overdose.

J Assoc Physicians India 2016; 64: 80-1.

Singh R, Arain E, Buth A, Kado J, Soubani A, Imran N.

Ethylene glycol poisoning: an unusual cause of altered mental status and the lessons learned from management of the disease in the acute setting.

Case Rep Crit Care 2016; 2016: 9157393.

Antidotes

Mansour A, Al-Bizri L, El-Maamary J, Al-Helou A, Hamade R, Saliba E, Khammash D, Makhoul K, Matli K, Ghosn N, Deeb M, Faour WH.

National study on the adequacy of antidotes stocking in Lebanese hospitals providing emergency care.

BMC Pharmacol Toxicol 2016; 17: 51.

Acetylcysteine

Gupte GL.

Management of paracetamol overdose.

Paediatr Child Health 2016; 26: 459-63.

Shimizu MHM, Gois PHF, Volpini RA, Canale D, Luchi WM, Froeder L, Heilberg IP, Seguro AC.

N-acetylcysteine protects against star fruit-induced acute kidney injury.

Ren Fail 2016; online early:

doi: 10.1080/0886022X.2016.1256315:

Antivenom

Félix-Silva J, Gomes JAS, Xavier-Santos JB, Passos JGR, Silva-Junior AA, Tambourgi DV, Fernandes-Pedrosa MF.

Inhibition of local effects induced by *Bothrops erythromelas* snake venom: Assessment of the effectiveness of Brazilian polyvalent bothropic antivenom and aqueous leaf extract of *Jatropha gossypifolia*.

Toxicon 2016; online early:

doi: 10.1016/j.toxicon.2016.11.260:

Johnston CI, Ryan NM, O'Leary MA, Brown SGA, Isbister GK.

Australian taipan (*Oxyuranus* spp.) envenoming: clinical effects and potential benefits of early antivenom therapy – Australian Snakebite Project (ASP-25).

Clin Toxicol 2016; online early:

doi: 10.1080/15563650.2016.1250903:

Steuerwald MT, Gabbard SR, Beauchamp GA, Riddle MK, Otten EJ.

Administration of CroFab antivenom by a helicopter emergency medical service team.

Air Med J 2016; 35: 371-3.

Chelating agents

Aneni EC, Escolar E, Lamas GA.

Chronic toxic metal exposure and cardiovascular disease: mechanisms of risk and emerging role of chelation therapy.

Curr Atheroscler Rep 2016; 18: 81.

Ferrero ME.

Rationale for the successful management of EDTA chelation therapy in human burden by toxic metals.

BioMed Res Int 2016; 2016: 8274504.

Lee Y-R, Kang M-H, Park H-M.

Treatment of zinc toxicosis in a dog with chelation using D-penicillamine.

J Vet Emerg Crit Care (San Antonio) 2016; 26: 825-30.

van Eijkeren JCH, Olie JDN, Bradberry SM, Vale JA, de Vries I, Clewell HJ, III, Meulenbelt J, Hunault CC.

Modeling the effect of succimer (DMSA; dimercaptosuccinic acid) chelation therapy in patients poisoned by lead.

Clin Toxicol 2016; online early:

doi: 10.1080/15563650.2016.1263855:

Hydroxocobalamin

Fueyo L, Robles J, Aguilar I, Yáñez AM, Socías M, Parera M.

Hemolysis index to detect degree of hydroxocobalamin interference with common laboratory tests.

J Clin Lab Anal 2016; online early: doi: 10.1002/jcla.22089:

Idarucizumab

Rosenberg L, Gerstrøm G, Nybo M.

Idarucizumab for reversal of dabigatran prior to acute surgery: a schematic approach based on a case report.

Basic Clin Pharmacol Toxicol 2016; online early: doi: 10.1111/bcpt.12696:

Lipid emulsion therapy

Forsberg M, Forsberg S, Edman G, Höjer J.

No support for lipid rescue in oral poisoning: a systematic review and analysis of 160 published cases.

Hum Exp Toxicol 2016; online early:
doi: 10.1177/0960327116679715:

Spray JW.
Review of intravenous lipid emulsion therapy.
J Infus Nurs 2016; 39: 377-80.

Naloxone

Babcock C, Rockich-Winston N, Booth C.
Bringing naloxone to ground zero: Huntington, West Virginia.
J Am Pharm Assoc (Wash) 2016; online early:
doi: 10.1016/j.japh.2016.09.006:

Traynor K.
Experts weigh minimum naloxone dose as opioid crisis evolves.
Am J Health Syst Pharm 2016; 73: 1892-4.

Wagner KD, Bovet LJ, Haynes B, Joshua A, Davidson PJ.
Training law enforcement to respond to opioid overdose with naloxone: impact on knowledge, attitudes, and interactions with community members.
Drug Alcohol Depend 2016; 165: 22-8.

Willman MW, Liss DB, Schwarz ES, Mullins ME.
Do heroin overdose patients require observation after receiving naloxone?
Clin Toxicol 2016; online early:
doi: 10.1080/15563650.2016.1253846:

Neostigmine

Torrents R, Glaizal M, Schmitt C, Boulamery A, de Haro L, Simon N.

A rarely described use of neostigmine in a case of acute anticholinergic poisoning.
Presse Med 2016; online early:
doi: 10.1016/j.lpm.2016.09.021:

Oximes

Vale JA.
Oximes.
In Critical Care Toxicology, ed. by J Brent, K Burkhart, P Dargan, B Hatten, B Megarbane, & R Palmer. Cham: Springer International Publishing, 2016.

Corticosteroids

Liu W, Nie X, Zhang L.
A retrospective analysis of Stevens-Johnson syndrome/toxic epidermal necrolysis treated with corticosteroids.
Int J Dermatol 2016; 55: 1408-13.

Extracorporeal treatments

Haemodialysis

Baig W, Kan G, Manickam V, Srivastava V, Nigam A.
Acetazolamide toxicity-reversal with haemodialysis.
Nephrology (Carlton) 2016; 21 Suppl S2: 252.

le Noble JLML, Foudraine NA, Kornips FHM, van Dam DGHA, Neef C, Janssen PKC.
Extracorporeal clearance of levetiracetam during continuous venovenous hemofiltration in a critically ill patient and new dosing recommendation.
J Clin Pharmacol 2016; online early:
doi: 10.1002/jcph.844:

Haemoperfusion

Jansen T, Petersen H, Malskær CM, Gabel-Jensen C, Dalhoff K, Eriksen T, Belhage B, Hoegberg LCG.

Activated charcoal hemoperfusion in the treatment of experimental amitriptyline poisoning in pigs - the effect on amitriptyline plasma concentration and hemodynamic parameters.

Basic Clin Pharmacol Toxicol 2016; online early:
doi: 10.1111/bcpt.12704:

Plasmapheresis

Disel NR, Acikalin A, Kecek Z, Sebe A.
Utilization of plasmapheresis for organophosphate intoxication: a case report.
Turk J Emerg Med 2016; 16: 69-71.

Methadone maintenance therapy

George P, Vicknasingam B, Thurairajasingam S, Ramasamy P, Yusof HM, Yasin MABM, Shah ZUBS.
Methadone complications amongst opioid-dependent patients in Malaysia: a case series.
Drug Alcohol Rev 2016; online early:
doi: 10.1111/dar.12456:

Manfredini D.
Methadone maintenance treatment may be associated with bruxism in male prisoners.
J Evid Based Dent Pract 2016; 16: 202-4.

Rosiglitazone

Wang J-X, Zhang C, Fu L, Zhang D-G, Wang B-W, Zhang Z-H, Chen Y-H, Lu Y, Chen X, Xu D-X.
Protective effect of rosiglitazone against acetaminophen-induced acute liver injury is associated with down-regulation of hepatic NADPH oxidases.
Toxicol Lett 2016; 265: 38-46.

Uridine triacetate

Santos C, Morgan BW, Geller RJ.
The successful treatment of 5-fluorouracil (5-FU) overdose in a patient with malignancy and HIV/AIDS with uridine triacetate.
Am J Emerg Med 2016; online early:
doi: 10.1016/j.ajem.2016.11.038:

DRUGS

General

Almazroo OA, Miah MK, Venkataramanan R.
Drug metabolism in the liver.
Clin Liver Dis 2017; 21: 1-20.

Bidny S, Gago K, Chung P, Albertyn D, Pasin D.
Simultaneous screening and quantification of basic, neutral and acidic drugs in blood using UPLC-QTOF-MS.
J Anal Toxicol 2016; online early:
doi: 10.1093/jat/bkw118:

Bluth MH.
Drug testing and toxicology: redefining the plague of darkness.
Clin Lab Med 2016; 36: xi-xx.

Chen S-S, Yu K-K, Huang C, Li N, Zheng J-M, Bao S-X, Chen M-Q, Zhang W-H.
The characteristics and clinical outcome of drug-induced liver injury in a Chinese hospital: a retrospective cohort study.
Medicine 2016; 95: e4683.

Goggin MM, Tann C-M, Miller A, Nguyen A, Janis GC.
Catching fakes: new markers of urine sample validity and invalidity.

J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw119:

Görgens C, Guddat S, Thomas A, Wachsmuth P, Orlovius A-K, Sigmund G, Thevis M, Schänzer W. Simplifying and expanding analytical capabilities for various classes of doping agents by means of direct urine injection high performance liquid chromatography high resolution/high accuracy mass spectrometry. J Pharm Biomed Anal 2016; 131: 482-96.

Ho CSH, Ong YL, Tan GHN, Yeo SN, Ho RCM. Profile differences between overdose and non-overdose suicide attempts in a multi-ethnic Asian society. BMC Psychiatry 2016; 16: 379.

Hosohata K. Role of oxidative stress in drug-induced kidney injury. Int J Mol Sci 2016; 17: 1826.

Iasella CJ, Johnson HJ, Dunn MA. Adverse drug reactions: type A (intrinsic) or type B (idiosyncratic). Clin Liver Dis 2017; 21: 73-87.

Jacobson G, Carmel NN, Lotan D, Kremer A, Justo D. Reckless administration of QT interval-prolonging agents in elderly patients with drug-induced torsade de pointes. Z Gerontol Geriatr 2016; online early: doi: 10.1007/s00391-016-1155-5:

Kim E, Park Y, Ha H, Chung H. Patterns of drugs & poisons in southern area of South Korea in 2014. Forensic Sci Int 2016; 269: 50-5.

Lee S-J, Lee YJ, Park K-K. The pathogenesis of drug-induced liver injury. Expert Rev Gastroenterol Hepatol 2016; 10: 1175-85.

Liu W, Nie X, Zhang L. A retrospective analysis of Stevens-Johnson syndrome/toxic epidermal necrolysis treated with corticosteroids. Int J Dermatol 2016; 55: 1408-13.

Lu A, Scott KS, Chan-Hosokawa A, Logan BK. Impact of expanding ELISA screening in DUID investigations to include carisoprodol/meprobamate and zolpidem. J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw106:

McCarthy KD, Donovan RM. Management of a patient with toxic epidermal necrolysis using silicone transfer foam dressings and a secondary absorbent dressing. J Wound Ostomy Continence Nurs 2016; 43: 650-1.

Metz TD, Rovner P, Hoffman MC, Allshouse AA, Beckwith KM, Binswanger IA. Maternal deaths from suicide and overdose in Colorado, 2004-2012. Obstet Gynecol 2016; online early: doi: 10.1097/AOG.0000000000001695:

Mosedale M, Watkins PB. Drug-induced liver injury: advances in mechanistic understanding that will inform risk management. Clin Pharmacol Ther 2016; online early: doi: 10.1002/cpt.564:

Musshoff F, Fels H, Carli A, Piombino-Mascalì D. The anatomical mummies of Mombello: detection of cocaine, nicotine, and caffeine in the hair of psychiatric patients of the early 20th century.

Forensic Sci Int 2017; 270: 20-4.

Orfanidis A, Mastrogianni O, Koukou A, Psarros G, Gika H, Theodoridis G, Raikos N. A GC-MS method for the detection and quantitation of ten major drugs of abuse in human hair samples. J Chromatogr B Biomed Sci Appl 2016; online early: doi: 10.1016/j.jchromb.2016.11.011:

Pariante G, Leibson T, Carls A, Adams-Webber T, Ito S, Koren G. Pregnancy-associated changes in pharmacokinetics: a systematic review. PLoS Med 2016; 13: e1002160.

Rooney B, Gouveia GJ, Isles N, Lawrence L, Brodie T, Grahovac Z, Chamberlain M, Trotter G. Drugged drivers blood concentrations in England and Wales prior to the introduction of *per se* limits. J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw109:

Sheridan DC, Hendrickson RG, Lin AL, Fu R, Horowitz BZ. Adolescent suicidal ingestion: national trends over a decade. J Adolesc Health 2016; online early: doi: 10.1016/j.jadohealth.2016.09.012:

Smith MP, Bluth MH. Common interferences in drug testing. Clin Lab Med 2016; 36: 663-71.

Stine JG, Chalasani NP. Drug hepatotoxicity: environmental factors. Clin Liver Dis 2017; 21: 103-13.

Teschke R, Danan G. Drug-induced liver injury: Is chronic liver disease a risk factor and a clinical issue? Expert Opin Drug Metab Toxicol 2016; online early: doi: 10.1080/17425255.2017.1252749:

Vanham D, Spinewine A, Hantson P, Wittebole X, Wouters D, Sneyers B. Drug-drug interactions in the intensive care unit: do they really matter? J Crit Care 2017; 38: 97-103.

Wu F, Marin SJ, McMillin GA. Stability of 21 cocaine, opioid and benzodiazepine drug analytes in spiked meconium at three temperatures. J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw113:

ACE inhibitors

Enalapril

Liu X, Jin Y, Liu Z. A case of survival following intake of a potentially lethal dose of enalapril. Toxin Rev 2016; 35: 214-6.

Acetaminophen (see paracetamol)

Acetazolamide

Baig W, Kan G, Manickam V, Srivastava V, Nigam A. Acetazolamide toxicity-reversal with haemodialysis. Nephrology (Carlton) 2016; 21 Suppl S2: 252.

Amfetamines and MDMA (ecstasy)

Chen P-S, Chen S-H, Chen J-H, Haung W-Y, Liu H-T, Kong P-H, Yang OHY.

Modifier-assisted differential mobility-tandem mass spectrometry method for detection and quantification of amphetamine-type stimulants in urine.
Anal Chim Acta 2016; 946: 1-8.

McKenna B, McEvedy S, Kelly K, Long B, Anderson J, Dalzell E, Maguire T, Tacey M, Furness T.
Association of methamphetamine use and restrictive interventions in an acute adult inpatient mental health unit: a retrospective cohort study.
Int J Ment Health Nurs 2016; online early:
doi: 10.1111/inm.12283:

Anaesthetics

Brinkman EN, Stolwijk LJ, Lemmers PM, van Wolfswinkel L, Purvis P, Sury MR, de Graaff JC.
A survey of the dose of inhalational agents used to maintain anaesthesia in infants.
Eur J Anaesthesiol 2016; online early:
doi: 10.1097/EJA.0000000000000546:

Kieliszak CR, Griffin JR, Pollinger TH, Junkins-Hopkins JM.
Pseudo-bullous dermatosis induced by topical anesthetic agent-clues to this localized toxic reaction.
Am J Dermatopathol 2016; online early:
doi: 10.1097/DAD.0000000000000670:

Osman BM, Maga JM, Baquero SM.
Case report: management of differential diagnosis and treatment of severe anaphylaxis in the setting of spinal anaesthesia.
J Clin Anesth 2016; 35: 145-9.

Torres de Araújo Azi LM, Figueroa DG, Souza Simas AA.
Cardiac arrest after local anaesthetic toxicity in a paediatric patient.
Case Rep Anesthesiol 2016; 2016: 7826280.

Yilmaz S, Çalbayram NÇ.
Exposure to anesthetic gases among operating room personnel and risk of genotoxicity: a systematic review of the human biomonitoring studies.
J Clin Anesth 2016; 35: 326-31.

Lignocaine

Chan TYK.
Fatal anaphylactic reactions to lignocaine.
Forensic Sci Int 2016; 266: 449-52.

Analgesics

Bluth MH, Pincus MR.
Narcotic analgesics and common drugs of abuse: clinical correlations and laboratory assessment.
Clin Lab Med 2016; 36: 603-34.

Ciejka M, Nguyen K, Bluth MH, Dubey E.
Drug toxicities of common analgesic medications in the emergency department.
Clin Lab Med 2016; 36: 761-76.

Antiarrhythmic drugs

Amiodarone

Hammann F, Gotta V, Conen K, Medinger M, Cesana P, Rochlitz C, Taegtmeyer AB.
Pharmacokinetic interaction between taxanes and amiodarone leading to severe toxicity.
Br J Clin Pharmacol 2016; online early:
doi: 10.1111/bcp.13155:

Flecainide

Tessitore E, Ramlawi M, Tobler O, Sunthorn H.
Brugada pattern caused by a flecainide overdose.
J Emerg Med 2016; online early:
doi: 10.1016/j.jemermed.2016.10.045:

Antibiotics

Ciprofloxacin

Meyer JM, Proctor G, Cummings MA, Dardashti LJ, Stahl SM.
Ciprofloxacin and clozapine: a potentially fatal but underappreciated interaction.
Case Rep Psychiatry 2016; 2016: 5606098.

Metronidazole

Thakkar N, Bhaarat, Chand R, Sharma R, Mahavar S, Srivastava S, Palawat A.
Metronidazole Induced encephalopathy.
J Assoc Physicians India 2016; 64: 72-4.

Trimethoprim-sulfamethoxazole

Jha A, Ghosh H, James N.
Severe agranulocytosis following simultaneous administration of chlorpromazine and trimethoprim-sulfamethoxazole in a patient with sepsis: a possible toxic combination.
Case Rep Med 2016; 2016: 5653497.

Vancomycin

Kumar T, Teo I, McCormick BB.
Systemic toxicity of intraperitoneal vancomycin.
Case Rep Nephrol 2016; 2016: 3968690.

Anticholinergic drugs

Torrents R, Glaizal M, Schmitt C, Boulamery A, de Haro L, Simon N.
A rarely described use of neostigmine in a case of acute anticholinergic poisoning.
Presse Med 2016; online early:
doi: 10.1016/j.lpm.2016.09.021:

Anticoagulants

Pfeiffer H, Herbst L, Schwarze B, Eckstein R, Weisbach V.
Massive intoxication with rivaroxaban, phenprocoumon, and diclofenac: a case report.
Medicine (Baltimore) 2016; 95: e5343.

Apixaban

Leikin SM, Patel H, Welker KL, Leikin JB.
The X factor: lack of bleeding after an acute apixaban overdose.
Am J Emerg Med 2016; online early:
doi: 10.1016/j.ajem.2016.11.035:

Dabigatran

Rosenberg L, Gerstrøm G, Nybo M.
Idarucizumab for reversal of dabigatran prior to acute surgery: a schematic approach based on a case report.
Basic Clin Pharmacol Toxicol 2016; online early: doi: 10.1111/bcpt.12696:

Warfarin

Berling I, Mostafa A, Grice JE, Roberts MS, Isbister GK.
Warfarin poisoning with delayed rebound toxicity.
J Emerg Med 2016; online early:
doi: 10.1016/j.jemermed.2016.05.068:

Anticonvulsants

Lamotrigine

Grosso S, Ferranti S, Gaggiano C, Grande E, Loi B, Di Bartolo R.

Massive lamotrigine poisoning. A case report.

Brain Dev 2016; online early:

doi: 10.1016/j.braindev.2016.11.003:

Pregabalin

Elliott SP, Burke T, Smith C.

Determining the toxicological significance of pregabalin in fatalities.

J Forensic Sci 2016; online early:

doi: 10.1111/1556-4029.13263:

Antidepressants

John A, Marchant AL, Fone DL, McGregor JI, Dennis MS, Tan JO, Lloyd K.

Recent trends in primary-care antidepressant prescribing to children and young people: an e-cohort study.

Psychol Med 2016; 46: 3315-27.

Nielsen ES, Rasmussen L, Poulsen MH, Thomsen PH, Nørgaard M, Laursen T.

Trends in off-label prescribing of sedatives, hypnotics and antidepressants among children and adolescents – a Danish, nationwide register-based study.

Basic Clin Pharmacol Toxicol 2016; online early:

doi: 10.1111/bcpt.12706:

Ramirez Fernandez MD, Wille SM, Hill V, Samyn N.

Determination of antidepressants in hair via UHPLC-MS/MS as a complementary informative tool for clinical and forensic toxicological assessments.

Ther Drug Monit 2016; 38: 751-60.

Antifungal drugs

Butenafine

Mitra A, Kim N, Spark D, Toner F, Craig S, Roper C, Meyer TA.

Use of an *in vitro* human skin permeation assay to assess bioequivalence of two topical cream formulations containing butenafine hydrochloride (1%, w/w).

Regul Toxicol Pharmacol 2016; 82: 14-9.

Antihistamines

Diphenhydramine

Oritani S, Michiue T, Chen J-H, Tani N, Ishikawa T.

Biodistribution of diphenhydramine in reproductive organs in an overdose case.

Human Cell 2016; online early: doi: 10.1007/s13577-016-0151-9:

Antimalarial drugs

Hydroxychloroquine

Lally DR, Heier JS, Bauml C, Witkin AJ, Maler S, Shah CP, Reichel E, Waheed NK, Bussel I, Rogers A, Duker JS.

Expanded spectral domain-OCT findings in the early detection of hydroxychloroquine retinopathy and changes following drug cessation.

Int J Retina Vitreous 2016; 2: 18.

Mefloquine

Jain M, Nevin RL, Ahmed I.

Mefloquine-associated dizziness, diplopia, and central serous chorioretinopathy: a case report.

J Med Case Rep 2016; 10: 305.

Antineoplastic drugs

Alberti P.

Chemotherapy-induced peripheral neurotoxicity outcome measures: the issue.

Expert Opin Drug Metab Toxicol 2016; online early: doi: 10.1080/17425255.2017.1258400:

Cyclophosphamide

Lim SR, Hyun S-H, Lee SG, Kim J-Y, Kim S-H, Park S-J, Moon K-S, Sul D, Kim DH, Choi H-K.

Potential urinary biomarkers of nephrotoxicity in cyclophosphamide-treated rats investigated by NMR-based metabolic profiling.

J Biochem Mol Toxicol 2016; online early:

doi: 10.1002/jbt.21871:

Fluorouracil

Santos C, Morgan BW, Geller RJ.

The successful treatment of 5-fluorouracil (5-FU) overdose in a patient with malignancy and HIV/AIDS with uridine triacetate.

Am J Emerg Med 2016; online early:

doi: 10.1016/j.ajem.2016.11.038:

Methotrexate

Cairns R, Brown JA, Buckley NA.

A decade of Australian methotrexate dosing errors.

Med J Aust 2016; 205: 486.

Foster JH, Bernhardt MB, Thompson PA, Smith EO, Schafer ES.

Using a bedside algorithm to individually dose high-dose methotrexate for patients at risk for toxicity.

J Pediatr Hematol Oncol 2016; online early:

doi: 10.1097/MPH.0000000000000696:

Gönül M, Keseroglu H, Hacinecipoglu F.

A case of methotrexate intoxication in a patient with psoriasis who drank beetroot juice during methotrexate treatment.

Clin Exp Dermatol 2016; 41: 893-5.

Ozeki T, Fujita Y.

Asymptomatic colitis induced by low-dose methotrexate.

BMJ Case Rep 2016; doi: 10.1136/bcr-2016-217771:

Paclitaxel

Rawal G, Yadav S, Kumar R.

Paclitaxel induced acute ST elevation myocardial infarction: a rare case report.

J Clin Diagn Res 2016; 10: XD01-XD02.

Antipsychotics

Chlorpromazine

Jha A, Ghosh H, James N.

Severe agranulocytosis following simultaneous administration of chlorpromazine and trimethoprim-sulfamethoxazole in a patient with sepsis: a possible toxic combination.

Case Rep Med 2016; 2016: 5653497.

Clozapine

Meyer JM, Proctor G, Cummings MA, Dardashti LJ, Stahl SM.

Ciprofloxacin and clozapine: a potentially fatal but underappreciated interaction.

Case Rep Psychiatry 2016; 2016: 5606098.

Quetiapine

Smolders DME, Smolders WAP.

Case report and review of the literature: cardiomyopathy in a young woman on high-dose quetiapine.

Cardiovasc Toxicol 2016; online early:
doi: 10.1007/s12012-016-9390-y;

Risperidone

Schoretsanitis G, Haen E, Gründer G, Stegmann B, Schruers KR, Hiemke C, Lammertz SE, Paulzen M. Pharmacokinetic drug-drug interactions of mood stabilizers and risperidone in patients under combined treatment. J Clin Psychopharmacol 2016; 36: 554-61.

Antiviral drugs

Tenofovir

Iwata K, Nagata M, Watanabe S, Nishi S. Distal renal tubular acidosis without renal impairment after use of tenofovir: a case report. BMC Pharmacol Toxicol 2016; 17: 52.

Ayahuasca

Heise CW, Brooks DE. Ayahuasca exposure: descriptive analysis of calls to US Poison Control Centers from 2005 to 2015. J Med Toxicol 2016; online early: doi: 10.1007/s13181-016-0593-1:

Benzodiazepines

Alprazolam

Lloyd B, Dwyer J, Bugeja L, Jamieson A. Alprazolam in fatal overdose following regulatory rescheduling: a response to Deacon et al. Int J Drug Policy 2016; online early: doi: 10.1016/j.drugpo.2016.10.008:

Diazepam

Silveira AT, Albuquerque AC, Lepera JS, Martins I. Diazepam influences urinary bioindicator of occupational toluene exposure. Environ Toxicol Pharmacol 2016; 48: 191-6.

Caffeine

Chen F, Hu Z-Y, Parker RB, Laizure SC. Measurement of caffeine and its three primary metabolites in human plasma by HPLC-ESI-MS/MS and clinical application. Biomed Chromatogr 2016; online early: doi: 10.1002/bmc.3900:

Calcium channel blockers

Fermini B, Ramirez DS, Sun S, Bassyouni A, Hemkens M, Wisialowski T, Jenkinson S. L-type calcium channel antagonism - translation from *in vitro* to *in vivo*. J Pharmacol Toxicol Methods 2016; 84: 86-92.

Cannabis (marijuana)

Berthet A, de Cesare M, Favrat B, Sporkert F, Augsburg M, Thomas A, Giroud C. A systematic review of passive exposure to cannabis. Forensic Sci Int 2016; 269: 97-112.

Draz EI, Oreby MM, Elsheikh EA, Khedr LA, Atlam SA. Marijuana use in acute coronary syndromes. Am J Drug Alcohol Abuse 2016; online early: doi: 10.1080/00952990.2016.1240800:

Lawn W, Freeman TP, Pope RA, Joye A, Harvey L, Hindocha C, Mokrysz C, Moss A, Wall MB, Bloomfield MA, Das RK, Morgan CJ, Nutt DJ, Curran HV.

Acute and chronic effects of cannabinoids on effort-related decision-making and reward learning: an evaluation of the cannabis 'amotivational' hypotheses. Psychopharmacology 2016; 233: 3537-52.

Walsh Z, Gonzalez R, Crosby K, Thiessen S, Carroll C, Bonn-Miller MO. Medical cannabis and mental health: a guided systematic review. Clinical Psychology Review 2016; 51: 15-29.

Wolf CE, Poklis JL, Poklis A. Stability of tetrahydrocannabinol and cannabidiol in prepared quality control medible brownies. J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw114:

Cocaine

Williamson J, Bonello M, Simpson M, Jacob A. Spinal cord infarction after cocaine use. Pract Neurol 2016; online early: doi: 10.1136/practneurol-2016-001518:

Colchicine

Lloyd G. Colchicine in overdose. Br J Gen Pract 2016; 66: 605.

Digoxin

Haga C, Opdal MS, Tuv SS, Zahl PH, Stenberg-Nilsen H. Legemiddelsikkerhet ved bytte av digitalispreparat i Norge. [Drug safety associated with the change of digitalis drug in Norway]. In Norweigan with English abstract. Tidsskr Nor Laegeforen 2016; 136: 1714-8.

Dimethyl fumarate

Jungst C, Kim Y-J, Lammert F. Severe drug-induced liver injury related to therapy with dimethyl fumarate. Hepatology 2016; 64: 1367-9.

Glucagon

Legler A, Kim RK, Chawla N. Glucagon-induced hypertensive emergency: a case report. J Clin Anesth 2016; 35: 493-6.

Herbal medicines, ethnic remedies and dietary supplements

Brown AC. An overview of herb and dietary supplement efficacy, safety and government regulations in the United States with suggested improvements. Part 1 of 5 series. Food Chem Toxicol 2016; online early: doi: 10.1016/j.fct.2016.11.001:

Chambial S, Bhardwaj P, Mahdi AA, Sharma P. Lead poisoning due to herbal medications. Indian J Clin Biochem 2016; online early: doi: 10.1007/s12291-016-0617-2:

de Boer YS, Sherker AH. Herbal and dietary supplement-induced liver injury. Clin Liver Dis 2017; 21: 135-49.

de Capitani EM. Traditional medicine preparations and health risks: time to revisit their regulatory status. Clin Toxicol 2016; online early: doi: 10.1080/15563650.2016.1260138:

Liew Z, Lee K.

Severe hypokalemia—a rare cause of rhabdomyolysis with acute kidney injury. *Nephrology (Carlton)* 2016; 21: 264.

Mo T, Sun S, Wang Y, Luo D, Peng B, Xia Y.

Mercury poisoning caused by Chinese folk prescription (CFP): a case report and analysis of both CFP and quackery. *Medicine (Baltimore)* 2016; 95: e5162.

Mossoba ME, Flynn TJ, Vohra S, Wiesenfeld P, Sprando RL. Evaluation of "dream herb," *Calea zacatechichi*, for nephrotoxicity using human kidney proximal tubule cells. *J Toxicol* 2016; 2016: 9794570.

Singhapricha T, Pomerleau AC.

A case of strychnine poisoning from a southeast Asian herbal remedy.

J Emerg Med 2016; online early: doi: 10.1016/j.jemermed.2016.10.007:

Teschke R, Andrade RJ.

Drug, herb, and dietary supplement hepatotoxicity. *Int J Mol Sci* 2016; 17: 1488.

Heroin (diacetylmorphine)

Willman MW, Liss DB, Schwarz ES, Mullins ME.

Do heroin overdose patients require observation after receiving naloxone?

Clin Toxicol 2016; online early: doi: 10.1080/15563650.2016.1253846:

Sitagliptin

Sehra S, Jaggi S, Sehra D, Aggarwal R, Saraswat V, Juneja D. Management of sitagliptin and metformin combination toxic overdose.

J Assoc Physicians India 2016; 64: 80-1.

Sulfonylurea

Kumar S, Choudhary A, Ali M, Gupta V, Muralidharan J, Singhi SC.

Sulfonylurea poisoning in a healthy toddler.

Indian J Pediatr 2016; online early: doi: 10.1007/s12098-016-2249-1:

Ibogaine

Glue P, Cape G, Tunnicliff D, Lockhart M, Lam F, Hung N, Hung CT, Harland S, Devane J, Crockett RS, Howes J, Darpo B, Zhou M, Weis H, Friedhoff L.

Ascending single-dose, double-blind, placebo-controlled safety study of noribogaine in opioid-dependent patients.

Clin Pharmacol Drug Dev 2016; 5: 460-8.

Insulin

Robinson SD, Safavi-Hemami H.

Insulin as a weapon.

Toxicol 2016; 123: 56-61.

Ketamine

Zhu W, Ding Z, Zhang Y, Shi J, Hashimoto K, Lu L.

Risks associated with misuse of ketamine as a rapid-acting antidepressant.

Neurosci Bull 2016; online early: doi: 10.1007/s12264-016-0081-2:

Kratom

Singh D, Narayanan S, Vicknasingam B.

Traditional and non-traditional uses of Mitragynine (Kratom): a survey of the literature.

Brain Res Bull 2016; 126 Part 1: 41-6.

Levetiracetam

Bouchier B, Demarquay G, Guérin C, André-Obadia N, Gobert F.

Marked EEG worsening following levetiracetam overdose: how a pharmacological issue can confound coma prognosis.

Clin Neurol Neurosurg 2016; 152: 1-4.

le Noble JLML, Foudraïne NA, Kornips FHM, van Dam DGHA, Neef C, Janssen PKC.

Extracorporeal clearance of levetiracetam during continuous venovenous hemofiltration in a critically ill patient and new dosing recommendation.

J Clin Pharmacol 2016; online early:

doi: 10.1002/jcph.844:

Loperamide

Eggleston W, Marraffa JM, Stork CM, Mercurio-Zappala M, Su MK, Wightman RS, Cummings KR, Schier JG.

Notes from the field: Cardiac dysrhythmias after loperamide abuse - New York, 2008-2016.

MMWR Morb Mortal Wkly Rep 2016; 65: 1276-7.

Vakkalanka JP, Charlton NP, Holstege CP.

Epidemiologic trends in loperamide abuse and misuse.

Ann Emerg Med 2016; online early:

doi: 10.1016/j.annemergmed.2016.08.444:

Mephedrone

Olesti E, Pujadas M, Papaseit E, Pérez-Mañá C, Pozo ÓJ, Farré M, de la Torre R.

GC-MS quantification method for mephedrone in plasma and urine: application to human pharmacokinetics.

J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw120:

Methylphenidate

Diav-Citrin O, Shechtman S, Arnon J, Wajnberg R, Borisch C, Beck E, Richardson JL, Bozzo P, Nulman I, Ornoy A.

Methylphenidate in pregnancy: a multicenter, prospective, comparative, observational study.

J Clin Psychiatry 2016; 77: 1176-81.

Minoxidil

Sinha A, Raheja H, Kupfer Y.

Myocardial infarction after accidental minoxidil poisoning.

Am J Ther 2016; online early:

doi: 10.1097/MJT.0000000000000536:

Mood stabilisers

Schoretsanitis G, Haen E, Gründer G, Stegmann B, Schruers KR, Hiemke C, Lammertz SE, Paulzen M.

Pharmacokinetic drug-drug interactions of mood stabilizers and risperidone in patients under combined treatment.

J Clin Psychopharmacol 2016; 36: 554-61.

Nerve block adjuvants

Knight JB, Schott NJ, Kentor ML, Williams BA.

Neurotoxicity of common peripheral nerve block adjuvants.

Curr Opin Anaesthesiol 2016; 28: 598-604.

Nicotine

Bharadwaj S, Mitchell RJ, Qureshi A, Niazi JH.

Toxicity evaluation of e-juice and its soluble aerosols generated by electronic cigarettes using recombinant bioluminescent bacteria responsive to specific cellular damages.

Biosens Bioelectron 2016; 90: 53-60.

El-Hellani A, Salman R, El-Hage R, Talih S, Malek N, Baalbaki R, Karaoghlianian N, Nakkash R, Shihadeh A, Saliba NA.

Nicotine and carbonyl emissions from popular electronic cigarette products: correlation to liquid composition and design characteristics.

Nicotine Tob Res 2016; online early:
doi: 10.1093/ntr/ntw280:

Lee H, Chung S, Noh J.

Maternal nicotine exposure during late gestation and lactation increases anxiety-like and impulsive decision-making behavior in adolescent offspring of rat.

Toxicol Res (Camb) 2016; 32: 275-80.

McConnell R, Barrington-Trimis JL, Wang K, Urman R, Hong H, Unger J, Samet J, Leventhal A, Berhane K.

Electronic-cigarette use and respiratory symptoms in adolescents.

Am J Respir Crit Care Med 2016; online early:
doi: 10.1164/rccm.201604-0804OC:

Norepinephrine

Snijder RA, Knape JT, Egberts TC, Timmerman AM.

Hypertensive crisis during norepinephrine syringe exchange. A A Case Rep 2016; online early:

doi: 10.1213/XAA.0000000000000458:

Novel psychoactive substances

Bade R, Bijlsma L, Sancho JV, Baz-Lomba JA, Castiglioni S, Castrignanò E, Causanilles A, Gracia-Lor E, Kasprzyk-Hordern B, Kinyua J, McCall A-K, van Nuijs AL, Ort C, Plósz BG, Ramin P, Rousis NI, Ryu Y, Thomas KV, de Voogt P, Zuccato E, Hernández F.

Liquid chromatography-tandem mass spectrometry determination of synthetic cathinones and phenethylamines in influent wastewater of eight European cities.

Chemosphere 2016; online early:
doi: 10.1016/j.chemosphere.2016.10.107:

Meacher M, Clegg N.

How changes to drug prohibition could be good for the UK—an essay by Molly Meacher and Nick Clegg.

Br Med J 2016; 355: i6006.

Designer benzodiazepines

Wohlfarth A, Vikingsson S, Roman M, Andersson M, Kugelberg FC, Green H, Kronstrand R.

Looking at flubromazolam metabolism from four different angles: metabolite profiling in human liver microsomes, human hepatocytes, mice and authentic human urine samples with liquid chromatography high-resolution mass spectrometry.

Forensic Sci Int 2016; online early:
doi: 10.1016/j.forsciint.2016.10.021:

Phenethylamines

Juurmaa J, Menke RAL, Vila P, Mürsepp A, Tomberg T, Ilves P, Nigul M, Johansen-Berg H, Donaghy M, Stagg CJ, Stepens A, Taba P.

Grey matter abnormalities in methcathinone abusers with a Parkinsonian syndrome.

Brain Behav 2016; 6: e00539.

Synthetic cannabinoids

Asaoka N, Kawai H, Nishitani N, Kinoshita H, Shibui N, Nagayasu K, Shirakawa H, Kaneko S.

A new designer drug 5F-ADB activates midbrain dopaminergic neurons but not serotonergic neurons.

J Toxicol Sci 2016; 41: 813-6.

Carlier J, Diao X, Wohlfarth A, Scheidweiler K, Huestis MA. In vitro metabolite profiling of ADB-FUBINACA, a new synthetic cannabinoid.

Curr Neuropharmacol 2016; online early: PMID:27829332:

Hess C, Krueger L, Unger M, Madea B.

Freeze-and-thaw stability and long-term-stability of 84 synthetic cannabinoids in serum.

Drug Test Anal 2016; online early:
doi: 10.1002/dta.2133:

Kak M, Mikhail F, Yano ST, Guan R, Lukas RV.

Buzz juice: neurological sequelae of synthetic cannabinoids. J Clin Neurosci 2016; online early:

doi: 10.1016/j.jocn.2016.10.046:

Le Boisselier R, Alexandre J, Lelong-Boulouard V, Debruyne D.

Focus on cannabinoids and synthetic cannabinoids.

Clin Pharmacol Ther 2016; online early:
doi: 10.1002/cpt.563:

Synthetic cathinones

Liu C, Jia W, Li T, Hua Z, Qian Z.

Identification and analytical characterization of nine synthetic cathinone derivatives *N*-ethylhexedrone, 4-Cl-pentedrone, 4-Cl- α -EAPP, propylone, *N*-ethylnorpropylone, 6-MeO-bk-MDMA, α -PiHP, 4-Cl- α -PHP, and 4-F- α -PHP.

Drug Test Anal 2016; online early: doi: 10.1002/dta.2136:

Synthetic opioids

McIntyre IM, Gary RD, Joseph S, Stabley R.

A fatality related to the synthetic opioid U-47700: postmortem concentration distribution.

J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw124:

NSAIDs

Diclofenac

Pfeiffer H, Herbst L, Schwarze B, Eckstein R, Weisbach V. Massive intoxication with rivaroxaban, phenprocoumon, and diclofenac: a case report.

Medicine (Baltimore) 2016; 95: e5343.

Opioids

Bogen DL, Whalen BL, Kair LR, Vining M, King BA.

Wide variation found in care of opioid-exposed newborns.

Acad Pediatr 2016; online early:
doi: 10.1016/j.acap.2016.10.003:

Burkes R, Pfister G, Guinn B, Cavallazzi R.

Opioid overdose leading to intensive care unit admission: epidemiology and outcomes.

J Crit Care 2016; online early:
doi: 10.1016/j.jccr.2016.10.024:

Chang Y, Compton P.

Opioid misuse/abuse and quality persistent pain management in older adults.

J Gerontol Nurs 2016; 42: 21-30.

George P, Vicknasingam B, Thurairajasingam S, Ramasamy P, Yusof HM, Yasin MABM, Shah ZUBS.

Methadone complications amongst opioid-dependent patients in Malaysia: a case series.

Drug Alcohol Rev 2016; online early:
doi: 10.1111/dar.12456:

Gibson KS, Stark MS, Kumar D, Bailit JL.

The relationship between gestational age and the severity of neonatal abstinence syndrome.

Addiction 2016; online early: doi: 10.1111/add.13703:

Glue P, Cape G, Tunnicliff D, Lockhart M, Lam F, Hung N, Hung CT, Harland S, Devane J, Crockett RS, Howes J, Darpo B, Zhou M, Weis H, Friedhoff L.

Ascending single-dose, double-blind, placebo-controlled safety study of noribogaine in opioid-dependent patients. Clin Pharmacol Drug Dev 2016; 5: 460-8.

Lankhorst MA.

Hypotestosterone and long-term opioid use.

J Pain Palliat Care Pharmacother 2016; online early: doi: 10.1080/15360288.2016.1231738:

Liebling EJ, Yedinak JL, Green TC, Hadland SE, Clark MA, Marshall BDL.

Access to substance use treatment among young adults who use prescription opioids non-medically.

Subst Abuse Treat Prev Policy 2016; 11: 38.

Roland CL, Lake J, Oderda GM.

Prevalence of prescription opioid misuse/abuse as determined by international classification of diseases codes: a systematic review.

J Pain Palliat Care Pharmacother 2016; online early: doi: 10.1080/15360288.2016.1231739:

Saldaña SN, Weaver N, Stanford B.

Pharmacist-led health-system approaches to reduce opioid overdose and death.

J Am Pharm Assoc (2003) 2016; online early: doi: 10.1016/j.japh.2016.09.005:

Schwarz DA, George MP, Bluth MH.

Toxicology in pain management.

Clin Lab Med 2016; 36: 673-84.

Strayer RJ, Motov SM, Nelson LS.

Something for pain: responsible opioid use in emergency medicine.

Am J Emerg Med 2016; online early: doi: 10.1016/j.ajem.2016.10.043:

Traynor K.

Experts weigh minimum naloxone dose as opioid crisis evolves.

Am J Health Syst Pharm 2016; 73: 1892-4.

Wagner KD, Bovet LJ, Haynes B, Joshua A, Davidson PJ.

Training law enforcement to respond to opioid overdose with naloxone: impact on knowledge, attitudes, and interactions with community members.

Drug Alcohol Depend 2016; 165: 22-8.

Carfentanil

Feasel MG, Wohlfarth A, Nilles JM, Pang S, Kristovich RL, Huestis MA.

Metabolism of carfentanil, an ultra-potent opioid, in human liver microsomes and human hepatocytes by high-resolution mass spectrometry.

AAPS J 2016; 18: 1489-99.

Fentanyl

Dillon D, O'Neill F.

Abuse of fentanyl analgesic patches.

Ulster Med J 2016; 85: 203.

Quintana P, Ventura M, Grifell M, Palma A, Galindo L,

Fornis I, Gil C, Carbón X, Caudevilla F, Farré M, Torrens M. The hidden web and the fentanyl problem: detection of ocfentanil as an adulterant in heroin.

Int J Drug Policy 2016; online early:

doi: 10.1016/j.drugpo.2016.10.006:

Methadone

Eizadi-Mood N, Naeini SAHM, Hedaiaty M, Sabzghabae AM, Moudi M.

Prevalence of pulmonary edema among the deceased cases with acute methadone poisoning: a report from Iran.

J Res Pharm Pract 2016; 5: 290-3.

George P, Vicknasingam B, Thurairajasingam S, Ramasamy P, Yusof HM, Yasin MABM, Shah ZUBS.

Methadone complications amongst opioid-dependent patients in Malaysia: a case series.

Drug Alcohol Rev 2016; online early:

doi: 10.1111/dar.12456:

Lyaker MR, Elefritz JL, Murphy CV.

Methadone analgesia in the critically ill.

J Crit Care 2016; 36: 296.

Manfredini D.

Methadone maintenance treatment may be associated with bruxism in male prisoners.

J Evid Based Dent Pract 2016; 16: 202-4.

Ruan X, Kaye AJ, Kaye AD.

Methadone analgesia in the critically ill.

J Crit Care 2016; 36: 295.

Oxycodone

Franklin AE, Lovell MR, Boyle F.

A case of opioid toxicity on conversion from extended-release oxycodone and naloxone to extended-release oxycodone in a patient with liver dysfunction.

J Pain Symptom Manage 2016; online early:

doi: 10.1016/j.jpainsymman.2016.10.354:

Tramadol

Kluger M, Penrose S, Bjorksten AR, Chalkiadis G.

Accuracy of dispersing tramadol capsules for oral administration in young children.

Anaesth Intensive Care 2016; 44: 742-4.

Miotto K, Cho AK, Khalil MA, Blanco K, Sasaki JD, Rawson R.

Trends in tramadol: pharmacology, metabolism, and misuse.

Anesth Analg 2016; online early:

doi: 10.1213/ANE.0000000000001683:

Paracetamol (acetaminophen)

Clark LL, Taubman SB.

Acetaminophen overdoses, active component, U.S. Armed Forces, 2006-2015.

MSMR 2016; 23: 16-9.

Gupte GL.

Management of paracetamol overdose.

Paediatr Child Health 2016; 26: 459-63.

Heard K, Anderson V, Dart RC, Kile D, Lavonas E, Green JL.

Serum acetaminophen protein adduct concentrations in pediatric emergency department patients.

J Pediatr Gastroenterol Nutr 2016; online early:

doi: 10.1097/MPG.0000000000001459:

Lee SKY, Quinonez RB, Chuang A, Munz SM, Dabiri D.

The case for improved interprofessional care: fatal analgesic overdose secondary to acute dental pain during pregnancy.
case Rep Dent 2016; 2016: 7467262.

Mohammed NEM, Messiha BAS, Abo-Saif AA.
Effect of amlodipine, lisinopril and allopurinol on acetaminophen-induced hepatotoxicity in rats.
Saudi Pharm J 2016; 24: 635-44.

Wang J-X, Zhang C, Fu L, Zhang D-G, Wang B-W, Zhang Z-H, Chen Y-H, Lu Y, Chen X, Xu D-X.
Protective effect of rosiglitazone against acetaminophen-induced acute liver injury is associated with down-regulation of hepatic NADPH oxidases.
Toxicol Lett 2016; 265: 38-46.

Psychotropic drugs

Hori S, Kinoshita K.
Clinical characteristics of patients who overdose on multiple psychotropic drugs in Tokyo.
J Toxicol Sci 2016; 41: 765-73.

Kyriakou C, Marchei E, Scaravelli G, García-Algar O, Supervía A, Graziano S.
Identification and quantification of psychoactive drugs in whole blood using dried blood spot (DBS) by ultra-performance liquid chromatography tandem mass spectrometry.
J Pharm Biomed Anal 2016; 128: 53-60.

Nosè M, Bighelli I, Castellazzi M, Martinotti G, Carrà G, Lucii C, Ostuzzi G, Sozzi F, Barbui C.
Prevalence and correlates of QTc prolongation in Italian psychiatric care: cross-sectional multicentre study.
Epidemiol Psychiatr Sci 2016; 25: 532-40.

Salicylates

Magierowski M, Magierowska K, Hubalewska-Mazgaj M, Adamski J, Bakalarz D, Sliwowski Z, Pajdo R, Kwiecien S, Brzozowski T.
Interaction between endogenous carbon monoxide and hydrogen sulfide in the mechanism of gastroprotection against acute aspirin-induced gastric damage.
Pharmacol Res 2016; 114: 235-50.

Sedatives

Nielsen ES, Rasmussen L, Poulsen MH, Thomsen PH, Nørgaard M, Laursen T.
Trends in off-label prescribing of sedatives, hypnotics and antidepressants among children and adolescents – a Danish, nationwide register-based study.
Basic Clin Pharmacol Toxicol 2016; online early: doi: 10.1111/bcpt.12706:

Suvorexant

Carson M, Kerrigan S.
Quantification of suvorexant in urine using gas chromatography/mass spectrometry.
J Chromatogr B Biomed Sci Appl 2016; online early: doi: 10.1016/j.jchromb.2016.10.042:

Xylazine

Andresen-Streichert H, Iwersen-Bergmann S, Mueller A, Anders S.
Attempted drug-facilitated sexual assault-xylazine intoxication in a child.
J Forensic Sci 2016; online early: doi: 10.1111/1556-4029.13270:

Sildenafil

Lubna NJ, Nakamura Y, Cao X, Wada T, Izumi-Nakaseko H, Ando K, Sugiyama A.
Cardiac safety profile of sildenafil: chronotropic, inotropic and coronary vasodilator effects in the canine isolated, blood-perfused heart preparations.
J Toxicol Sci 2016; 41: 739-44.

SSRIs and SNRIs

Wang RZ, Vashistha V, Kaur S, Houchens NW.
Serotonin syndrome: preventing, recognizing, and treating it.
Cleve Clin J Med 2016; 83: 810-7.

Escitalopram

Viard T, Destephen C, Kare M, Labadie M.
Intoxication à l'escitalopram et à la venlafaxine compliquée d'hypoglycémies récidivantes. [Recurrent hypoglycemia due to escitalopram and venlafaxin poisoning]. In French with English abstract.
Toxicol Anal Clin 2016; 28: 224-7.

Fluoxetine

Pope S, Zarea SG.
Serum fluoxetine and norfluoxetine levels support the safety of fluoxetine in overdose.
Ann Gen Psychiatry 2016; 15: 30.

Venlafaxine

Castanares-Zapatero D, Gillard N, Capron A, Haufroid V, Hantson P.
Reversible cardiac dysfunction after venlafaxine overdose and possible influence of genotype and metabolism.
Forensic Sci Int 2016; 266: e48-e51.

Viard T, Destephen C, Kare M, Labadie M.
Intoxication à l'escitalopram et à la venlafaxine compliquée d'hypoglycémies récidivantes. [Recurrent hypoglycemia due to escitalopram and venlafaxin poisoning]. In French with English abstract.
Toxicol Anal Clin 2016; 28: 224-7.

Substance abuse

Arensman E, Bennardi M, Larkin C, Wall A, McAuliffe C, McCarthy J, Williamson E, Perry IJ.
Suicide among young people and adults in Ireland: method characteristics, toxicological analysis and substance abuse histories compared.
PLoS ONE 2016; 11: e0166881.

Bean P, Brown G, Hallinan P, Becerra S, Lewis D.
Improved recovery of repeat intoxicated drivers using fingernails and blood spots to monitor alcohol and other substance abuse.
Traffic Inj Prev 2017; 18: 9-18.

Bluth MH, Pincus MR.
Narcotic analgesics and common drugs of abuse: clinical correlations and laboratory assessment.
Clin Lab Med 2016; 36: 603-34.

Chang Y, Compton P.
Opioid misuse/abuse and quality persistent pain management in older adults.
J Gerontol Nurs 2016; 42: 21-30.

Dillon D, O'Neill F.
Abuse of fentanyl analgesic patches.
Ulster Med J 2016; 85: 203.

Dombrowski K, Crawford D, Khan B, Tyler K.
Current rural drug use in the US midwest.
J Drug Abuse 2016; 2: 22.

Eggleston W, Marraffa JM, Stork CM, Mercurio-Zappala M, Su MK, Wightman RS, Cummings KR, Schier JG.
Notes from the field: Cardiac dysrhythmias after loperamide abuse - New York, 2008-2016.
MMWR Morb Mortal Wkly Rep 2016; 65: 1276-7.

Giorgetti R, Tagliabracchi A, Schifano F, Zaami S, Marinelli E, Busardò FP.
When "chems" meet sex: a rising phenomenon called "ChemSex".
Curr Neuropharmacol 2016; online early: PMID:27855594:

Graziano S, Orsolini L, Rotolo MC, Tittarellie R, Schifano F, Pichini S.
Herbal highs: review on psychoactive effects and neuropharmacology.
Curr Neuropharmacol 2016; online early:
doi: 10.2174/1570159X14666161031144427:

Liebling EJ, Yedinak JL, Green TC, Hadland SE, Clark MA, Marshall BDL.
Access to substance use treatment among young adults who use prescription opioids non-medically.
Subst Abuse Treat Prev Policy 2016; 11: 38.

Meacher M, Clegg N.
How changes to drug prohibition could be good for the UK—an essay by Molly Meacher and Nick Clegg.
Br Med J 2016; 355: i6006.

Miotto K, Cho AK, Khalil MA, Blanco K, Sasaki JD, Rawson R.
Trends in tramadol: pharmacology, metabolism, and misuse.
Anesth Analg 2016; online early:
doi: 10.1213/ANE.0000000000001683:

Orfanidis A, Mastrogianni O, Koukou A, Psarros G, Gika H, Theodoridis G, Raikos N.
A GC-MS method for the detection and quantitation of ten major drugs of abuse in human hair samples.
J Chromatogr B Biomed Sci Appl 2016; online early: doi: 10.1016/j.jchromb.2016.11.011:

Papp LM, Kouros CD.
Predicting young adults' risk for engaging in prescription drug misuse in daily life from individual, partner, and relationship factors.
Subst Abuse 2016; online early:
doi: 10.1080/08897077.2016.1263590:

Pichini S, Busardò FP, Gregori A, Berretta P, Gentili S, Pacifici R.
Purity and adulterant analysis of some recent drug seizures in Italy.
Drug Test Anal 2016; online early:
doi: 10.1002/dta.2134:

Pilgrim JL, Dorward R, Drummer OH.
Drug-caused deaths in Australian medical practitioners and health-care professionals.
Addiction 2016; online early: doi: 10.1111/add.13619:

Quintana P, Ventura M, Grifell M, Palma A, Galindo L, Fornis I, Gil C, Carbón X, Caudevilla F, Farré M, Torrens M.
The hidden web and the fentanyl problem: detection of ocfentanil as an adulterant in heroin.
Int J Drug Policy 2016; online early:
doi: 10.1016/j.drugpo.2016.10.006:

Schwarz DA, George MP, Bluth MH.
Toxicology in addiction medicine.
Clin Lab Med 2016; 36: 685-92.

Vakkalanka JP, Charlton NP, Holstege CP.
Epidemiologic trends in loperamide abuse and misuse.
Ann Emerg Med 2016; online early:
doi: 10.1016/j.annemergmed.2016.08.444:

Tricyclic antidepressants

Santos MG, Tavares IMC, Barbosa AF, Bettini J, Figueiredo EC.
Analysis of tricyclic antidepressants in human plasma using online-restricted access molecularly imprinted solid phase extraction followed by direct mass spectrometry identification/quantification.
Talanta 2017; 163: 8-16.

Amitriptyline

Jansen T, Petersen H, Malskær CM, Gabel-Jensen C, Dalhoff K, Eriksen T, Belhage B, Hoegberg LCG.
Activated charcoal hemoperfusion in the treatment of experimental amitriptyline poisoning in pigs - the effect on amitriptyline plasma concentration and hemodynamic parameters.
Basic Clin Pharmacol Toxicol 2016; online early: doi: 10.1111/bcpt.12704:

Varenicline

Richardson JL, Stephens S, Yates LM, Diav-Citrin O, Arnon J, Beghin D, Kayser A, Kennedy D, Cupitt D, te Winkel B, Peltonen M, Kaplan YC, Thomas SHL.
Pregnancy outcomes after maternal varenicline use; analysis of surveillance data collected by the European Network of Teratology Information Services.
Reprod Toxicol 2017; 67: 26-34.

Vitamins

Calciferol

Vierge M, Laborie S, Bertholet-Thomas A, Carlier M-C, Picaud J-C, Claris O, Bacchetta J.
Neonatal intoxication to vitamin D in premature babies: a series of 16 cases.
Pediatr Nephrol 2016; 31: 1917.

Vitamin A

Rousselle C.
Opinion of the Scientific Committee on consumer safety (SCCS) - Final version of the Opinion on Vitamin A (retinol, retinyl acetate and retinyl palmitate) in cosmetic products.
Regul Toxicol Pharmacol 2016; online early:
doi: 10.1016/j.yrtph.2016.11.017:

CHEMICAL INCIDENTS AND POLLUTION

Air pollution

Secrest MH, Schauer JJ, Carter EM, Lai AM, Wang Y, Shan M, Yang X, Zhang Y, Baumgartner J.
The oxidative potential of PM_{2.5} exposures from indoor and outdoor sources in rural China.
Sci Total Environ 2016; 571: 1477-89.

Weichenthal SA, Lavigne E, Evans GJ, Godri Pollitt KJ, Burnett RT.
Fine particulate matter and emergency room visits for respiratory illness: effect modification by oxidative potential.
Am J Respir Crit Care Med 2016; 194: 577-86.

Wu L, Jin L, Shi T, Zhang B, Zhou Y, Zhou T, Bao W, Xiang H, Zuo Y, Li G, Wang C, Duan Y, Peng Z, Huang X, Zhang H, Xu T, Li Y, Pan X, Xia Y, Gong X, Chen W, Liu Y. Association between ambient particulate matter exposure and semen quality in Wuhan, China. *Environ Int* 2016; online early: doi: 10.1016/j.envint.2016.11.013:

Chemical incidents

Clark KA, Karmaus WJJ, Mohr LC, Cai B, Balte P, Gibson JJ, Ownby D, Lawson AB, Vena JE, Svendsen ER. Lung function before and after a large chlorine gas release in Graniteville, South Carolina. *Ann Am Thorac Soc* 2016; 13: 356-63.

Ford H, Trent S, Wickizer S. Pharmacy services after a tank car derailment and toxic chemical release in Blount County, Tennessee. *J Am Pharm Assoc (2003)* 2016; online early: doi: 10.1016/j.japh.2016.08.007:

Pollution and hazardous waste Water pollution

Akoto O, Azuure AA, Adotey KD. Pesticide residues in water, sediment and fish from Tono Reservoir and their health risk implications. *Springerplus* 2016; 5: 1849.

Brack W, Dulio V, Ågerstrand M, Allan I, Altenburger R, Brinkmann M, Bunke D, Burgess RM, Cousins I, Escher BI, Hernández FJ, Hewitt LM, Hilscherova K, Hollender J, Hollert H, Kase R, Klauer B, Lindim C, López Herráez D, Miège C, Munthe J, O'Toole S, Posthuma L, Rüdél H, Schäfer RB, Sengl M, Smedes F, Van De Meent D, Van Den Brink PJ, van Gils J. Towards the review of the European Union Water Framework management of chemical contamination in European surface water resources. *Sci Total Environ* 2016; 576: 720-37.

Corlin L, Rock T, Cordova J, Woodin M, Durant JL, Gute DM, Ingram J, Brugge D. Health effects and environmental justice concerns of exposure to uranium in drinking water. *Curr Environ Health Rep* 2016; 3: 434-42.

Le Bot B, Lucas J-P, Lacroix F, Glorennec P. Exposure of children to metals via tap water ingestion at home: contamination and exposure data from a nationwide survey in France. *Environ Int* 2016; 94: 500-7.

Tiselius P, Magnusson K. Toxicity of treated bilge water: the need for revised regulatory control. *Mar Pollut Bull* 2016; online early: doi: 10.1016/j.marpolbul.2016.11.010:

CHEMICALS

General

Anon. Carcinogens report lists seven new substances. *Cancer Discov* 2016; online early: doi: 10.1158/2159-8290.CD-NB2016-150:

da Silva J. DNA damage induced by occupational and environmental exposure to miscellaneous chemicals. *Mutat Res Rev Mutat Res* 2016; 770: 170-82.

Gissi A, Louekari K, Hoffstadt L, Bornatowicz N, Aparicio AM. Alternative acute oral toxicity assessment under REACH based on sub-acute toxicity values. *ALTEX* 2016; online early: doi: 10.14573/altex.1609121:

Ingre-Khans E, Ågerstrand M, Beronius A, Rudén C. Transparency of chemical risk assessment data under REACH. *Environ Sci Process Impacts* 2016; online early: doi: 10.1039/c6em00389c:

Myridakis A, Chalkiadaki G, Fotou M, Kogevinas M, Chatzi L, Stephanou EG. Exposure of preschool-age Greek children (RHEA cohort) to bisphenol A, parabens, phthalates, and organophosphates. *Environ Sci Technol* 2016; 50: 932-41.

Nascimento SN, Göethel G, Baierle M, Barth A, Brucker N, Charão MF, Moro AM, Gauer B, Sauer E, Durgante J, Arbo MD, Thiesen FV, Saint' Pierre TD, Gioda A, Moresco R, Garcia SC. Environmental exposure and effects on health of children from a tobacco-producing region. *Environ Sci Pollut Res* 2016; online early: doi: 10.1007/s11356-016-8071-5:

Quadalti C, Galli C, Lazzari G. Development of an *in vitro* test battery for the screening of the receptor-mediated mechanism and the spindle-poison mode of action of estrogenic compounds. *Environ Toxicol Pharmacol* 2016; 48: 245-52.

Wang A, Padula A, Sirota M, Woodruff TJ. Environmental influences on reproductive health: the importance of chemical exposures. *Fertil Steril* 2016; 106: 905-29.

2,4-dichlorophenol

Fu J, Zhang X, Chen P, Zhang Y. Endoplasmic reticulum stress is involved in 2,4-dichlorophenol-induced hepatotoxicity. *J Toxicol Sci* 2016; 41: 745-56.

Alcohol (ethanol)

Bean P, Brown G, Hallinan P, Becerra S, Lewis D. Improved recovery of repeat intoxicated drivers using fingernails and blood spots to monitor alcohol and other substance abuse. *Traffic Inj Prev* 2017; 18: 9-18.

Crunelle CL, Neels H, Maudens K, De Doncker M, Cappelle D, Matthys F, Dom G, Fransen E, Michielsens P, De Keukeleire S, Covaci A, Yegles M. Influence of body mass index on hair ethyl glucuronide concentrations. *Alcohol Alcohol* 2016; online early: doi: 10.1093/alcalc/agw079:

Grüne B, Piontek D, Pogarell O, Grübl A, Groß C, Reis O, Zimmermann US, Kraus L. Acute alcohol intoxication among adolescents—the role of the context of drinking. *Eur J Pediatr* 2016; online early: doi: 10.1007/s00431-016-2797-4:

Hegstad S, Kristoffersen L, Liane VH, Spigset O. EtG and EtS in autopsy blood samples with and without putrefaction using UPLC-MS-MS. *J Anal Toxicol* 2016; online early: doi: 10.1093/jat/bkw123:

Maximus S, Figueroa C, Pham J, Kuncir E, Barrios C.

DUI histories in intoxicated injured bicyclists.
J Trauma Acute Care Surg 2016; 81: 638-43.

Anionic methacrylate copolymer

Eisele J, Haynes G, Kreuzer K, Hall C.
 Toxicological assessment of anionic methacrylate copolymer:
 I. characterization, bioavailability and genotoxicity.
Regul Toxicol Pharmacol 2016; 82: 39-47.

Asbestos

Abelmann A, Glynn ME, Pierce JS, Scott PK, Paustenbach DJ.
 Authors' response to Finkelstein's letter to the editor
 regarding our recent review of ambient airborne asbestos
 concentrations (Abelmann et al., 2015).
Inhal Toxicol 2016; 28: 581-2.

Dodge DG, Beck BD.
 Historical state of knowledge of the health risks of
 asbestos posed to seamen on merchant ships.
Inhal Toxicol 2016; online early:
 doi: 10.1080/08958378.2016.1244228:

Barium chloride

Tao H, Man Y, Shi X, Zhu J, Pan H, Qin Q, Liu S.
 Inconceivable hypokalemia: a case report of acute severe
 barium chloride poisoning.
Case Rep Med 2016; 2016: 2743134.

Bentonite

Maxim LD, Niebo R, McConnell EE.
 Bentonite toxicology and epidemiology - a review.
Inhal Toxicol 2016; 28: 591-617.

Bisphenol A

Pinney SE, Mesaros CA, Snyder NW, Busch CM, Xiao R,
 Aijaz S, Ijaz N, Blair IA, Manson JM.
 Second trimester amniotic fluid bisphenol A concentration
 is associated with decreased birth weight in term infants.
Reprod Toxicol 2016; 67: 1-9.

Reposi A, Farabegoli F, Gazzotti T, Zironi E, Pagliuca G.
 Bisphenol A in edible part of seafood.
Ital J Food Saf 2016; 5: 5666.

Tzatzarakis MN, Karzi V, Vakonaki E, Goumenou M,
 Kavvalakis M, Stivaktakis P, Tsitsimpikou C, Tsakiris I,
 Rizos A, Tsatsakis AM.
 Bisphenol A in soft drinks and canned foods and data
 evaluation.
Food Addit Contam Part B Surveill 2016; online early: doi:
 10.1080/19393210.2016.1266522:

Bongkreikic acid

Falconer TM, Kern SE, Brzezinski JL, Turner JA, Boyd BL,
 Litzau JJ.
 Identification of the potent toxin bongkreikic acid in a
 traditional African beverage linked to a fatal outbreak.
Forensic Sci Int 2016; online early:
 doi: 10.1016/j.forsciint.2016.10.015:

Carbon monoxide

Dirlik M, Bostancioglu B.
 Deaths due to carbon monoxide poisoning in Aydin,
 western Turkey.
Death Stud 2016; online early:
 doi: 10.1080/07481187.2016.1259693:

Fujiwara S, Yoshioka Y, Matsuda T, Nishimoto H, Ogawa
 A, Ogasawara K, Beppu T.

Relation between brain temperature and white matter
 damage in subacute carbon monoxide poisoning.
Sci Rep 2016; 6: 36523.

Kim DM, Lee IH, Park JY, Hwang S-B, Yoo DS, Song CJ.
 Acute carbon monoxide poisoning: MR imaging findings
 with clinical correlation.
Diagn Interv Imaging 2016; online early:
 doi: 10.1016/j.diii.2016.10.004:

Kitamoto T, Tsuda M, Kato M, Saito F, Kamijo Y, Kinoshita T.
 Risk factors for the delayed onset of neuropsychologic
 sequelae following carbon monoxide poisoning.
Acute Med Surg 2016; 3: 315-9.

Chlorine

Clark KA, Karmaus WJJ, Mohr LC, Cai B, Balte P, Gibson
 JJ, Ownby D, Lawson AB, Vena JE, Svendsen ER.
 Lung function before and after a large chlorine gas release
 in Graniteville, South Carolina.
Ann Am Thorac Soc 2016; 13: 356-63.

Chlormequat

Huang D, Wu S, Pan Y, Meng Q, Chu H, Jiang J, Shang L,
 Hao W.
 The effects of chlormequat chloride on the development of
 pubertal male rats.
Environ Toxicol Pharmacol 2016; 47: 92-9.

Chloroform

Richeval C, Allorge D, Lopez V, Boyer B, Gaulier J-M.
 Unusual case of drug-facilitated sexual assault using
 chloroform.
J Anal Toxicol 2016; online early: doi: 10.1093/jat/bkw125:

Contrast media

Semelka RC, Commander CW, Jay M, Burke LMB, Ramalho M.
 Presumed gadolinium toxicity in subjects with normal renal
 function: a report of 4 cases.
Invest Radiol 2016; 51: 661-5.

Cosmetics

Scientific Committee on Consumer Safety (SCCS),
 Rousselle C.
 Opinion of the Scientific Committee on Consumer Safety
 (SCCS) – Final version of the opinion on decamethyl-
 cyclopentasiloxane (cyclopentasiloxane, D5) in cosmetic
 products.
Regul Toxicol Pharmacol 2016; online early: doi:
 10.1016/j.yrtph.2016.11.016:

Iwegbue CM, Emakunu OS, Nwajei GE, Bassey FI,
 Martincigh BS.
 Evaluation of human exposure to metals from some
 commonly used bathing soaps and shower gels in Nigeria.
Regul Toxicol Pharmacol 2017; 83: 38-45.

Lilienblum W.
 Opinion of the Scientific Committee on Consumer Safety
 (SCCS) – Final version of the opinion on phenoxyethanol
 in cosmetic products.
Regul Toxicol Pharmacol 2016; 82: 156.

Rousselle C.
 Opinion of the Scientific Committee on consumer safety
 (SCCS) - Final version of the Opinion on Vitamin A (retinol,
 retinyl acetate and retinyl palmitate) in cosmetic products.
Regul Toxicol Pharmacol 2016; online early: doi:
 10.1016/j.yrtph.2016.11.017:

Yoshikawa M, Sumikawa Y, Hida T, Kamiya T, Kase K, Ishii-Osai Y, Kato J, Kan Y, Kamiya S, Sato Y, Yamashita T. Clinical and epidemiological analysis in 149 cases of rhododendrol-induced leukoderma. *J Dermatol* 2016; online early: doi: 10.1111/1346-8138.13694:

Decamethylcyclopentasiloxane

Scientific Committee on Consumer Safety (SCCS), Rousselle C. Opinion of the Scientific Committee on Consumer Safety (SCCS) – Final version of the opinion on decamethylcyclopentasiloxane (cyclopentasiloxane, D5) in cosmetic products. *Regul Toxicol Pharmacol* 2016; online early: doi: 10.1016/j.yrtph.2016.11.016:

Detergents

Day R, Eddleston M, Thomas SHL, Thompson JP, Vale JA. Exposures to traditional automatic dishwashing tablets and a comparison with exposures to soluble film tablets reported to the United Kingdom National Poisons Information Service 2008–2015. *Clin Toxicol* 2016; online early: doi: 10.1080/15563650.2016.1264588:

Diacetyl

Cichocki JA, Morris JB. Inhalation dosimetry modeling provides insights into regional respiratory tract toxicity of inhaled diacetyl. *Toxicology* 2016; online early: doi: 10.1016/j.tox.2016.11.007:

Dichloromethane

Pacheco C, Magalhaes R, Fonseca M, Silveira P, Brandao I. Accidental intoxication by dichloromethane at work place: clinical case and literature review. *J Acute Med* 2016; 6: 43-5.

Disinfectants

Huh J-W, Hong S-B, Do K-H, Koo HJ, Jang SJ, Lee M-S, Paek D, Park D-U, Lim C-M, Koh Y. Inhalation lung injury associated with humidifier disinfectants in adults. *J Korean Med Sci* 2016; 31: 1857-62.

Kim H-R, Hwang G-W, Naganuma A, Chung K-H. Adverse health effects of humidifier disinfectants in Korea: lung toxicity of polyhexamethylene guanidine phosphate. *J Toxicol Sci* 2016; 41: 711-7.

Dust

Yoshida S, Ichinose T, Arashidani K, He M, Takano H, Shibamoto T. Effects of fetal exposure to Asian sand dust on development and reproduction in male offspring. *Int J Environ Res Public Health* 2016; 13: 1173.

E-cigarettes and e-liquids

Bharadwaj S, Mitchell RJ, Qureshi A, Niazi JH. Toxicity evaluation of e-juice and its soluble aerosols generated by electronic cigarettes using recombinant bioluminescent bacteria responsive to specific cellular damages. *Biosens Bioelectron* 2016; 90: 53-60.

El-Hellani A, Salman R, El-Hage R, Talih S, Malek N, Baalbaki R, Karaoghlianian N, Nakkash R, Shihadeh A, Saliba NA.

Nicotine and carbonyl emissions from popular electronic cigarette products: correlation to liquid composition and design characteristics. *Nicotine Tob Res* 2016; online early: doi: 10.1093/ntr/ntw280:

Hess CA, Olmedo P, Navas-Acien A, Goessler W, Cohen JE, Rule AM. E-cigarettes as a source of toxic and potentially carcinogenic metals. *Environ Res* 2016; 152: 221-5.

McConnell R, Barrington-Trimis JL, Wang K, Urman R, Hong H, Unger J, Samet J, Leventhal A, Berhane K. Electronic-cigarette use and respiratory symptoms in adolescents. *Am J Respir Crit Care Med* 2016; online early: doi: 10.1164/rccm.201604-0804OC:

Soussy S, El-Hellani A, Baalbaki R, Salman R, Shihadeh A, Saliba NA. Detection of 5-hydroxymethylfurfural and furfural in the aerosol of electronic cigarettes. *Tob Control* 2016; online early: doi: 10.1136/tobaccocontrol-2016-053220:

Zhao J, Pyrgiotakis G, Demokritou P. Development and characterization of electronic-cigarette exposure generation system (Ecig-EGS) for the physico-chemical and toxicological assessment of electronic cigarette emissions. *Inhal Toxicol* 2016; online early: doi: 10.1080/08958378.2016.1246628:

Ethylene glycol

Singh R, Arain E, Buth A, Kado J, Soubani A, Imran N. Ethylene glycol poisoning: an unusual cause of altered mental status and the lessons learned from management of the disease in the acute setting. *Case Rep Crit Care* 2016; 2016: 9157393.

Flame retardants

Allgood JM, Jimah T, McClaskey CM, La Guardia MJ, Hammel SC, Zeineddine MM, Tang IW, Runnerstrom MG, Ogunseit OA. Potential human exposure to halogenated flame-retardants in elevated surface dust and floor dust in an academic environment. *Environ Res* 2017; 153: 55-62.

Szabo DT, Pathmasiri W, Sumner S, Birnbaum LS. Serum metabolomic profiles in neonatal mice following oral brominated flame retardant exposures to hexabromocyclododecane (HBCD) alpha, gamma, and commercial mixture. *Environ Health Perspect* 2016; online early: doi: 10.1289/EHP242, 02 Dec 16:

Zhang X, Zou W, Mu L, Chen Y, Ren C, Hu X, Zhou Q. Rice ingestion is a major pathway for human exposure to organophosphate flame retardants (OPFRs) in China. *J Hazard Mater* 2016; 318: 686-93.

Fluoride

Panneerselvam L, Raghunath A, Perumal E. Acute fluoride poisoning alters myocardial cytoskeletal and AMPK signaling proteins in rats. *Int J Cardiol* 2016; online early: doi: 10.1016/j.ijcard.2016.11.221:

Food colourings

Gajda-Wyrebek J, Kuzma K, Switka A, Jarecka J, Beresinska M, Postupolski J.

Exposure of Polish children to Southampton food colours. *Food Addit Contam Part A Chem Anal Control Expo Risk Assess* 2016; online early: doi: 10.1080/19440049.2016.1254819:

Formaldehyde

Cheng J, Zhang L, Tang Y, Li Z.

The toxicity of continuous long-term low-dose formaldehyde inhalation in mice.

Immunopharmacol Immunotoxicol 2016; 38: 495-501.

Fragrance chemicals

Api AM, Belsito D, Bhatia S, Bruze M, Calow P, Dagli ML, Dekant W, Fryer AD, Kromidas L, La Cava S, Lapczynski A, Liebler DC, O'Brien D, Parakhia R, Penning TM, Politano VT, Ritacco G, Salvito D, Schultz TW, Shen J, Sipes IG, Wall B, Wilcox DK.

RIFM fragrance ingredient safety assessment, isobornyl isovalerate, CAS registry number 7779-73-9.

Food Chem Toxicol 2016; online early:

doi: 10.1016/j.fct.2016.10.029:

Api AM, Belsito D, Botelho D, Bruze M, Burton GA, Buschmann J, Calow P, Dagli ML, Dekant W, Fryer AD, Cava SL, Lapczynski A, Liebler DC, O'Brien D, Parakhia R, Patel A, Penning TM, Ritacco G, Romine J, Salvito D, Schultz TW, Sipes IG, Wahler J.

RIFM fragrance ingredient safety assessment, beta-guaiene, CAS registry number 88-84-6.

Food Chem Toxicol 2016; online early:

doi: 10.1016/j.fct.2016.11.017:

Furfural

Soussy S, El-Hellani A, Baalbaki R, Salman R, Shihadeh A, Saliba NA.

Detection of 5-hydroxymethylfurfural and furfural in the aerosol of electronic cigarettes.

Tob Control 2016; online early:

doi: 10.1136/tobaccocontrol-2016-053220:

Household products

Garcia-Hidalgo E, von Goetz N, Siegrist M, Hungerbühler K. Use-patterns of personal care and household cleaning products in Switzerland.

Food Chem Toxicol 2017; 99: 24-39.

Maharaj VR, Paul JF, Finkelstein Y.

Sweet and minty: a 2 year old with a fatal household ingestion.

Pediatr Emerg Care 2016; 32: 892-6.

Hydrocarbons

Vazquez M, Paul AZ, Tay ET, Tsung JW.

Evaluation and monitoring of a child with hydrocarbon pneumonitis using point-of-care lung ultrasound in the pediatric emergency department.

Pediatr Emerg Care 2016; 32: 642-4.

Hydrogen sulphide

Barbera N, Montana A, Indorato F, Arbouche N, Romano G.

Evaluation of the role of toxicological data in discriminating between H₂S femoral blood concentration secondary to lethal poisoning and endogenous H₂S putrefactive production.

J Forensic Sci 2016; online early: doi: 10.1111/1556-4029.13291:

Wnek S, Berg M, Skelton S, Lemond L, Goad P.

Hazards after the storm: floodwater drainage pump stations and exposure to hydrogen sulfide.

J Occup Environ Hyg 2016; online early:

doi: 10.1080/15459624.2016.1252842:

Methanol

Elkhamary SM, Fahmy DM, Galvez-Ruiz A, Asghar N, Bosley TM.

Spectrum of MRI findings in 58 patients with methanol intoxication: long-term visual and neurological correlation.

Egypt J Radiol Nucl Med 2016; 47: 1049-55.

Takehige H, Ueno Y, Sasaki F, Namera A, Matsukawa T, Yokoyama K, Hattori N.

Acute hippocampal and chronic diffuse white matter involvement in severe methanol intoxication.

Neurology 2016; 87: 2382-3.

Methyl salicylate

Greene T, Rogers S, Franzen A, Gentry R.

A critical review of the literature to conduct a toxicity assessment for oral exposure to methyl salicylate.

Crit Rev Toxicol 2016; online early:

doi: 10.1080/10408444.2016.1236071:

Nanoparticles

Bostan HB, Rezaee R, Valokala MG, Tsarouhas K, Golokhvast K, Tsatsakis AM, Karimi G.

Cardiotoxicity of nano-particles.

Life Sci 2016; 165: 91-9.

Mousavi SZ, Nafisi S, Maibach HI.

Fullerene nanoparticle in dermatological and cosmetic applications.

Nanomedicine 2016; online early:

doi: 10.1016/j.nano.2016.10.002:

Naphthalene

Kidiyoor Y, Rai S, Bakkannavar SM, Nayak VC, James RI, Patil N, Saravu K.

Psychiatric illness and naphthalene poisoning: a case report.

Res J Pharm Biol Chem Sci 2016; 7: 211-3.

Perfluorinated compounds

Papadopoulou E, Sabaredzovic A, Namork E, Nygaard UC, Granum B, Haug LS.

Exposure of Norwegian toddlers to perfluoroalkyl substances (PFAS): the association with breastfeeding and maternal PFAS concentrations.

Environ Int 2016; 94: 687-94.

Periodate salts

Lent EM, Crouse LC, Eck WS.

Acute and subacute oral toxicity of periodate salts in rats.

Regul Toxicol Pharmacol 2017; 83: 23-37.

Phenoxyethanol

Lilienblum W.

Opinion of the Scientific Committee on Consumer Safety (SCCS) – Final version of the opinion on phenoxyethanol in cosmetic products.

Regul Toxicol Pharmacol 2016; 82: 156.

Phthalate esters

Kolena B, Petrovicová I, Šidlovská M, Pilka T, Neuschlová M, Valentová I, Rybansky L, Trnovec T.

Occupational phthalate exposure and health outcomes among hairdressing apprentices.
Hum Exp Toxicol 2016; online early:
doi: 10.1177/0960327116678295:

Polyvinyl chloride

Guardiola JJ, Beier JI, Falkner KC, Wheeler B, McClain CJ, Cave M.
Occupational exposures at a polyvinyl chloride production facility are associated with significant changes to the plasma metabolome.
Toxicol Appl Pharmacol 2016; 313: 47-56.

Radiation

Oskan F, Becker G, Bleif M.
Specific toxicity after stereotactic body radiation therapy to the central chest : a comprehensive review.
Strahlenther Onkol 2016; online early:
doi: 10.1007/s00066-016-1063-z:

Rhododendrol

Yoshikawa M, Sumikawa Y, Hida T, Kamiya T, Kase K, Ishii-Osai Y, Kato J, Kan Y, Kamiya S, Sato Y, Yamashita T.
Clinical and epidemiological analysis in 149 cases of rhododendrol-induced leukoderma.
J Dermatol 2016; online early: doi: 10.1111/1346-8138.13694:

Sodium azide

Downes MA, Taliana KE, Muscat TM, Whyte IM.
Sodium azide ingestion and secondary contamination risk in healthcare workers.
Eur J Emerg Med 2016; 23: 68-70.

Sodium benzoate

O'Connor R, McCarthy S, Murphy M, Bourke J.
Airborne contact urticaria resulting from occupational exposure to sodium benzoate.
Contact Derm 2016; 75: 101.

Styrene

Lima JJ, Aguilar A, Sánchez FG, Díaz AN.
Enantiomeric fraction of styrene glycol as a biomarker of occupational risk exposure to styrene.
Chemosphere 2016; online early:
doi: 10.1016/j.chemosphere.2016.10.120:

Tobacco

Al-Sheyab NA, Al-Fuqha RA, Kheirallah KA, Khabour OF, Alzoubi KH.
Anthropometric measurements of newborns of women who smoke waterpipe during pregnancy: a comparative retrospective design.
Inhal Toxicol 2016; 28: 629-35.

Kogel U, Titz B, Schlage WK, Nury C, Martin F, Oviedo A, Lebrun S, Elamin A, Guedj E, Trivedi K, Ivanov NV, Vanscheeuwijck P, Peitsch MC, Hoeng J.
Evaluation of the tobacco heating system 2.2. Part 7: systems toxicological assessment of a mentholated version revealed reduced cellular and molecular exposure effects compared with mentholated and non-mentholated cigarette smoke.
Regul Toxicol Pharmacol 2016; online early:
doi: 10.1016/j.yrtph.2016.11.001:

Lopez AA, Eissenberg T, Jaafar M, Affi R.

Now is the time to advocate for interventions designed specifically to prevent and control waterpipe tobacco smoking.
Addict Behav 2016; 66: 41-7.

Martin F, Talikka M, Ivanov NV, Haziza C, Hoeng J, Peitsch MC.
Evaluation of the tobacco heating system 2.2. part 9: application of systems pharmacology to identify exposure response markers in peripheral blood of smokers switching to THS2.2.
Regul Toxicol Pharmacol 2016; online early:
doi: 10.1016/j.yrtph.2016.11.011:

Oviedo A, Lebrun S, Kogel U, Ho J, Tan WT, Titz B, Leroy P, Vuillaume G, Bera M, Martin F, Rodrigo G, Esposito M, Dempsey R, Ivanov NV, Hoeng J, Peitsch MC, Vanscheeuwijck P.
Evaluation of the tobacco heating system 2.2. Part 6: 90-day OECD 413 rat inhalation study with systems toxicology endpoints demonstrates reduced exposure effects of a mentholated version compared with mentholated and non-mentholated cigarette smoke.
Regul Toxicol Pharmacol 2016; online early:
doi: 10.1016/j.yrtph.2016.11.004:

Park J-M, Chang K-H, Park K-H, Choi S-J, Lee K, Lee J-Y, Satoh M, Song S-Y, Lee M-Y.
Differential effects between cigarette total particulate matter and cigarette smoke extract on blood and blood vessel.
Toxicol Res (Camb) 2016; 32: 353-8.

Rosenberry ZR, Pickworth WB, Koszowski B.
Large cigars: smoking topography and toxicant exposure.
Nicotine Tob Res 2016; online early:
doi: 10.1093/ntr/ntw289:

Sewer A, Kogel U, Talikka M, Wong ET, Martin F, Xiang Y, Guedj E, Ivanov NV, Hoeng J, Peitsch MC.
Evaluation of the tobacco heating system 2.2 (THS2.2). Part 5: microRNA expression from a 90-day rat inhalation study indicates that exposure to THS 2.2 aerosol causes reduced effects on lung tissue compared with cigarette smoke.
Regul Toxicol Pharmacol 2016; online early:
doi: 10.1016/j.yrtph.2016.11.018:

Toluene

Silveira AT, Albuquerque AC, Lepera JS, Martins I.
Diazepam influences urinary bioindicator of occupational toluene exposure.
Environ Toxicol Pharmacol 2016; 48: 191-6.

Yasar S, Yildirim E, Koklu M, Gursoy E, Celik M, Yuksel UC.
A case of reversible cardiomyopathy associated with acute toluene exposure.
Turk J Emerg Med 2016; 16: 123-5.

Water

Lee LC, Noronha M.
When plenty is too much: water intoxication in a patient with a simple urinary tract infection.
BMJ Case Rep 2016; doi: 10.1136/bcr-2016-216882:

Welding fumes

Togawa K, Le Cornet C, Feychting M, Tynes T, Pukkala E, Hansen J, Olsson A, Dalton SO, Nordby K-C, Uuskulainen S, Wiebert P, Woldbaek T, Skakkebaek NE, Fervers B, Schüz J.

Parental occupational exposure to heavy metals and welding fumes and risk of testicular germ cell tumors in offspring: a registry-based case-control study.
Cancer Epidemiol Biomarkers Prev 2016; 25: 1426-34.

METALS

General

Aneni EC, Escolar E, Lamas GA.

Chronic toxic metal exposure and cardiovascular disease: mechanisms of risk and emerging role of chelation therapy.

Curr Atheroscler Rep 2016; 18: 81.

Ferrero ME.

Rationale for the successful management of EDTA chelation therapy in human burden by toxic metals.

BioMed Res Int 2016; 2016: 8274504.

Hess CA, Olmedo P, Navas-Acien A, Goessler W, Cohen JE, Rule AM.

E-cigarettes as a source of toxic and potentially carcinogenic metals.

Environ Res 2016; 152: 221-5.

Iwegbue CM, Emakunu OS, Nwajei GE, Bassey FI, Martincigh BS.

Evaluation of human exposure to metals from some commonly used bathing soaps and shower gels in Nigeria.

Regul Toxicol Pharmacol 2017; 83: 38-45.

Le Bot B, Lucas J-P, Lacroix F, Glorennec P.

Exposure of children to metals via tap water ingestion at home: contamination and exposure data from a nationwide survey in France.

Environ Int 2016; 94: 500-7.

Nersesyan A, Kundi M, Waldherr M, Setayesh T, Mišik M, Wultsch G, Filipic M, Mazzaron Barcelos GR, Knasmueller S. Results of micronucleus assays with individuals who are occupationally and environmentally exposed to mercury, lead and cadmium.

Mutat Res Rev Mutat Res 2016; 770: 119-39.

Togawa K, Le Cornet C, Feychting M, Tynes T, Pukkala E, Hansen J, Olsson A, Dalton SO, Nordby K-C, Uuskulainen S, Wiebert P, Woldbaek T, Skakkebaek NE, Fervers B, Schüz J.

Parental occupational exposure to heavy metals and welding fumes and risk of testicular germ cell tumors in offspring: a registry-based case-control study.

Cancer Epidemiol Biomarkers Prev 2016; 25: 1426-34.

Arsenic

Cárdenas-González M, Osorio-Yáñez C, Gaspar-Ramírez O, Pavkovic M, Ochoa-Martínez A, López-Ventura D, Medeiros M, Barbier OC, Pérez-Maldonado IN, Sabbisetti VS, Bonventre JV, Vaidya VS.

Environmental exposure to arsenic and chromium in children is associated with kidney injury molecule-1.

Environ Res 2016; 150: 653-62.

Loewenberg S.

In Bangladesh, arsenic poisoning is a neglected issue.

Lancet 2016; 388: 2336-7.

Sattar A, Xie S, Hafeez MA, Wang X, Hussain HI, Iqbal Z, Pan Y, Iqbal M, Shabbir MA, Yuan Z.

Metabolism and toxicity of arsenicals in mammals.

Environ Toxicol Pharmacol 2016; 48: 214-24.

Chromium

Cárdenas-González M, Osorio-Yáñez C, Gaspar-Ramírez O, Pavkovic M, Ochoa-Martínez A, López-Ventura D, Medeiros M, Barbier OC, Pérez-Maldonado IN, Sabbisetti VS, Bonventre JV, Vaidya VS.

Environmental exposure to arsenic and chromium in children is associated with kidney injury molecule-1.

Environ Res 2016; 150: 653-62.

Dyer O.

Johnson & Johnson is ordered to pay \$1bn over faulty hip implants.

Br Med J 2016; 355: i6551.

Gadolinium

Semelka RC, Commander CW, Jay M, Burke LMB, Ramalho M. Presumed gadolinium toxicity in subjects with normal renal function: a report of 4 cases.

Invest Radiol 2016; 51: 661-5.

Lead

Azizi A, Ferguson K, Dluzewski S, Hussain T, Klein M.

Chronic lead poisoning in an Iranian opium smoker resident in London.

BMJ Case Rep 2016; doi: 10.1136/bcr-2016-215965:

Chambial S, Bhardwaj P, Mahdi AA, Sharma P.

Lead poisoning due to herbal medications.

Indian J Clin Biochem 2016; online early:

doi: 10.1007/s12291-016-0617-2:

Dobrakowski M, Boron M, Kasperczyk S, Kozłowska A, Kasperczyk A, Plachetka A, Pawlas N.

The analysis of blood lead levels changeability over the 5-year observation in workers occupationally exposed to lead.

Toxicol Ind Health 2016; online early:

doi: 10.1177/0748233716674380:

Gleason KM, Valeri L, Shankar AH, Hasan MOSI, Qamruzzaman Q, Rodrigues EG, Christiani DC, Wright RO, Bellinger DC, Mazumdar M.

Stunting is associated with blood lead concentration among Bangladeshi children aged 2-3 years.

Environ Health 2016; 15: 103.

Guariglia SR, Stansfield KH, McGlothlan J, Guilarte TR.

Chronic early life lead (Pb²⁺) exposure alters presynaptic vesicle pools in hippocampal synapses.

BMC Pharmacol Toxicol 2016; 17: 56.

Kalahasthi R, Barman T.

Effect of lead exposure on the status of reticulocyte count indices among workers from lead battery manufacturing plant.

Toxicol Res (Camb) 2016; 32: 281-7.

Martins E, Varea A, Hernández K, Sala M, Girardelli A, Fasano V, Disalvo L.

Blood lead levels in children aged between 1 and 6 years old in La Plata, Argentina. Identification of risk factors for lead exposure.

Arch Argent Pediatr 2016; 114: 543-8.

van Eijkeren JCH, Olie JDN, Bradberry SM, Vale JA, de Vries I, Clewell HJ, III, Meulenbelt J, Hunault CC.

Modeling the effect of succimer (DMSA; dimercaptosuccinic acid) chelation therapy in patients poisoned by lead.

Clin Toxicol 2016; online early:

doi: 10.1080/15563650.2016.1263855:

Mercury

de Jesus LF, Moreira FR.

Impact of exposure to low levels of mercury on the health of dental workers.

Acta Sci Health Sci 2016; 38: 219-29.

Mo T, Sun S, Wang Y, Luo D, Peng B, Xia Y.

Mercury poisoning caused by Chinese folk prescription (CFP): a case report and analysis of both CFP and quackery.

Medicine (Baltimore) 2016; 95: e5162.

Roda E, Giampreti A, Vecchio S, Apostoli P, Coccini T.

Mercury vapour long-lasting exposure: lymphocyte muscarinic receptors as neurochemical markers of accidental intoxication.

Case Rep Med 2016; 2016: 9783876.

Yin L, Yu K, Lin S, Song X, Yu X.

Associations of blood mercury, inorganic mercury, methyl mercury and bisphenol A with dental surface restorations in the U.S. population, NHANES 2003–2004 and 2010–2012.

Ecotoxicol Environ Saf 2016; 134: 213-25.

Silicon

Scientific Committee on Consumer Safety (SCCS), Rousselle C.

Opinion of the Scientific Committee on Consumer Safety (SCCS) – Final version of the opinion on decamethyl-cyclopentasiloxane (cyclopentasiloxane, D5) in cosmetic products.

Regul Toxicol Pharmacol 2016; online early: doi: 10.1016/j.yrtph.2016.11.016:

Silver

Sarnat-Kucharczyk M, Pojda-Wilczek D, Mrukwa-Kominek E.

Diagnostic methods in ocular argyrosis: case report.

Doc Ophthalmol 2016; 133: 129-38.

Uranium

Corlin L, Rock T, Cordova J, Woodin M, Durant JL, Gute DM, Ingram J, Brugge D.

Health effects and environmental justice concerns of exposure to uranium in drinking water.

Curr Environ Health Rep 2016; 3: 434-42.

Zinc

Lee Y-R, Kang M-H, Park H-M.

Treatment of zinc toxicosis in a dog with chelation using D-penicillamine.

J Vet Emerg Crit Care (San Antonio) 2016; 26: 825-30.

PESTICIDES

General

Akoto O, Azuure AA, Adotey KD.

Pesticide residues in water, sediment and fish from Tono Reservoir and their health risk implications.

Springerplus 2016; 5: 1849.

Cochran RC, Ross JH.

A method for quantitative risk appraisal for pesticide risk assessments.

J Toxicol Environ Health A 2016; online early: doi: 10.1080/15287394.2016.1224747:

Donald CE, Scott RP, Blaustein KL, Halbleib ML, Sarr M, Jepson PC, Anderson KA.

Silicone wristbands detect individuals' pesticide exposures in West Africa.

R Soc Open Sci 2016; 3: 160433.

Mitra D, Vg A.

Genotoxic effect of pesticides on human leukocyte culture: a review.

Asian J Pharm Clin Res 2016; 9: 29-33.

Nascimento SN, Göethel G, Baierle M, Barth A, Brucker N, Charão MF, Moro AM, Gauer B, Sauer E, Durgante J, Arbo MD, Thiesen FV, Saint' Pierre TD, Gioda A, Moresco R, Garcia SC.

Environmental exposure and effects on health of children from a tobacco-producing region.

Environ Sci Pollut Res 2016; online early: doi: 10.1007/s11356-016-8071-5:

Page A, Liu S, Gunnell D, Astell-Burt T, Feng X, Wang L, Zhou M.

Suicide by pesticide poisoning remains a priority for suicide prevention in China: analysis of national mortality trends 2006–2013.

J Affect Disord 2016; 208: 418-23.

Pesticides and cancer

Acquavella J, Garabrant D, Marsh G, Sorahan T, Weed DL. Glyphosate epidemiology expert panel review: a weight of evidence systematic review of the relationship between glyphosate exposure and non-Hodgkin's lymphoma or multiple myeloma.

Crit Rev Toxicol 2016; 46: 28-43.

Carbamate insecticides

General

Vale JA, Bradberry SM.

Organophosphorus and carbamate insecticides.

In Critical Care Toxicology, ed. by J Brent, K Burkhart, P Dargan, B Hatten, B Megarbane, & R Palmer. Cham: Springer International Publishing, 2016.

Fungicides

Mancozeb

Runkle J, Flocks J, Economos J, Dunlop AL.

A systematic review of mancozeb as a reproductive and developmental hazard.

Environ Int 2016; online early: doi: 10.1016/j.envint.2016.11.006:

Herbicides

Bradberry SM, Vale JA.

Chlorophenoxy herbicides.

In Critical care toxicology, ed. by J Brent, K Burkhart, P Dargan, B Hatten, B Megarbane, & R Palmer. Cham: Springer International Publishing, 2016.

Glyphosate

Acquavella J, Garabrant D, Marsh G, Sorahan T, Weed DL. Glyphosate epidemiology expert panel review: a weight of evidence systematic review of the relationship between glyphosate exposure and non-Hodgkin's lymphoma or multiple myeloma.

Crit Rev Toxicol 2016; 46: 28-43.

Propanil

Hulse E, Shihana F, Buckley NA.

Radical 7 co-oximeter inaccuracies: reply.

Clin Toxicol 2016; online early: doi: 10.1080/15563650.2016.1263858:

Zamani N, Hassanian-Moghaddam H.

RE: Methemoglobin measurements are underestimated by the Radical 7 CO-oximeter: experience from a series of moderate to severe propanil poisonings.

Clin Toxicol 2016; online early:

doi: 10.1080/15563650.2016.1263856:

Insecticides

Amitraz

Agrawal I, Ahmad S, Kumar M, Akram M.

Amitraz poisoning: an unusual cause of respiratory and peripheral circulatory failure.

Trop Doct 2016; online early:

doi: 10.1177/0049475516677159:

Indoxacarb

Firoozabadi AS, Nasri-Nasrabadi Z, Marashi SM.

Management of indoxacarb poisoning in a regional setting.

Indian J Crit Care Med 2016; 20: 627-8.

Organochlorine pesticides

General

Hajjar MJ, Al-Salam A.

Organochlorine pesticide residues in human milk and estimated daily intake (EDI) for the infants from eastern region of Saudi Arabia.

Chemosphere 2016; 164: 643-8.

Namulanda G, Maisonet M, Taylor E, Flanders WD, Olson D, Sjodin A, Qualters JR, Vena J, Northstone K, Naeher L.

In utero exposure to organochlorine pesticides and early menarche in the Avon Longitudinal Study of Parents and Children.

Environ Int 2016; 94: 467-72.

Organophosphorus insecticides

General

Hiremath P, Rangappa P, Jacob I, Rao K.

Pseudocholinesterase as a predictor of mortality and morbidity in organophosphorus poisoning.

Indian J Crit Care Med 2016; 20: 601-4.

Liu P, Wu C, Chang X, Qi X, Zheng M, Zhou Z.

Adverse associations of both prenatal and postnatal exposure to organophosphorous pesticides with infant neurodevelopment in an agricultural area of Jiangsu Province, China.

Environ Health Perspect 2016; 124: 1637-43.

Vale JA, Bradberry SM.

Organophosphorus and carbamate insecticides.

In Critical Care Toxicology, ed. by J Brent, K Burkhardt, P Dargan, B Hatten, B Megarbane, & R Palmer. Cham: Springer International Publishing, 2016.

Trichlorfon

Disel NR, Acikalin A, Kecec Z, Sebe A.

Utilization of plasmapheresis for organophosphate intoxication: a case report.

Turk J Emerg Med 2016; 16: 69-71.

Paraquat and diquat

Zhou D-C, Zhang H, Luo Z-M, Zhu Q-X, Zhou C-F.

Prognostic value of hematological parameters in patients with paraquat poisoning.

Sci Rep 2016; 6: 36235.

Pyrethroid insecticides

Cyhalothrin

Moser VC, Liu Z, Schlosser C, Spanogle TL, Chandrasekaran A, McDaniel KL.

Locomotor activity and tissue levels following acute administration of lambda- and gamma-cyhalothrin in rats.

Toxicol Appl Pharmacol 2016; 313: 97-103.

Rodenticides

Ye L, Wang Z.

Establishment of evaluation system of intake doses in children with coumarin derivative rodenticide intoxication: report of 44 cases.

Pediatr Nephrol 2016; 31: 1977.

Strychnine

Singhapricha T, Pomerleau AC.

A case of strychnine poisoning from a southeast Asian herbal remedy.

J Emerg Med 2016; online early:

doi: 10.1016/j.jemermed.2016.10.007:

CHEMICAL WARFARE, BIOLOGICAL WARFARE AND RIOT CONTROL AGENTS Chemical warfare

Mustard gas

Panahi Y, Aslani J, Hajjhashemi A, Kalkhorani M, Ghanei M, Sahebkar A.

Effect of *Aloe vera* and pantoprazole on gastroesophageal reflux symptoms in mustard gas victims: a randomized controlled trial.

Pharm Sci 2016; 22: 190-4.

Nerve agents

Iyengar ARS, Pande AH.

Organophosphate-hydrolyzing enzymes as first-line of defence against nerve agent-poisoning: perspectives and the road ahead.

Protein J 2016; 35: 424-39.

PLANTS

General

Graziano S, Orsolini L, Rotolo MC, Tittarellie R, Schifano F, Pichini S.

Herbal highs: review on psychoactive effects and neuropharmacology.

Curr Neuropharmacol 2016; online early:

doi: 10.2174/1570159X14666161031144427:

Mezzasalma V, Ganopoulos I, Galimberti A, Cornara L, Ferri E, Labra M.

Poisonous or non-poisonous plants? DNA-based tools and applications for accurate identification.

Int J Legal Med 2016; online early: doi: 10.1007/s00414-016-1460-y:

Averrhoa carambola (Star fruit)

Shimizu MHM, Gois PHF, Volpini RA, Canale D, Luchi WM, Froeder L, Heilberg IP, Seguro AC.

N-acetylcysteine protects against star fruit-induced acute kidney injury.

Ren Fail 2016; online early:

doi: 10.1080/0886022X.2016.1256315:

Rauvolfia spp.

Gicquel T, Hugbart C, Le Devehat F, Lepage S, Baert A, Bouvet R, Morel I.

Death related to consumption of *Rauvolfia* sp. powder mislabeled as *Tabernanthe iboga*.

Forensic Sci Int 2016; 266: e38-e42.

ANIMALS

Bee stings

Gupta PN, Kumar BK, Velappan P, Sudheer MD.

Possible complication of bee stings and a review of the cardiac effects of bee stings.

BMJ Case Rep 2016; doi: 10.1136/bcr-2015-213974:

Fish/marine poisoning

Saggiomo SL, Zelenka C, Seymour J.

Relationship between food and venom production in the estuarine stonefish *Synanceia horrida*.

Toxicol 2017; 125: 19-23.

Ciguatera

Armstrong P, Murray P, Nesdale A, Peckler B.

Ciguatera fish poisoning.

N Z Med J 2016; 129: 111-4.

Palytoxin

Thakur LK, Jha KK.

Palytoxin-induced acute respiratory failure.

Respir Med Case Rep 2017; 20: 4-6.

Tetrodotoxin

Bane V, Hutchinson S, Sheehan A, Brosnan B, Barnes P, Lehane M, Furey A.

LC-MS/MS method for the determination of tetrodotoxin (TTX) on a triple quadrupole mass spectrometer.

Food Addit Contam Part A Chem Anal Control Expo Risk Assess 2016; 33: 1728-40.

Scorpions

Cajado-Carvalho D, Kuniyoshi AK, Duzzi B, Iwai LK, de Oliveira UC, Junqueira de Azevedo IdLM, Kodama RT, Portaro FV.

Insights into the hypertensive effects of *Tityus serrulatus* scorpion venom: purification of an angiotensin-converting enzyme-like peptidase.

Toxins (Basel) 2016; 8: 348.

Rebahi H, Ba-Mhamed S, Mouaffak Y, Younous S, Bennis M.

Clinico-epidemiological features of severe scorpion envenomation in a pediatric Moroccan population.

Anesth Analg 2016; 123: 340.

Snake bites

Aktar F, Aktar S, Yolbas I, Tekin R.

Evaluation of risk factors and follow-up criteria for severity of snakebite in children.

Iran J Pediatr 2016; 26: e5212.

Hu Y, Yang L, Yang H, He S, Wei J-F.

Identification of snake venom allergens by two-dimensional electrophoresis followed by immunoblotting.

Toxicol 2017; 125: 13-8.

Mallik S, Singh SR, Sahoo S, Mohanty MK.

Ornament induced complications in snake bites: revisiting the "Do it RIGHT" approach. PMC5084587.

J Family Med Prim Care 2016; 5: 474-6.

Ramanath KV, Anitha C, Junied S.

Study on snake bite poisoning and its outcomes in a rural tertiary care hospital.

Res J Pharm Biol Chem Sci 2016; 7: 1875-89.

Crotalinae (Pit vipers)

Cañas CA, Vallejo A.

Envenomation by *Bothrops punctatus* in southwestern Colombia.

Toxicol 2016; 124: 94-6.

Emswiler MP, Griffith FP, Cumpston KL.

Clinically significant envenomation from postmortem Copperhead (*Agkistrodon contortrix*).

Wilderness Environ Med 2016; online early:

doi: 10.1016/j.wem.2016.09.007:

Félix-Silva J, Gomes JAS, Xavier-Santos JB, Passos JGR, Silva-Junior AA, Tambourgi DV, Fernandes-Pedrosa MF.

Inhibition of local effects induced by *Bothrops erythromelas* snake venom: Assessment of the effectiveness of Brazilian polyvalent bothropic antivenom and aqueous leaf extract of *Jatropha gossypifolia*.

Toxicol 2016; online early:

doi: 10.1016/j.toxicol.2016.11.260:

Jorge RJB, Jorge ARC, de Menezes RRPPB, Mello CP, Lima DB, Silveira JAdM, Alves NTQ, Marinho AD, Ximenes RM, Netto CC, Machado LG, Zingali RB, Martins AMC, Monteiro HSA.

Differences between renal effects of venom from two *Bothrops jararaca* populations from southeastern and southern Brazil.

Toxicol 2017; 125: 84-90.

Menaldo DL, Bernardes CP, Jacob-Ferreira AL, Nogueira-Santos CG, Casare-Ogasawara TM, Pereira-Crott LS, Sampaio SV.

Effects of *Bothrops atrox* venom and two isolated toxins on the human complement system: modulation of pathways and generation of anaphylatoxins.

Mol Immunol 2016; 80: 91-100.

Steuerwald MT, Gabbard SR, Beauchamp GA, Riddle MK, Otten EJ.

Administration of CroFab antivenom by a helicopter emergency medical service team.

Air Med J 2016; 35: 371-3.

Elapidae

Johnston CI, Ryan NM, O'Leary MA, Brown SGA, Isbister GK.

Australian taipan (*Oxyuranus* spp.) envenoming: clinical effects and potential benefits of early antivenom therapy – Australian Snakebite Project (ASP-25).

Clin Toxicol 2016; online early:

doi: 10.1080/15563650.2016.1250903:

Mason H, Tan P, Kirkland G, Jose M.

Tiger snake envenomation related severe acute kidney injury: 2 case report.

Nephrology (Carlton) 2016; 21: 256-7.

Spiders

Rueda A, Realpe E, Uribe A.

Toxicity evaluation and initial characterization of the venom of a Colombian *Latrodectus* sp.

Toxicol 2017; 125: 53-8.

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