1 Detailed Scientific Programme
preliminary 10 March 2014
## PROGRAMME

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<td>New insights in mechanisms of toxicities and their clinical relevance</td>
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Continuing Education in Clinical Toxicology:
Pre-Congress Symposium

Natural Toxins

Session chair:

09.00  Keynote lecture: Plant toxicology

Hugo Kupferschmidt
Swiss Toxicological Information Centre, Associated Institute of the University of Zurich, Zurich, Switzerland

At the end of this session the audience should be able to:
- identify the most toxic plants and the mechanisms of toxicity of their toxic ingredients
- explain the risk assessment of toxic plants
- describe the medical management of toxic plant exposures and make a reasonable plan for the medical management of exposed patients

09.30  Keynote lecture: The "new" mushroom syndromes

Régis Bédry
Hospital Secure Unit, Pellegrin University Hospital, Bordeaux, France

At the end of this session the audience should be able to:
- list the main mushroom species that can result in "new" mushroom syndromes
- describe the clinical profile of the "new" mushroom syndromes
- describe the therapeutic management and follow-up of the "new" mushroom syndromes

10.00  Keynote lecture: New insights in marine toxicology (1)

Luc de Haro
Marseille Poison Centre, Hôpital Sainte Marguerite, Marseille, France

At the end of this session the audience should be able to:
- list the main emerging marine toxic syndromes present in the European coasts
- discuss the role of the European Poison Centres in the alerting and management of poisoned or envenomed patients
- describe the European situation in global ecological and toxicological aspects at the world level, with a description of tropical emerging problems which may soon be present in Europe

10.30 – 11.00 Coffee
Session chair:

11.00 Keynote lecture: Influence of climate change on the epidemiology of poisonous animals and envenomings

Max Goyffon

RDDM Department, National Museum of Natural History, Paris, France

At the end of this session the audience should be able to:
- examine the relationship between seasonal proliferation and territorial expansion and current climate change
- compare the situation and territorial expansion of terrestrial fauna (Hymenoptera Aculeata, scorpions) and marine fauna (Medusozoa) with that of other venomous groups deliberately introduced by man into new territories (Hymenoptera, Amphibians)
- discuss whether human factors are more important in the conquest of new territories by venomous species (in particular in anthropic environments) than climatic factors

11.30 Pro/Con debate

Mannitol for the treatment of ciguatera poisoning?

**Pro:** Michael E Mullins

*Emergency Medicine, Washington University, Saint Louis, USA*

**Con:** Robert S Hoffman

*New York City Poison Control Center, New York, NY, USA*

At the end of this session the audience should be able to:
- describe the use of mannitol in ciguatera poisoning
- evaluate the literature on the efficacy of mannitol in ciguatera poisoning

12.15 Keynote lecture: Antivenom for snake envenoming: Efficacy, effectiveness and adverse reactions

Geoff Isbister

*Calvary Mater Newcastle, Waratah, Australia*

At the end of this session the audience should be able to:
- explain the difference between antivenom efficacy and effectiveness
- discuss the importance of early indicators of envenoming and timing of antivenom
- describe the type of adverse reactions to antivenom

*12.45 – 14.00 Lunch*
Interactive case studies

Session chair:

14.00 Case 1: Ricin poisoning
   Fridtjof Heyerdahl
   Department of Acute Medicine, Oslo University Hospital, Ullevaal, Norway

14.30 Case 2: Herbal tea intoxication
   Ming-Ling Wu
   Division of Clinical Toxicology, Taipei Veterans General Hospital, Taipei, Taiwan

15.00 Case 3: Spider toxicology
   Julian White
   Toxicology, Women’s & Children’s Hospital, North Adelaide, Australia

At the end of this session the audience should be able to:
• recognise the features of ricin poisoning
• describe a case of herbal tea poisoning
• discuss the features and management of spider bites

15.30 – 16.00 Coffee

Session chair:

16.00 Case 4: Collective toxic fish poisoning
   Man-Li Tse
   Hong Kong Poison Information Centre, United Christian Hospital, Hong Kong, China

16.30 Case 5: Exotic (non-native) snake poisoning
   Fabio Bucaretchi
   Campinas Poison Control Center, State University of Campinas, Campinas, Brazil

At the end of this session the audience should be able to:
• describe a collective fish poisoning incident
• summarise the problems of poisoning with exotic (non-native) snakes

17.00 Pro/Con debate
   Is supportive treatment for scorpion envenomation sufficient?

   Pro: Fekri Abroug
   Intensive Care, CHU F. Bourguiba, Monastir, Tunisia

   Con: Rachida Soulaymani-Bencheikh
   Centre Anti Poison et de Pharmacovigilance du Maroc (CAPM), Rabat, Morocco

At the end of this session the audience should be able to:
• evaluate specific treatments for scorpion envenomation
• debate the value of supportive treatment in scorpion envenomation

17.45 Close
Symposium: Where have we come from and where are we going?

Session chair:

08.35 PLENARY LECTURE
Ups and downs in clinical toxicology: A review from 1964 to 2014
Thomas Zilker
Department for Clinical Toxicology at II. Med. Klinik, TU München, Munich, Germany

At the end of this session the audience should be able to:
- describe the range of different intoxications during the last 50 years; which poisons are consistent throughout and which have emerged during this time?
- list therapeutic options that have developed during the last half century and what sorts of therapy have come and disappeared
- discuss how prevention of poisoning has improved since 1964

09.20 Keynote lecture: 50 years of progress in the care of the patient with a toxicologic emergency
Lewis Goldfrank
Emergency Medicine, New York University, New York, NY, USA

At the end of this session the audience should be able to:
- evaluate the rationale for the transition from high dose naloxone to low dose naloxone to home naloxone in the overdosed patient
- discuss the rationale for the transition in management of the patient with an agitated delirium from restraints and antipsychotics to sedation and cooling
- compare and contrast the use of public health approaches to unintentional kerosene poisoning in America in the 1960s and kerosene poisoning in Ghana in the 2000s to model collaborative global health approaches to toxicology

09.40 Keynote lecture: 50 years of paracetamol poisoning
D Nicholas Bateman
National Poisons Information Service (Edinburgh Unit), Edinburgh, UK

At the end of this session the audience should be able to:
- describe the history of the development of treatments for paracetamol
- discuss the issues in current management
- outline methods of assessing paracetamol poisoning

10.00 – 10.30 Coffee and Posters (19-120)
### Mini-symposium: Emerging toxicities

**Session chair:**

<table>
<thead>
<tr>
<th>Time</th>
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| 09.20 | *Neurotoxicity of 1-bromopropane in workers: An outbreak reported to the National Poison Center in Taiwan* (2)  
TeHao Wang\(^1\,^2\), JouFang Deng\(^1\), ChengChang Yang\(^1\,^2\), MingLing Wu\(^1\,^2\)  
\(^1\)Division of Clinical Toxicology, Taipei Veterans General Hospital, Taipei, Taiwan; \(^2\)Institute of Environmental and Occupational Health Sciences, National Yang-Ming University, Taipei, Taiwan |
| 09.35 | *Arthroprosthetic cobaltism: Clinical features, management and chelating therapy of a 2012-2013 case series from Pavia Poison Control Centre* (3)  
Andrea Giampreti, Valeria M Petrolini, Sarah Vecchio, Davide Lonati, Anna Ronchi, Carlo A Locatelli  
Poison Control Centre and National Toxicology Information Centre, Toxicology Unit, IRCCS Maugeri Foundation, Pavia, Italy |
| 09.50 | *Computerized Early Warning System for emerging poisonings threatening public health* (4)  
Gerard A van Zoelen\(^1\), Tessa E van Riemsdijk\(^1\), Antoinette JHP van Riel\(^1\), Irma de Vries\(^1\), Jan Meulenbelt\(^1\,^2\,^3\)  
\(^1\)National Poisons Information Center, University Medical Center Utrecht, Utrecht, The Netherlands; \(^2\)Department of Intensive Care Medicine, University Medical Center Utrecht, Utrecht, The Netherlands; \(^3\)Institute for Risk Assessment Sciences, Utrecht University, Utrecht, The Netherlands |

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*10.05 ÷ 10.30 Coffee and Posters (19-120)*
Symposium: Where have we come from and where are we going?

Session chair:

10.30 Keynote lecture: From DDT to Bt: A brief history of insecticide toxicology

Martin F Wilks
Swiss Centre for Applied Human Toxicology, University of Basel, Basel, Switzerland

At the end of this session the audience should be able to:
- identify the most commonly used groups of insecticides and their properties
- describe typical toxidromes associated with insecticide poisoning
- discuss the major controversies with regard to insecticide toxicity in humans and the environment

10.50 Keynote lecture: 50 years of fungal poisoning and antidotes: Do we have progress?

Hans Persson
Swedish Poisons Information Centre, Stockholm, Sweden

At the end of this session the audience should be able to:
- describe the toxic mechanisms and symptoms, and discuss the treatment approaches after ingestion of fungi containing the extremely toxic amatoxins
- describe the effects of the toxin orellanine that occurs in certain Cortinarius spp
- discuss the toxicity and relevant treatment of morels (e.g. Gyromitra esculenta) and of fungi containing muscarine

11.10 Keynote lecture: 50 years of the EAPCCT

J Allister Vale
National Poisons Information Service (Birmingham Unit) and West Midlands Poisons Unit,
City Hospital, Birmingham, UK; University of Birmingham, UK

At the end of this lecture the audience should be able to:
- explain why the EAPCCT is a vibrant international scientific society and how it has played a major role in establishing the scientific credibility of the specialty of clinical toxicology
- recognize that to fulfil its Aims and Objectives the EAPCCT organizes state-of-the-art coverage of important toxicological topics at each International Congress so that the continuing professional development of its members is ensured
- recognize that to further its Aims and Objectives the EAPCCT co-sponsors the journal Clinical Toxicology, Position Statements and international guidelines, holds membership in IUTOX and partners the European Commission in the development of an alerting system for chemical health threats (ASHT II)

11.30 GENERAL DISCUSSION
Mini-symposium: Psychotropic drugs

Session chair:

10.30  Retrospective analysis of poisonings with newer psychotropic drugs (5)
       Jochen Stenzel, Leonie Ruhnau, Florian Ever
       Clinical Toxicology, Klinikum rechts der Isar, Munich, Germany

10.45  Pregabalin: An assessment of its toxicity (6)
       Dagmar Prasa1, Uwe Stedtler2, Carola Seidel3, Petra Hoffmann-Walbeck4,
       Elja Heistermann4, Sonja Gros5, Cornelia Reichert6, Elke Färber2,
       Sabine Stoletzki7, Dieter Genser8, Gabriele Dostal9

1  Poisons Information Centre Erfurt; 2  Poisons Information Centre Freiburg; 3  Poisons
   Information Centre Bonn; 4  Poisons Information Centre Berlin; 5  Poisons Information Centre
   Mainz, Germany; 6  Poisons Information Centre Zurich, Switzerland; 7  Poisons Information
   Centre Göttingen, Germany; 8  Poisons Information Centre Vienna, Austria; 9  Poisons
   Information Centre Munich, Germany

11.00  Are selective serotonin reuptake inhibitors responsible for an excess of morbidity in acute
       poisonings admitted to the emergency department? (7)
       Sébastien Beaune1,2, Emmanuel Curis1, Philippe Juvin2, Bruno Mégarbane1

1  INSERM U1144, Paris-Descartes University, Paris, France; 2  Emergency Department,
   Georges Pompidou Hospital, Paris, France

11.15  Seizures after single-agent overdose with pharmaceutical drugs: Analysis of cases
       reported to a poison centre (8)
       Cornelia Reichert, Alessandro Ceschi, Hugo Kupferschmidt,
       Christine Rauber-Lüthy

   Swiss Toxicological Information Centre, Associated Institute of the University of Zurich,
   Zurich, Switzerland

11.30  GENERAL DISCUSSION
Symposium: Where have we come from and where are we going?

Session chair:

11.45  Round table: Poisons centre information delivery, from clay tablet to 2014 and beyond

Session chair:

Edward Krenzelok  
*School of Pharmacy, University of Pittsburgh, Pittsburgh, PA, USA*

Kalle Hoppu  
*Poison Information Centre, Helsinki, Finland*

Andreas Stürer  
*Poisons Centre and Clinical Toxicology, University Medical Centre, Mainz, Germany*

Jou-Fang Deng  
*Department of Internal Medicine, Taipei Veterans General Hospital, Taipei, Taiwan*

Naren Gunja  
*NSW Poisons Centre, Sydney Childrens Hospital Network, Sydney, Australia*

At the end of this session the audience should be able to:

- describe the changes that have occurred since the setting up of poisons centres
- examine the changes in information provision over the years, from paper to smartphone
- debate what new technologies may be important in the future.

12.45 – 13.45 Lunch and Posters (19-120)
Mini-symposium: Severe illness from poisoning

Session chair:

11.40 Fatal salicylate levels can be lower than expected (9) Thomas G Martin
Utah Poison Control Center, University of Utah, Seattle, Washington, USA

11.55 Visual damage after acute methanol poisoning: prospective study in 50 patients (10)
Sergey Zakharov¹, Tomas Navrati², Pavel Diblik³, Pavel Urban¹,
Knut Erik Hovda⁴, Daniela Pelclova¹
¹Toxicological Information Center at General University Hospital, Charles University, Prague, Czech Republic; ²Department of Biophysical Chemistry, J. Heyrovský Institute of Physical Chemistry, Prague, Czech Republic; ³Department of Ophthalmology, General University Hospital, Prague, Czech Republic; ⁴Norwegian Center for NBC Medicine, Oslo University Hospital, Ulleval, Norway

12.10 Intoxicated intensive care unit patients: Long-term mortality? (11)
Raya Brandenburg¹, Sylvia Brinkman²,³, Nicolet de Keizer²,³, Jan Meulenbelt¹,⁴,⁵, Dylan W de Lange¹,³,⁴
¹Department of Intensive Care and Emergency Medicine, University Medical Center Utrecht; ²Department of Medical Informatics, Academic Medical Centre Amsterdam; ³National Intensive Care Evaluation (NICE) Foundation, Academic Medical Centre Amsterdam; ⁴National Poisons Information Center (NPIC), University Medical Center Utrecht; ⁵Institute for Risk Assessment Sciences (IRAS), University of Utrecht, The Netherlands

12.25 S100B protein predictive value for neuropsychological sequelae in carbon monoxide poisoning (12)
Miran Brvar
Poison Control Centre, University Medical Centre, Ljubljana, Slovenia

12.40 GENERAL DISCUSSION

12.45 – 13.45 Lunch and Posters (19-120)
13.45 | Fellowship ceremony

Simon Thomas

14.05 – 15.00 | LOUIS ROCHE LECTURE
Sea-dumped chemical weapons: Environmental hazard/Occupational risk

Michael Greenberg

Department of Emergency Medicine, Drexel University College of Medicine, Philadelphia, Pennsylvania, USA

Symposium: Chemical warfare agents

Session chair:

15.00 | Keynote lecture: Chemical weapon risks to health in Syria – WHO Response

Joanna Tempowski, Catherine Smallwood

World Health Organization, Geneva, Switzerland

At the end of this session the audience should be able to:

- explain the role of WHO in a setting where chemical weapons may be used
- describe 3 types of activity engaged in by WHO for preparedness and response to the release of chemical weapons in Syria
- describe at least one challenge faced by WHO in the context of chemical weapon release in Syria

15.20 | Keynote lecture: Process of verification of human exposure towards chemical warfare agents

Marc-Michael Blum

Organisation for the Prohibition of Chemical Weapons (OPCW), OPCW Laboratory, Rijswijk, The Netherlands

At the end of this session the audience should be able to:

- describe the foundations of the verification process as laid down in the Chemical Weapons Convention and the Verification Annex and the way the Organisation for the Prohibition of Chemical Weapons (OPCW) Technical Secretariat implements this process with respect to biomedical samples
- evaluate the current process followed by the OPCW laboratory to establish Proficiency Tests for analysis of biomedical samples by running a series of confidence building exercises
- list the areas where OPCW verification activities interface with practical work of (clinical) toxicologist; what information if of highest relevance for verification; how samples should be taken and documented; and how chain of custody issues are addressed

15.40 | GENERAL DISCUSSION

15.45 – 16.15 Coffee and Posters (19-120)
Mini-symposium: History of poisons and poison centres

Session chair:

15.00  The art of poisoning: A history of toxicology through art and literature (14)

Naren Gunja
Toxicology Unit, Western Sydney, Australia

15.15  * 50 years of the German National Committee for the Assessment of Poisonings (93)

Axel Hahn, Kathrin Begemann, Matthias Greiner
Federal Institute for Risk Assessment, Berlin, Germany

15.25  * The Ljubljana Poison Control Center 40 years on (94)

Miran Brvar, Marija Jamsek
Poison Control Center, University Medical Center, Ljubljana, Slovenia

15.35  * Setting up and stages of toxicological service work in the Sverdlovsk region: 40 years of toxicological service work in the Russian Federation (95)

Valentin G Sentcov¹, Konstantin M Brusin¹, Olga V Novikova¹, Sergey I Bogdanov¹, Andrey A Reutov¹, Dmitriy E Zhovtyak¹, Viacheslav U Misharin², Aleksey V Martinov³, Andrey A Masterkov²

¹Toxicology Department, Ural State Medical University, Yekaterinburg, Russia; ²Sverdlovsk Regional Clinical Psychiatric Hospital ⁷ 7, Nizhny Tagil, Russia; ³City Clinical Hospital ¹⁴, Yekaterinburg, Russia

15.45 ÷ 16.15 Coffee and Posters (19-120)

*Poster (see page 41)
Symposium: Chemical warfare agents (continued)

Session chair:

16.15  **Keynote lecture: Biomarkers for nerve agent and mustard exposure**

Daniel D Noort  
*CBRN Protection, TNO, Rijswijk, The Netherlands*

At the end of this session the audience should be able to:

- explain the basic chemistry involved in the interactions between nerve agents/mustards and bio-macromolecules
- describe which biomarkers result after an exposure to nerve agents and mustard agents
- outline how these biomarkers can be used for retrospective exposure assessment

16.35  **Keynote lecture: Treatment of mustard gas poisoning: Results and long term consequences** (13)

John Jenner  
*Biomedical Sciences Department, Dstl, Porton Down, Salisbury, UK*

At the end of this session the audience should be able to:

- identify the key signs and symptoms of sulphur mustard (SM, mustard gas) injury
- list the current treatments for SM eye, lung and skin injury
- distinguish the short and long term effects of SM poisoning.

16.55  **Keynote lecture: Treatment of nerve agent poisoning: General principles**

Horst Thiermann  
*Bundeswehr Institute of Pharmacology & Toxicology, Munich, Germany*

At the end of this session the audience should be able to:

- distinguish toxicological properties and effects of G-type nerve agents and V-type nerve agents
- describe adequate methods for protection of medical personnel, patients and medical equipment as well as for personnel and patient decontamination
- perform appropriate life saving therapy as well as explaining the principles of maintaining patient oriented therapeutic measures
Mini-symposium: Antidotes

Session chair:

16.15 Uridine triacetate: Antidote for 5-fluorouracil overexposure (15)
Michael Bamat, Robert Tremmel, Joan Helton, Reid von Borstel
Wellstat Therapeutics LLC, Gaithersburg, MD, USA

16.30 Pyridoxine is still useful in isoniazid poisoning? (16)
Monia Aloise, Valeria M Petrolini, Emanuela Cortini, Davide Lonati, Marta Mazzoleni,
Giulia Scaravaggi, Sarah Vecchio, Andrea Giampreti, Carlo A Locatelli
Poison Control Centre and National Toxicology Information Centre, IRCCS Maugeri
Foundation and University of Pavia, Pavia, Italy

16.45 Modified-release paracetamol (Panadol Osteo®) poisoning: Is the Australasian
management guideline being followed? (17)
Andis Graudins
Toxicology and Addiction Medicine Service, Monash Health and Southern Clinical School,
Melbourne, Victoria, Australia

17.00 Effects of initial acetylcysteine infusion rates on adverse reactions in paracetamol
overdose: A cohort study (18)
D Nicholas Bateman¹, Janice M Pettie¹, Robert Carroll⁴, Margaret A Dow¹, Judy Coyle²,
Kristina R Cranfield³, Alisdair Gray³, Christopher Hook², Euan A Sandilands¹,
Aravindan Veiraiah¹, David J Webb³, James W Dear¹,³, Michael Eddleston¹,³
¹NPIS Edinburgh, Royal Infirmary of Edinburgh, Edinburgh, UK; ²Emergency Medicine
Research Group, Royal Infirmary of Edinburgh, Edinburgh, UK; ³Pharmacology, Toxicology
& Therapeutics, University/BHF Centre for Cardiovascular Science, Edinburgh, UK; ⁴School
of Social and Community Medicine, University of Bristol, Bristol, UK
Symposium: Chemical warfare agents (continued)

17.15  Keynote lecture: Which oxime should be used for the treatment of nerve agent poisoning?  
      Franz Worek  
      Bundeswehr Institute of Pharmacology & Toxicology, Munich, Germany

At the end of this session the audience should be able to:
- distinguish the pharmacological properties of relevant oximes
- contrast the advantages and limitations of oxime therapy in poisoning by different nerve agents
- select appropriate oximes, to determine effective doses, dosing intervals and duration of oxime therapy

17.35  Keynote lecture: Diagnosis and therapy of poisoning by incapacitating agents  
       Paul Rice  
       Dstl, Porton Down, Salisbury, UK

At the end of this session the audience should be able to:
- describe the major categories of agents regarded as incapacitating agents
- recognise the typical clinical presentations associated with poisoning by these agents
- describe the medical management of cases due to poisoning by these agents

17.55  GENERAL DISCUSSION

18.00 Close
Mini-symposium: Antidotes (continued)

Session chair:

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**Pro:** Kurt Anseeuw  
*Emergency Department, ZNA Stuivenberg, Antwerpen, Belgium*

**Con:** John P Thompson  
*All Wales Therapeutics & Toxicology Centre, Cardiff University, Cardiff, UK*

At the end of this session the audience should be able to:
- discuss the antidotes for cyanide poisoning
- evaluate whether hydroxocobalamin is the appropriate first-line antidote after smoke inhalation and for which patients

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**18.00 Close**
Symposium: Main challenges for the future

Session chair:

**09.00** PLENARY LECTURE
Evidence based treatments

Nicholas A Buckley

*Clinical Pharmacology, University of Sydney, Sydney, Australia*

At the end of this session the audience should be able to:
- discuss why some treatments are regarded as more 'evidence-based' than other treatments
- examine the relevance to toxicology of the more recent variations in hierarchies of evidence, including increased recognition of 'mechanistic evidence' and 'all or nothing' evidence.
- recognise some of the common pitfalls in design of clinical trials in toxicology that lead to 'failure' to create stronger evidence; in particular lack of careful consideration of interventions, doses, primary outcomes, inclusion criteria, sample size and trial termination

**09.45** Keynote lecture: Nanotoxicology: where are we now?

Dominique Lison

*Louvain Centre for Toxicology and Applied Pharmacology, Université catholique de Louvain, Brussels, Belgium*

At the end of this session the audience should be able to:
- define a nanomaterial
- identify the challenges, promises and drawbacks of nanotoxicology
- explain why progress has been (is) slow in defining health risks of nanomaterials

**10.05** Keynote lecture: What’s new in analytical toxicology

Jean-Claude Alvarez

*Pharmacology & Toxicology, APHP and Versailles University, Garches, France*

At the end of this session the audience should be able to:
- outline how new technology like mass spectrometry can be helpful when analyzing blood after suspicion of acute intoxication
- describe the value of hair analysis in the detection of acute or chronic intoxication, or in drug facilitated sexual assault
- examine the possibility of identifying and quantifying new drugs such as designer drugs responsible for acute or chronic intoxications

**10.25** GENERAL DISCUSSION

10.30 - 11.00 Coffee and Posters (132-233)
PLENARY LECTURE (Copper Hall)
Evidence based treatments

Symposium: Poisonings from animals

Session chair:

09.45 Ciguatera outbreak in Germany in 2012 (122)
Martin M Ebbecke, Andreas Schaper, Herbert Desel
GIZ-Nord Poisons Centre, University Medical Center Göttingen, Göttingen, Germany

10.00 Measurement of venom and clotting function in patients with Russell's viper coagulopathy and response to antivenom (123)
Kalana Maduwage¹, Fiona Scorgie², Mohamed Fahim³, Harindra Karunathilake⁴,
Chandana Abeyasinghe⁵, Margaret A O'Leary⁵, Christeine A Ariaratnam⁵,
Geoffrey K Isbister¹
¹School of Medicine and Public Health, University of Newcastle, Newcastle, Australia;
²Hunter Haematology Research Group, Calvary Mater Newcastle, Newcastle, Australia;
³South Asian Clinical Toxicology Research Collaboration, Peradeniya, Sri Lanka;
⁴Chilaw Hospital, Sri Lanka; ⁵Department of Medicine, University of Colombo,
Colombo, Sri Lanka

10.15 Negative predictive value of excluding embedded snake foreign body by ultrasound (124)
William F Rushton¹, Priyanka Vakkalanka¹, James H Moak², Nathan P Charlton¹
¹Division of Medical Toxicology, University of Virginia School of Medicine, Charlottesville,
VA, USA; ²Department of Emergency Medicine, University of Virginia School of Medicine,
Charlottesville, VA, USA

10.30–11.00 Coffee and Posters (132-233)
Symposium: Main challenges for the future (continued)

Session chair:

11.00 Keynote lecture: Is there a risk of systemic metal poisoning from prosthetic hips?

Sally M Bradberry¹, J Mark Wilkinson², Robin E Ferner³

¹West Midlands Poisons Unit, City Hospital, Birmingham, UK; ²Department of Human Metabolism, University of Sheffield, Sheffield, UK; ³West Midlands Centre for Adverse Drug Reactions, City Hospital, Birmingham, UK

At the end of this session the audience should be able to:

• explain the reasons for the recent increased concern regarding possible heavy metal toxicity from prosthetic metal hips.
• describe the circumstances in which cobalt poisoning might arise in prosthetic hip recipients.
• appreciate the problems encountered in assessing the risk of cobalt poisoning in metal hip recipients.

11.20 Keynote lecture: Aluminum toxicity in infants & children: What's known & what isn't

Alan D Woolf¹,²,³

¹Pediatric Environmental Health Center, Boston Children’s Hospital, Boston, USA; ²Harvard Medical School, Boston, USA; ³Region 1 New England Pediatric Environmental Health Specialty Unit (PEHSU), Boston, USA

At the end of this session the audience should be able to:

• name three groups of infants and children who are most vulnerable to aluminum toxicity
• list three organ systems often adversely affected in aluminum overload states
• describe research needs in the assessment of a child’s aluminum body burden

11.40 GENERAL DISCUSSION

11.50 Keynote lecture: How safe is food? Threats with unexpected toxic substances

Robin E Ferner

West Midlands Centre for Adverse Drug Reactions, City Hospital, Birmingham, UK

At the end of this session the audience should be able to:

• explore the global span and length of the food chain
• describe what toxicological problems have arisen in the past
• identify the key indicators of a food-related incident

12.10 Keynote lecture: Social network research methodology involving the Internet

Alex F Manini

Division of Medical Toxicology, Icahn School of Medicine at Mount Sinai, New York, USA

At the end of this session the audience should be able to:

• contrast the advantages and disadvantages of survey research versus social media research
• describe the concept of toxicovigilance and how it may be applied to social media research
• list three analytic techniques which may be applied to social media research for the purposes of toxicovigilance

12.30 GENERAL DISCUSSION

12.45 – 14.00 Lunch and Posters (132-233)
Symposium: Poisonings from animals (continued)

Session chair:

11.00 Predicting the severity of common krait envenomation at presentation: What signs to trust? (125)
   Ashish Bhalla, Mayank Singhal, Surjit Singh, Navneet Sharma, Sushil Kumar
   Department of Internal Medicine, PGIMER, Chandigarh, India

11.15 Scorpion envenomation management at King Khalid General Hospital Al Majmaah, Saudi Arabia: A study of 254 cases (126)
   N Ben Salah¹, Youssef Blel², Hafedh Thabet²
   ¹Emergency Department, King Khalid General Hospital Al Majmaah, Saudi Arabia;
   ²Anti Poison Center, Tunis, Tunisia

11.30 Clinical consequences of scorpion stings in Campinas, São Paulo State, Southeastern Brazil (127)
   Fabio Bucaretchi¹,², Eduardo M De Capitani¹,³, Stephen Hyslop¹,⁴, Ronan J Vieira¹,³, Luciane CR Fernandes¹, Carla B Fernandes¹, Maira M Branco¹, Camila C Prado¹.
   ¹Campinas Poison Control Center; ²Department of Pediatrics; ³Department of Clinical Medicine; ⁴Department of Pharmacology, State University of Campinas, Campinas, Brazil

11.45 The knowledge of receiving antivenom is more effective than antivenom or analgesia for treating latrodecism (128)
   Geoffrey K Isbister¹, Nicholas A Buckley², Simon GA Brown³
   ¹Department of Clinical Toxicology, Calvary Mater Newcastle, NSW, Australia; ²Medical Professorial Unit, University of New South Wales, NSW, Australia; ³Centre for Clinical Research in Emergency Medicine, Royal Perth Hospital, WA, Australia

12.00 Pro/Con debate
   Gastric lavage should be stopped totally vs gastric lavage is sometimes useful

   Pro: Sophie Gosselin
   Emergency Medicine, McGill University Health Centre & Centre Antipoison du Québec, Québec, Canada

   Con: Lewis Nelson
   Emergency Medicine, New York University School of Medicine, New York, NY, USA

   At the end of this session the audience should be able to:
   • discuss situations in which gastric lavage might be useful
   • evaluate whether gastric lavage could be totally abandoned

12.45 – 14.00 Lunch and Posters (132-233)
Symposium: Revisiting the challenges posed by new recreational drugs

Session chair:

14.00 PLENARY LECTURE
Minning the GPCR-ome to discover molecular targets for drug actions and side-effects

Bryan L. Roth
Pharmacology, UNC Chapel Hill Medical School, Chapel Hill, NC, USA

At the end of this session the audience should be able to:
- identify the 5-HT2B serotonin receptor as a major target for drug-induced valvular heart disease
- describe the power of genomic technology to discovery molecular targets responsible for drug side-effects
- discuss the power of genomic technology to propel therapeutic drug discovery

14.45 Keynote lecture: Toxicosurveillance of novel psychoactive substances: An European Monitoring Centre for Drugs and Drug Addiction perspective

Michael Evans-Brown
Supply Reduction and New Trends Unit, European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), Lisbon, Portugal

At the end of this session the audience should be able to:
- describe the European Union Early Warning System on new psychoactive substances which provides a fast-track mechanism for the information-exchange and rapid response to new drugs
- list examples and case studies describing the objectives, functioning and recent outputs of the Early Warning System
- discuss the challenges in monitoring and responding to new psychoactive substances

15.05 Keynote lecture: Toxicosurveillance of novel psychoactive substances: A poisons centre perspective

Simon L. Hill
National Poisons Information Service UK (Newcastle Unit), Royal Victoria Infirmary, Newcastle-upon-Tyne, UK

At the end of this session the audience should be able to:
- describe the challenges associated with recording the possible harms of novel psychoactive substances (NPS) and list the other sources of information available
- compare the type and detail of data generated by poisons centres regarding NPS with that from other sources, discuss the limitations of each
- list examples where poisons centre data have been used in conjunction with other data sources to identify possible harms associated with NPS

15.25 GENERAL DISCUSSION

15.30 - 16.00 Coffee and Posters (132-233)
Symposium: New insights in mechanisms of toxicity and their clinical relevance

Session chair:

14.00 Keynote lecture: Role of epigenetics in toxicity: State of the art and clinical implications

Wilhelm Bloch
Department of Molecular and Cellular Sport Medicine, German Sport University, Cologne, Germany

At the end of this session the audience should be able to:
- describe how chromatin packages may be epigenetically regulated by modification of histones and how DNA may be altered by methylation and/or acetylation
- discuss how epigenetic modulation allows long-term regulation of gene activity and how it explains the long-term effects of toxic agents
- identify how detection of epigenetic modifications could be considered in prediction of future disease risk in order to determine the effective countermeasures to prescribe as well as to set up toxicity safety assessments

14.20 Keynote lecture: miRNA in toxicology

James W Dear
National Poisons Information Service (Edinburgh Unit), Royal Infirmary of Edinburgh, Edinburgh, UK

At the end of this session the audience should be able to:
- discuss what microRNA do inside and outside the cell
- describe the strengths and weaknesses of microRNA as toxicity biomarkers in blood and urine
- list how microRNA could mediate toxicity in a variety of tissues

14.40 Keynote lecture: Integrating mechanistic research for management of toxic alcohol poisoning (130)

Kenneth E McMartin, Greg Landry, Corie Robinson, Taylor Conrad
Louisiana State University Health Sciences Center, Shreveport, Louisiana, USA

At the end of this session the audience should be able to:
- describe the basic mechanistic work that has shown that diglycolic acid is the nephrotoxic metabolite of diethylene glycol poisoning
- discuss the importance of intracellular transport of diglycolic acid and how inhibitors of such transport might be useful new therapies for the renal toxicity of diethylene glycol
- discuss the mechanisms by which diglycolic acid can reduce mitochondrial oxidative phosphorylation leading to cell death

15.00 DNA-adducts and DNA repair after alkylation: Relevance for clinical toxicology

Kai Kehe¹, Horst Thiermann²
¹Military Medical Research and Development, Bundeswehr Medical Academy, Munich, Germany; ²Bundeswehr Institute of Pharmacology and Toxicology, Munich, Germany

At the end of this session the audience should be able to:
- describe the molecular action of DNA alkylation agents e.g. sulfur mustard and link it to the clinical picture
- predict the clinical course of sulfur mustard burns (acute toxicology) and link it to late effects
- recommend diagnostic tools and treatment

15.20 GENERAL DISCUSSION

15.30 – 16.00 Coffee and Posters (132-233)
Symposium: Revisiting the challenges posed by new recreational drugs
(continued)

Session chair:

16.00 Keynote lecture: Toxicosurveillance of novel psychoactive substances: An emergency department perspective and the role of the European Drug Emergencies Network (Euro-DEN) project (129)

David M Wood1,2, Paul I Dargan1,2
1Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust and King’s Health Partners, London, UK; 2King’s College London, London, UK

At the end of this session the audience should be able to:
• describe the limitations of currently available sources of acute toxicity (harm) related to the use of novel psychoactive substances (NPS)
• describe how data on presentations to Emergency Departments with acute toxicity related to the use of NPS can be collected and the usefulness of this information
• describe the development of the European Drug Emergencies Network (Euro-DEN) and what information on acute toxicities of recreational drugs and NPS this can project aims to add to that already available

16.20 Keynote lecture: International overview of prescription drug misuse

Richard C Dart
Rocky Mountain Poison and Drug Center, Denver Health and Hospital Authority, Denver, USA

At the end of this session the audience should be able to:
• compare overall prescription drug abuse trends between countries
• describe the relationship between opioid consumption by country and the abuse of prescription opioids in that country
• discuss the trends for most commonly abuse opioids and stimulants

16.40 *Monoamine transporter and receptor interaction profiles of halogenated phenethylamines (166)

Anna Rickli1, Marius C Hoener2, Matthias E Liechti3
1Clinical Pharmacology and Toxicology, University Hospital Basel, University of Basel, Switzerland; 2Neuroscience Research, F. Hoffmann-La Roche Ltd, Basel, Switzerland

16.45 *Prevalence of analytically confirmed intoxications by new psychotoxic substances in Italy: Data from Pavia Poison Centre and National Early Warning System (167)

Carlo A Locatelli1, Davide Loni1, Eleonora Buscaglia1, Pietro Papa1, Valeria M Petrolini1, Sarah Vecchio1, Andrea Giampretti1, Catia Seri3, Clauudia Rimondo1, Elisa Rola1, Teresa Cocci1, Teodora Macchia5
1Poison Control Centre & National Toxicology Information Centre and Clinico-toxicological Coordinating Centre of the National Early Warning System, IRCCS Maugeri Foundation, Pavia; 2Laboratory of Analytical Toxicology, IRCCS Policlinico San Matteo Foundation, Pavia; 3Addiction Department, ULSS 20, Verona; 4Laboratory of Clinical Toxicology, IRCCS Salvatore Maugeri Foundation, Pavia; 5Department of Therapeutic Research and Medicines Evaluations, Istituto Superiore di Sanità, Rome

16.50 *Toxicity after reported use of benzofury compounds ([2-aminopropyl]-2,3-dihydrobenzofurans) compared with mephedrone. A report from the UK National Poisons Information Service (168)

Ashraf Kamour1, David James1, David J Lupton2, Gillian Cooper1, Michael Eddleston3, Allister J Vale4, John P Thompson3, Ruben HK Thanacoody5, Simon L Hill1, Simon HL Thomas1
1National Poisons Information Service & Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle upon Tyne, UK; 2Royal Infirmary of Edinburgh, Edinburgh, UK; 3University Hospital Llandough, Cardiff, UK; 4City Hospital, Birmingham, UK

*See page 46

Close 16.55
Symposium: New insights in mechanisms of toxicity and their clinical relevance
(continued)

Session chair:

16.00  **Keynote lecture: TRP channels in the respiratory tract: potential therapeutic targets in toxic lung injury**

Thomas Gudermann\(^1\), Dirk Steinritz\(^2\), Alexander Dietrich\(^3\)

\(^1\)Pharmacology & Toxicology, University of Munich, Munich, Germany; \(^2\)Bundeswehr Institute of Pharmacology & Toxicology, Munich, Germany

At the end of this session the audience should be able to:

- explain the role of Transient Receptor Potential (TRP) ion channels in cellular signaling processes
- explain the contribution of TRP channels to toxic lung injury in response to oxidative stress and toxic chemicals
- list the advantages of TRP channels as therapeutic targets in acute toxic lung injury

16.20  **Keynote lecture: Genetic susceptibility in toxicology**

Munir Pirmohamed

*The Wolfson Centre for Personalised Medicine, Institute of Translational Medicine, Liverpool, UK*

At the end of this session the audience should be able to:

- explain the basic concepts of pharmacogenetics and pharmacogenomics, including commonly used terminology (genotype, phenotype, allele, SNP, genome, etc)
- discuss the role of genetics in the response to drugs and other toxins
- give examples of some clinically important toxicological processes subject to genetic variability and explain the mechanisms involved

16.50  **Carbon monoxide release curves from measurements during indoor charcoal burning: Systematic research on toxic levels for humans** (131)

Axel Hahn\(^1\), Sebastian Zellmer\(^1\), Benno Riesselmann\(^2\), Simone Krüger\(^3\), Tina Raspe\(^3\), Silke Schwarz\(^3\), Sebastian Stahn\(^3\), Klaus Urban\(^3\)

\(^1\)Federal Institute for Risk Assessment, Berlin, Germany; \(^2\)State Institute of Legal and Social Medicine Berlin, Department of Forensic Toxicology, Berlin, Germany; \(^3\)Federal Institute for Materials Research and Testing (BAM), Berlin, Germany

17.05  **Close**

17.15  **EAPCCT GENERAL ASSEMBLY**
YOUNG INVESTIGATOR AWARD

Session chair:

08.30 Introduction to Young Investigator Award

08.35 Clinical findings and genomic biomarkers in three cases of chronic ciguatera poisoning (234)

Davide Lonati\(^1\), Miryam Martinetti\(^2\), Annamaria Pasi\(^2\), Anna Gatti\(^1\), Michele Buonocore\(^3\), Carlo A Locatelli\(^1\)

\(^1\)Pavia Poison Centre and National Toxicology Information Centre, IRCCS Maugeri Foundation Hospital; \(^2\)Immunogenetics Laboratory, Immunohematology and Transfusion Center, IRCCS Policlinico San Matteo Foundation; \(^3\)Unit of Clinical Neurophysiology & Neurodiagnostic Skin Biopsy, IRCCS Maugeri Foundation Clinical Institute, Pavia, Italy

08.50 The role of GABA receptors during intoxications with designer drugs: A mechanism-based approach for piperazine-derivatives (235)

Laura Hondebrink\(^1\), Elise JP Hermans\(^2\), Regina GDM van Kleef\(^2\), Jan Meulenbelt\(^1,2,3\), Remco HS Westerink\(^2\).

\(^1\)National Poisons Information Center, University Medical Center Utrecht; \(^2\)Neurotoxicology Research Group, Institute for Risk Assessment Sciences, Utrecht; \(^3\)Department of Intensive Care Medicine, University Medical Center Utrecht, The Netherlands

09.05 Pharmacokinetic study of mitragynine in Kratom abuse users (236)

Satariya Trakulsrichai\(^1,2\), Kothum Sathirakul\(^3\), Saranya Auparakkitanon\(^4\), Jatupon Krongvorakul\(^5\), Jetiammong Sueajai\(^6\), Nantida Noumjad\(^7\), Winai Wananukul\(^2\)

\(^1\)Emergency Department, Ramathibodi Hospital; \(^2\)Ramathibodi Poison Center, Ramathibodi Hospital; \(^3\)Department of Pharmacy, Mahidol University; \(^4\)Department of Pathology, Ramathibodi Hospital, Bangkok, Thailand

09.20 Study of lithium pharmacokinetics in the rat according to the three different modalities of human poisoning (237)

Anne-Sophie Hanak\(^1\), Lucie Chevillard\(^1\), Souleiman El-balkhi\(^1\), Patricia Risède\(^1\), Katell Peoc'h\(^1\), Bruno Mégabarane\(^1,2\)

\(^1\)INSERM U1144, Paris-Descartes University; \(^2\)Department of Toxicological and Medical Intensive Care, Lariboisière Hospital, Paris, France

09.35 Judging commences

09.35 Keynote lecture: The Wetteren acrylonitrile disaster: Management, media communication, and biomarker-based screening

Peter De Paepe\(^1\), An Van Nieuwenhuyse\(^2\), Christophe Stove\(^3\), Walter Buylaert\(^1\)

\(^1\)Department of Emergency Medicine, Ghent University Hospital, Ghent, Belgium; \(^2\)Scientific Institute of Public Health, Brussels, Belgium; \(^3\)Laboratory of Toxicology, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium

At the end of this session the audience should be able to:
- describe the medical management aspects of large-scale chemical disasters
- develop an understanding of the pitfalls and difficulties of risk and crisis communication
- list the advantages and limitations of biomonitoring

09.55 Presentation to the winner of the Young Investigator Award

\(10.00 \sim 10.30\) Coffee and Posters (250-330)
<table>
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<tr>
<th>Time</th>
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<tr>
<td>08.30 – 10.00</td>
<td>YOUNG INVESTIGATOR AWARD (Copper Hall) and Keynote lecture: The Wetteren acrylonitrile disaster: Management, media communication, and biomarker-based screening (Copper Hall)</td>
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<tr>
<td>10.00 – 10.30</td>
<td>Coffee and Posters (250-330)</td>
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</table>
Symposium: Poisonings in the developing world / resource-limited areas

Session chair:

10.30 Keynote lecture: Challenging the limitation of clinical toxicology in the developing world: Where do we go from here? (238) Andrew Dawson
NSW Poisons Center, Prince Alfred Hospital, Sydney, Australia

At the end of this session the audience should be able to:

- describe core limitations in global clinical toxicology
- discuss translational research block
- list some successful or potential strategies for addressing these blocks
Round table: Role of poison centres in the eyes of the European partners

Session chair:

10.30 To improve product safety in Europe
European Commissionaire

10.40 To influence Public Health-related decisions based on risk assessment
Herbert Desel
GIZ-Nord Poisons Centre, University Medical Center Göttingen, Göttingen, Germany

At the end of this session the audience should be able to:
- list the steps for clinical risk assessment in exposure cases reported to poison centres
- discuss mechanisms used to identify new poisoning risks and trends
- describe the cooperation of poison centres and other stakeholders (public health authorities, industry) in cases of detection of unusual events with risk of mass poisoning casualties

10.50 To assess population health threats from chemicals
Paolo Guglielmetti
DG Sanco Health Threats Unit, European Commission, Luxembourg

At the end of this session the audience should be able to:
- list the scope and content of the new Decision of the European Parliament and the Council on serious cross border threats to health
- describe the flow of procedures and activities intended to capture signals, confirm and assess such threats
- discuss the respective roles of the Commission's Scientific Committee, experts' networks, and other EU bodies in the risk/threat assessment, management and coordination of response, including the recent developments of the Early Warning and Response System (EWRS) and of the Rapid Alert System for Chemical events (RAS CHEM)

11.00 To identify toxicological hazards and risks in clinical toxicology
Irma de Vries
National Poisons Information Center, University Medical Center Utrecht, Utrecht, The Netherlands

At the end of this session the audience should be able to:
- discuss the importance of the use of Early Warning Systems by PCs
- describe how PCs can contribute and work together to prevent poisonings on a European (and global) scale
- explain how close cooperation between PCs and national Health Authorities benefits European Early Warning Systems in case of toxicological hazards
Symposium: Poisonings in the developing world / resource-limited areas (continued)

Round table: Adapting guidelines and recommendations for the developing world

Session chair:

10.50 How perfect turns into “as good as it gets”: Methanol

Knut Erik Hovda
The National CBRNe Centre, Oslo University Hospital, Ullevaal, Norway

At the end of this session the audience should be able to:
• explain why the existing guidelines for methanol poisonings have a limited value in most of the world
• describe how the existing guidelines can be used to develop a locally adapted diagnosis- and treatment protocol
• list the main limiting factors for a beneficial outcome in methanol poisonings in the areas where they most often occur

11.05 How perfect turns into “as good as it gets”: Organophosphates

Michael Eddleston
NPIS, Edinburgh, Royal Infirmary, Edinburgh, UK

At the end of this session the audience should be able to:
• explain the limitations that most clinicians will face in their treatment of poisoned patients in resource-limited areas
• describe the best way to administer atropine to a patient with OP pesticide poisoning
• discuss how management of organophosphate pesticide poisoning can be improved with widely available and affordable treatments

11.20 How perfect turns into “as good as it gets”: Paraquat

Indika Gawarammana
South Asian Clinical Toxicology Research Collaboration and Department of Medicine, University of Peradeniya, Peradeniya, Sri Lanka

At the end of this session the audience should be able to:
• describe the way in which management guidelines developed in the 1st world are not always applicable in the developing world settings of poisoning due to resource limitation
• discuss the best marker of prognosis following ingestion of paraquat (plasma paraquat level), which may be unavailable
• assess the usefulness of the urine dithionite test and creatinine levels which can predict outcome from paraquat self poisoning with decent accuracy

11.35 How perfect turns into “as good as it gets”: Lead

Paul I Dargan
Guy’s and St Thomas’ NHS Foundation Trust and King’s Health Partners, London, UK

At the end of this session the audience should be able to:
• describe the challenges with using standard lead chelation protocols in the Zamfara lead poisoning incident
• discuss how standard lead chelation protocols were adapted for use in the Zamfara lead poisoning incident
• describe the initial results from the use of this protocol

11.50 GENERAL DISCUSSION

12.05 - 13.30 Lunch and Posters (250-330)
**Round table: Role of poison centres in the eyes of the European partners**
(continued)

### 11.10 To build pharmacovigilance based on the new European legislation on medical drugs

**Simon Thomas**  
*National Poisons Information Service (Newcastle), Newcastle Hospitals NHS Foundation Trust, Newcastle-upon-Tyne, UK*

At the end of this session the audience should be able to:
- describe the new obligations imposed on national regulatory authorities by the recent EU Pharmacovigilance Directive (2010/84/EU)
- define suspected adverse drug reactions according to this Directive
- discuss how data collected by poisons centres may assist regulatory authorities in meeting their new obligations under the terms of the Directive

### 11.20 To harmonize poisoning case data collection for regulatory needs

**Axel Hahn**  
*Federal Institute for Risk Assessment (BfR), Berlin, Germany*

At the end of this session the audience should be able to:
- discuss the implementation of a standard dataset of poisoning cases based on EAPCCT definitions
- explore the harmonisation of at least the most important items on different poisoning database platforms
- develop a harmonised categorisation system for poisonings linked to a notification process of products

### 11.30 To provide useful data for product classification

**Sylvie Lemoine**  
*A.I.S.E. - International Association for Soaps, Detergents and Maintenance products, Brussels, Belgium*

At the end of this session the audience should be able to:
- demonstrate how to build on experience and expertise from poisons centres to successfully generate statistically robust information for Classification and Labelling of chemicals (eye effects of detergents)
- describe the complementary roles of poison centres and industry in managing incidents in specific sectors
- plan the way for more such cooperation, as appropriate

### 11.40 GENERAL DISCUSSION

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*12.00 - 13.30 Lunch and Posters (250-330)*
Symposium: Poisonings in the developing world / resource-limited areas
(continued)

Session chair:

13.30  Keynote lecture: Toxic and corrosive: What should be done for first aid?  

Daníela Peléclova  

Toxicological Information Centre, Charles University, Prague, Czech Republic

At the end of this session the audience should be able to:

- describe the preferred recommendations for first aid after ingestion of toxic agents
- describe the preferred recommendations for first aid after ingestion of corrosives
- explain the controversy in first aid recommendations and list several agents with both effects and recommend the optimal first aid for ingestion of those agents, based on the mechanisms and literature data

13.50  Keynote lecture: Phosphides and phosphine: Mechanisms for toxicity and range of the problem (239)  

Hossein Hassanian-Moghaddam  

Department of Clinical Toxicology, Shahid Beheshti University of Medical Sciences, Tehran, Iran

At the end of this session the audience should be able to:

- discuss aluminum and zinc phosphide poisonings and their prevalent in Asian countries
- describe the most common presentations of these toxicities
- evaluate the most recent achievements in their management

14.10  Keynote lecture: Ayurvedic drugs: It’s a jungle out there (240)  

Ashish Bhalla  

Post Graduate Institute of Medical Education and Research, Chandigarh, India

At the end of this session the audience should be able to:

- discuss the basics of Ayurvedic medicine use and the scope of the problem
- describe the nature of ayurvedic medicine toxicity and the complexities of attributing effect to any single component of the medicine
- list the possible interactions between conventional and ayurvedic drugs and the ways these can be prevented

14.30  Keynote lecture: Pharmaceutical poisoning spectrum in the developing countries in Asia: Epidemiologic data and possible causes of poisoning  

Chen-Chang Yang  

Division of Clinical Toxicology & Occupational Medicine, Taipei Veterans General Hospital, Taipei, Taiwan

At the end of this session the audience should be able to:

- describe the epidemiology of pharmaceutical poisonings in developing Asian countries
- contrast the differences in the pattern of pharmaceutical poisonings between various Asian countries
- identify possible causes and related geographic variation of pharmaceutical poisonings across developing Asian countries
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<th>Time</th>
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<tr>
<td>13.30</td>
<td>Poster discussion session</td>
<td>Alison Good, Horst Thiermann</td>
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Session chair: Alison Good, Horst Thiermann
Symposium: Poisonings in the developing world / resource-limited areas
(continued)

Session chair:

14.50 Keynote lecture: Setting up poison information services in developing countries: needs and accomplishments: The Poison Control Centre of Senegal (241)
Amadou Diouf¹,², Absa Lam Faye¹
¹Centre Anti Poison, Ministère de la Santé et de l’Action Sociale, Dakar, Sénégal; ²Laboratoire de Toxicologie et d’Hydrologie, Université Cheikh Anta Diop, Dakar, Sénégal

At the end of this session the audience should be able to:
• discuss international initiatives on public health with respect to poisoning
• describe the setting up of a poisons centre in a developing country
• list the requirements and potential achievements of such a poisons centre

15.10 Feasibility study for a sub-regional poisons centre in the Eastern Africa sub-region (242)
John N Edwards¹, Joanna H Tempowski², Hawa S Senkoro³, Clare Roberts¹, Carine J Marks⁴, Caesar Nyadzedzor⁵, Dexter Tagwireyi⁸, Tom Menge⁷, David Kapindula⁹, Christopher Kanema⁹
¹Nick Edwards Consulting Ltd, London, UK; ²International Programme on Chemical Safety, World Health Organisation, Geneva, Switzerland; ³World Health Organisation, Brazzaville, Congo; ⁴Poisons Centre, Red Cross War Memorial Children's Hospital, Cape Town, South Africa; ⁵Tygerberg Poison Information Centre, Stellenbosch University, Cape Town, South Africa; ⁶Ghana Poisons Information Centre, Ridge Hospital, Accra, Ghana; ⁷National Poison Information and Management Centre, Kenyatta National Hospital, Nairobi, Kenya; ⁸Drug and Toxicology Information Service, Harare, Zimbabwe; ⁹Zambian Environmental Management Agency, Lusaka, Zambia

15.25 GENERAL DISCUSSION

15.30 - 16.00 Coffee and Posters (250-330)
Mini-symposium: What's new in drugs of abuse?

Session chair:

14.30 The pharmacology of novel psychoactive substances (246)
Matthias E Liechti¹, Linda D Simmler¹, Anna Rickli¹, Marius C Hoener²
¹Clinical Pharmacology, University of Basel, Switzerland; ²Neuroscience Research, F. Hoffmann-La Roche Ltd, Basel, Switzerland

14.45 Novel and emerging recreational drug detection: A signals intelligence approach (247)
Silas W Smith¹,², Cole Gibbons³, Brian J Gilberti³
¹Department of Emergency Medicine, NYU School of Medicine, New York, USA; ²New York City Poison Control Center, New York, NY, USA; ³NYU School of Medicine, New York, USA

15.00 Novel synthetic cannabinoid outbreak causing severe illness (248)
Janetta L Iwanicki¹,³, Dazhe J Cao¹,²,³, Jason Hoppe¹,², Christopher O Hoyte¹,², Alvin C Bronstein¹,², Eric J Lavonas¹,³, Kennon J Heard¹,², Kristen Carpenter³, Andrew A Monte¹,²
¹Medical Toxicology, Rocky Mountain Poison and Drug Center, Denver, USA; ²Department of Emergency Medicine, University of Colorado School of Medicine, Aurora, USA; ³Department of Emergency Medicine, Denver Health Medical Center, Denver, USA

15.15 Acute effects of methylphenidate in healthy subjects alone or in combination with MDMA (249)
Yasmin Schmid, Cédric M Hysek, Matthias E Liechti
Clinical Pharmacology, University Hospital Basel, Basel, Switzerland

15.30 - 16.00 Coffee and Posters (250-330)
Mini-symposium: Management of severe poisonings

Session chair:

16.00 Pro/Con debate
Should we intubate all drug-induced comatose patients?

Pro: Philippe Hantson
*Intensive Care, Cliniques St-Luc, Brussels, Belgium*

Con: Bruno Mégarbane
*Medical and Toxicological Intensive Care Unit, Lariboisière Hospital, Paris, France*

At the end of this session the audience should be able to:
- describe when intubation is generally used in drug overdose
- discuss the value of intubating all drug overdose patients who are comatose

16.45 Methanol and formate elimination half-life during treatment for methanol poisoning: Intermittent hemodialysis vs. continuous hemodialysis / hemodiafiltration *(243)*

Sergey Zakharov¹, Daniela Pelclova¹, Tomas Navratil², Jaromir Belacek³, Ivana Kurcova⁴, Ondrej Komzak⁴, Knut Erik Hovda⁵

¹Toxicological Information Center, General University Hospital at Charles University, Prague, Czech Republic; ²Department of Biophysical Chemistry, J. Heyrovský Institute of Physical Chemistry, Prague, Czech Republic; ³Institute of Biophysics and Informatics at Charles University, Prague, Czech Republic; ⁴Department of Toxicology, Institute of Forensic Medicine and Toxicology at Charles University, Prague, Czech Republic; ⁵Norwegian Center for NBC Medicine, Oslo University Hospital, Ullevaal, Norway

17.00 Ú-amanitin poisoning: Outcome in 242 patients treated with the Pavia mushroom protocol (N-acetylcysteine, forced diuresis and multiple-dose activated charcoal) *(244)*

Valeria M Petrolini, Sarah Vecchio, Marta Crevani, Eleonora Buscaglia, Davide Lonati, Andrea Giampreti, Teresa Coccini, Elisa Roda, Davide Acerbi, Monia Aloise, Francesca Chiara, Carlo A Locatelli

Pavia Poison Control Centre - National Toxicology Information Centre, IRCCS Maugeri Foundation, Pavia, Italy

17.15 Arteriovenous extracorporeal life support in drug-induced cardiogenic shock: A ten-year experience *(245)*

Frédéric J Baud¹, Pascal Leprince², Nicolas Deye¹, Isabelle Malissin¹, Pierre Brun¹, Bruno Mégarbane¹, Louis Modestin¹, Alain Pavie², Iradj Gandjbakhch³

¹Medical and Toxicological Intensive Care Unit, Lariboisière Hospital, Paris, France; ²Cardiothoracic Surgery Department, La Pitié-Salpêtrière Hospital, Paris, France

17.30 Close
The best paper session

Session chair: Knut Erik Hovda, Régis Bédry

16.00 The best papers of 2013

An international panel will each be asked to select a clinical toxicology paper published in the year 2013 that they consider to be among the best. Three speakers, from different countries will defend their choice in a brief 10 minute presentation followed by discussion.

Discussants and papers:

Max Goyffon

RDDM Department, National Museum of Natural History, Paris, France


Carlo Locatelli

Poison Control Centre and National Toxicology Information Centre, Toxicology Unit, IRCCS Maugeri Foundation, Pavia, Italy


Dag Jacobsen

Department of Acute Medicine, Oslo University Hospital Ullevaal, Oslo, Norway

17.30 Close
Epidemiology

19. Use of artificial adaptive system software for real-time Poison Center outbreak localization
   Alvin C Bronstein, Weldon A Lodwick, Massimo P Buscema

20. Using Twitter to measure underage alcohol usage
   Michael Chary, Nick Genes, Alex F Manini

21. Monitoring of domperidone and dextromethorphan intoxications reported to Poisons Information Center following change in legal sales status
   Henneke N Mulder-Spijkerboer, Antoinette JHP van Riel, Agnes G van Velzen, Jan Meulenbelt, Irma de Vries

22. Acute poisoning in psychiatric patients
   Konstantin M Brusin, Yulia V Krayeva, Viacheslav G Ustyuzhanin, Nikolay V Druzhinin, Knut Erik Hovda

23. Epidemiology and mortality of hospitalized acute poisonings in Yekaterinburg and Oslo: A comparison of two cities
   Konstantin M Brusin, Cathrine Lund, Yulia E Krayeva, Knut E Hovda

24. Impact of changes in UK management advice for paracetamol overdose on the numbers of adult patients admitted and treated in Newcastle upon Tyne?
   Muhammad EMO Elamin, Lucy C Peart, Simon L Hill, Simon HL Thomas

25. Etiology of severe acute fatal poisoning in southern Romania between 2004-2012
   Alexandru I Ulmeanu, Dora A Boghitoiu, G Viorela Nitescu, Coriolan E Ulmeanu

26. Acute renal damage: Cause of death in acute severe poisoning in children
   Alexandru I Ulmeanu, Dora Boghitoiu, Coriolan E Ulmeanu

27. Risks from Russia — an analysis of 225 intoxications with Russian medicines over a 15 year period
   Andreas Schaper, Alexander Emmert, Alessandro Ceschi

28. Evaluation of the completeness of epidemiological surveillance systems for poisoning by the capture-recapture system in Rabat and region, Morocco, 2012
   Asmae Khattabi, Nasser Meskaoui, Hanane Chaoui, Rachida Soulaymani-Bencheikh

   Narjis Badrane, Fatima Abadi, Fouad Chafi, Driss Soussi Tanani, Abdelmajid Soulaymani, Naima Rhalem, Rachida Soulaymani Bencheikh

30. Morbidity and mortality associated with exposures to over-the-counter combination acetaminophen products in the United States
   Edward P Krenzelok, Becki Bucher Bartelson, Jody L Green

31. Intentional substance exposures in young persons: Inquiries to the New Zealand Poisons Information Centre from 2008-2012
   Richard Mason
32. Acute fatalities reported to the National Poisons Information Centre of Ireland from 2000-2012: A prospective observational study
Nicola Cassidy, Patricia B. Casey, Edel Duggan

33. Enquiries to the National Poisons Information Centre, Dublin concerning new generation anticoagulant agents
Elaine Donohoe, Patricia Casey, Edel Duggan

34. Analysis of the database of patients admitted with acute intoxications with substances of abuse in a large, university toxicology unit
Oana Avram, Radu A Macovei, Ilenuta Danescu

35. Evolution of fatal cases by chemicals in the Spanish Toxic Surveillance System
Ana Ferrer-Dufol, Santiago Nogue-Xarau, Ana Serrano-Ferrer, Francisco Ruiz-Ruiz

36. Fatal Poisonings in the Toxicology Clinic of UMHATEM N.I.Pirogov for the period 2009 – 2011
Julia V Radenkova-Saeva, Rayna Stoyanova

37. Intentional self-poisoning by alkaline corrosive agents: A study for the period 2010-2012
Julia V Radenkova-Saeva, Anelia Loukova, Hristo Tzekov

38. Patients presenting with acute poisoning to an outpatient emergency clinic in Oslo: A one year prospective observational study
Odd Martin Vallersnes, Dag Jacobsen, Øivind Ekeberg, Mette Brekke

39. Self-poisoning with drugs in Bamako, Mali
Hinde Hami, Tidiane Diallo, Ababacar Maïga, Abdelrhani Mokhtari, Rachida Soulaymani-Bencheikh, Abdelmajid Soulaymani

40. Acute poisonings in Iceland: A prospective study of poisonings presenting to the Emergency Department at Landspitali University Hospital
Gudborg A Gudjonsdottir, Anna M Thordardottir, Jakob Kristinsson

Antidotes

41. Plasma pralidoxime concentrations: A paradigm in antidotal efficacy of pralidoxime towards paraoxon toxicity
Pascal Houze, Tania M Duarte, Frédéric J Baud, Chantal Martin, Olivier Laprevote

42. Paracetamol poisoning in Melbourne, Australia: Are we maintaining the NAC of treating paracetamol poisoning?
Andis Graudins

43. A review of physical exam findings associated with anticholinergic poisoning reversed with physostigmine
Timothy J Wiegand, Rachel Schult

44. Rivastigmine toxicity safely treated with pralidoxime without atropine
Larissa K Laskowski, Cindy Wang, Mary A Howland, Robert S Hoffman, Lewis S Nelson

45. A Belgian survey on the management of acute paracetamol intoxications by emergency physicians
Henk van Pelt, Martine Mostin
46. Hydroxocobalamin - an antidote for sodium azide poisoning?
   Kinga Barbecka-Mino, Helmut Schiel, Angelika Holzer, Tara Arif, Gerald Raab, Hermann Mascher

47. Successful use of fomepizole during second trimester of pregnancy
   Sian CD Harbon, John P Thompson

48. Poisonings in Greenland: Remote-area challenges
   Lotte CG Hoegberg, Niels E Ebbehoej

49. Five years of antivenom delivery: Cooperation between the National Serum Depot and the Dutch Poisons Information Center
   Marieke A Dijkman, Kees Van der Zwan, Jan Meulenbelt, Irma De Vries

50. Hydroxocobalamin administration falsely lowers carboxyhemoglobin determination
   Rana Biary, Lewis S Nelson, Robert S Hoffman, Daniel Lugassy

51. L-Carnitine supplementation in the treatment of acute valproic acid overdoses
   Maria Sili, Arianna Dillaghi, Arianna Totti, Brunella Occupati, Alessandra Pistelli, Guido Mannaioni

52. Factors associated with prehospital naloxone use in the United States: 2010
   Benjamin W Hatten, Robert G Hendrickson, Mohamud Daya, Rongwei Fu, Craig Newgard

53. Administration of expired methylene blue in patients with methemoglobinemia: A therapeutic dilemma
   Wanling Wong, Chen-Chang Yang, Jou-Fang Deng

54. Symptomatic methemoglobinemia in a home hemodialysis patient and tolerance of methylene blue
   Charlotte Van Ende, Vincent Haufroid, Eric Marion, Johann Morelle, Philippe Hantson

ADR and medication errors

55. Seizures and sustained encephalopathy following an accidental 4-aminopyridine overdose
   Maria Ballesta Méndez, Vincent van Pesch, Arnaud Capron, Philippe Hantson

56. Adverse consequences of low-dose methotrexate medication errors
   Thierry Vial, Anne-Marie Patat, Clement Gegu, Delphine Castellan, Antoine Villa, Helene Theophile, Luc De Haro, Dorothee Durand, Andrea D'Amico, Aurore Gouraud, Christine Payen, Jacques-Georges Descotes

57. A dietary supplement public health event
   Shireen Banerji, Alvin C Bronstein

58. Persistent effects after camphor ingestion: A case report and review of the literature
   Cynthia Santos, Jennifer Cabot

59. Vitamin D overdose in infant and newborns after medication error: Public health problem in Morocco
   Narjis Badrane, Loubna Alj, Driss Soussi Tanani, Naima Rhalem, Rajae Benkirane, Rachida Soulalymani Bencheikh

60. AV block II in a toddler after accidental ingestion of a single tablet of fingolimod for multiple sclerosis
   Jonas Höjer, Eva Olsson
61. Asymptomatic rhabdomyolysis after pyridoxine treatment of an isoniazid intoxication  
   Gabi Dostal, Katrin Romanek, Raphael Stich, Rudi Pfäb, Florian Eyer

62. A case report of exogenous human chorionic gonadotropin use leading to laparoscopy to exclude ectopic pregnancy  
   Scott N Lucyk, Stephanie H Hernandez, Lewis S Nelson

63. Metformin induced leukemoid reaction  
   Ross W Sullivan, Jennifer Cochran, Jeanna Marraffa

64. Post-injection delirium/sedation syndrome after olanzapine pamoate intramuscular injection confirmed by serum olanzapine concentrations  
   Magdalena Łukasik-Głębocka, Karina Sommerfeld, Artur Tełuk, Pawel Panieński, Czesław Łaba, Barbara Zielińska-Psujda

65. Toxic epidermal necrolysis associated with lomefloxacin: Case report and molecular typing studies  
   Arturo Zancan, Davide Lonati, Andrea Giampreti, Miryam Martinetti, Antonella Pasi, Maurizio Stella, Carlo A Locatelli

66. Encephalopathy due to prolonged misuse of ivermectin (Stromectol R) after scabies infection  
   Elisabeth Goossens, Catherine Deraemaeker, Susana Ferrao, Martine Mostin, Christian Sindic

67. Chlorine dioxide from a dietary supplement causing hemolytic anemia  
   Vincent Nguyen, Robert S Hoffman, Lewis S Nelson

68. Methemoglobinemia in long term dapsone treatment  
   Radu Macovei, Ilenuta Danescu, Genica Caragea, Mihai Ionica

69. Medication errors in the first six months of life  
   Valeria M Petrolini, Elena Borlenghi, Giulia Scaravaggi, Sarah Vecchio, Andrea Giampreti, Francesca Chiara, Emanuela Cortini, Marta Mazzoleni, Monia Aloise, Marta Crevani, Carlo A Locatelli

70. Non-ST-segment-elevation myocardial infarction after phenylephrine misdosing  
   Jason L Dorais, John Dayton

71. Topiramate-associated heat stroke resulting in disseminated intravascular coagulation  
   Neal B Madhani, Andrew M King, Nathan B Menke, Andaleeb H Raja, Michael Abesamis, Anthony F Pizon

72. Reversible cardiomyopathy secondary to citalopram and methadone toxicity  
   Anthony Pfeiffer, Andrew M King, Nathan B Menke, Andaleeb H Raja, Jawaid Akhtar, Kenneth D Katz

73. Medication incidents in primary care medicine: prospective observational pilot study with case-control analysis  
   Alessandro Ceschi, Dieter Conen, Lilli Herzig, Alfred Staehe lin, Marco Zoller, Markus Gnädinger

74. Benzyl benzoate burns bad: 339 poison centre adverse reaction reports and counting  
   Jared A Brown, Christopher I Johnston

75. Toxicokinetics of intravenous paracetamol overdose in a 13 kg girl  
   Nicholas J Connors, Richard Marn, Mary Ann Howland, Lewis S Nelson, Robert S Hoffman
76. Neonatal medication errors reported to a Poison Control Center
   
   Nicholas J Connors, Lewis S Nelson, Robert S Hoffman, Mark K Su

77. Enquiries from nursing homes - increasing problems?
   
   Jutta Trompelt, Oliver Sauer, Andreas Stürer

78. Plan C: Intra-muscular overdose of methotrexate. A rarely reported entity
   
   Mai Takematsu, Robert S Hoffman, Lewis S Nelson, Mary Ann Howland, Silas W Smith

79. Iatrogenic recombinant factor VIII overdose in a patient with hemophilia A
   
   Scott N Lucyk, Lewis S Nelson, Robert S Hoffman

80. Pharmacogenomic testing to mitigate azathioprine adverse drug effects
   
   Shannon Manzi, Michael Toce, Michele Burns

Pschotropic drugs

81. Clinical outcomes of methylphenidate intoxications in children and adults: A prospective follow-up study
   
   Saskia J Rietjens, Laura Hondebrink, Claudine C Hunault, Rob Pereira, Nuriye Kelleci, Gulhan Yasar, Arian Ghebreleslasie, Cindy Lo-A-Foe, Irma de Vries, Jan Meulenbelt

83. Pregabalin and gabapentin abuse and toxicity as disclosed from postmortem cases
   
   Margareeta Hääkinen, Erkki Vuori, Eija Kalso, Merja Gergov, Ilkka Ojanperä

85. Therapeutic drug monitoring of clozapine and norclozapine using a multidrug ultra-high performance liquid chromatography-tandem mass spectrometric method
   
   Lisbeth Patteet, Zarha Vermeulen, Kristof E Maudens, Bernard Sabbe, Manuel Morrens, Hugo Neels

86. Psychomotor agitation in acute poisoning: Could we call it a toxidrome?
   
   Ana Ferrer-Dufol, Ana Serrano-Ferrer, Sebastian Menao-Guillen, Francisco Ruiz-Ruiz

87. Gabapentin overdose: A case series
   
   Dagmar Prasa, Uwe Stedler, Petra Hoffmann-Walbeck, Elja Heistermann, Cornelia Reichert, Carola Seidel, Elke Färber, Sabine Stoletzki, Dieter Genser, Sonja Gros

88. Diabetes insipidus associated with valproic acid overdose: A rare case of valproic acid toxicity
   
   Mai Takematsu, Lewis S Nelson, Robert S Hoffman, Jason Chu

89. Bupropion and ethanol co-ingestion presenting with hypotension and focal seizure activity
   
   Anthony Pfeiffer, Andrew M King, Nathan B Menke, Andaleeb H Raja, Anthony F Pizon

90. Methylphenidate poisoning: A devil in disguise?
   
   Sonja Gros, Ingo Sagoschen, Dagmar Eckart, Oliver Sauer, Andreas Stürer
91. A case of unintentional naltrexone-induced opioid withdrawal successfully treated with buprenorphine in an emergency department setting

   Cynthia Santos, Stephanie H Hernandez

92. Non-medical use of attention deficit hyperactivity disorder drugs by adults: A comparative study of atomoxetine versus methylphenidate

   Louise S Jensen, Anne Katrine Pagsberg, Kim P Dalhoff

**History**

*93. 50 years of the German National Committee for the Assessment of Poisonings

   Axel Hahn, Kathrin Begemann, Matthias Greiner

*94. The Ljubljana Poison Control Center 40 years on

   Miran Brvar, Marija Jamsek

*95. Setting up and stages of toxicological service work in the Sverdlovsk region: 40 years of toxicological service work in the Russian Federation

   Valentin G Sentcov, Konstantin M Brusin, Olga V Novikova, Sergey I Bogdanov, Andrey A Reutov, Dmitriy E Zhovtyak, Viacheslav U Misharin, Aleksey V Martinov, Andrey A Masterkov

**Poisons centres activity**

96. Comparison of 15,329 unit dose and 12,599 non-unit dose pediatric laundry detergent exposures using US National Poison Data System data: 2012-2013

   James B Mowry, Daniel A Spyker

97. Surveillance of biocide-related toxic exposures in Italy

   Laura Settimi, Franca Davanzo, Luciana Cossa, Elisabetta Urbani, Felice Giordano, Giovanni Milanesi

98. A preliminary comparison between human exposure cases identified in the US by the National Poison Data System and in Italy by the National System for Surveillance of Toxic Exposures and Poisonings

   Laura Settimi, Alvin C Bronstein, Franca Davanzo, Anna Celentano, Fabrizio Sesana

99. Surveillance of hazardous exposures to electronic cigarettes in Italy

   Franca Davanzo, Laura Settimi, Giovanni Milanesi, Felice Giordano, Fabrizio M Sesana, Anna Celentano, Elisabetta Urbani, Giscardo Panzavolta, Luciana Cossa, Adriana Tomoiaaga, Angelo Travaglia, Valeria Dimasi

100. Snus vs. cigarettes: A change in pattern of calls to the Norwegian poisons information centre

   Lise G Ringstad, Helga R Lorentzen

101. Calls concerning electronic cigarettes to the Finnish Poison Information Centre

   Suvi Pajarre-Sorsa, Mervi Saukkonen, Kalle Hoppu

102. E-cigarettes: A need for better quality regulation?

   Elisabeth J Scholtiens, Antoinette JHP van Riel, Jan Meulenbelt, Irma de Vries

*Poster oral see page 11
103. Trends in electronic cigarette exposures reported to the National Poison Center database
   J Priyanka Vakkalanka, Lewis S Hardison, William F Rushton, Christopher P Holstege

   Eleri Thomas, Rosie A Spears, Gloria Alldridge, Channa V Krishna, John P Thompson, Michael Eddleston, J Allister Vale, Simon HL Thomas

105. School-based health promotion for poisoning prevention education in children: A National Poisons Information Service proposal to reduce poisonings in the UK
   Eleri Thomas, Rosie A Spears, Gillian Cooper, Gloria Alldridge, Channa V Krishna, John P Thompson, Michael Eddleston, J Allister Vale, Simon HL Thomas

106. Serious adverse events associated with liquid laundry pods exposure: A retrospective study by the French poison control and toxicovigilance centres from 2005 to 2012
   Fatoumata Rigaux-Barry, Anne-Marie Patat, Laurie Cordier, Jacques Manel, Sandra Sinno-Tellier

107. An analysis of the UK National Poisons Information Service consultant referral process
   David A James, Simon HL Thomas, Rebecca ML Waugh, J Allister Vale, John Thompson, Michael Eddleston

   Bhupesh Panchal, Michael Eddleston, Simon HL Thomas, John P Thompson, J Allister Vale

109. Consequences of the inappropriate use of professional grade pesticides, an analysis using National Poisons Information Service Pesticide Surveillance Survey data
   Liam Perry, Andrew Bennett, Richard D Adams, Gill Jackson, Simon HL Thomas, John P Thompson, J Allister Vale, Michael Eddleston

110. National Poisons Information Service urgent alerting system for chemicals: Data from the first year
     Catherine L Crawford, Gill Jackson, Simon HL Thomas, John P Thompson, J Allister Vale, Michael Eddleston

111. Added value of poisons centers in the response to radiological incidents
     Marianne EC Leenders, Ronald De Groot, Gerard A Van Zoelen, Antoinette JHP van Riel, Jan Meulenbelt

112. National register of acute poisonings - role of the poison information center
     Zanina Pereska, Andon Chibishev, Cvetanka Bozhinovska, Lidija Petkovska, Natasha Simonovska, Aleksandra Babulovska, Irena Jurukov, Aleksandra Stevchevska, Marija Glasnovik

113. Sympathomimetic toxicity caused by adulterated food supplements for weight loss
     Chantal CJ Roelen, Antoinette JHP van Riel, Irma de Vries, Jan Meulenbelt

114. Use of Cloud technology reporting systems to motivate and improve staff performance in a poisons information service setting
     Alexander Campbell, Damian S Ballam, J Allister Vale

115. Agreement on product information requirements for Poisons Centres in European Union Member States
     Ronald de Groot, Pieter JAM Brekelmans, Herbert Desel, Martine Mostin, Karin Feychtling, Jan Meulenbelt
116. The impact of changes to packaging and labelling on exposures to liquid laundry detergent gel capsules

Patricia B Casey, Feargal O’Connor, Edel Duggan

117. Supporting the Union level co-ordinated assessment and management of cross border chemical health threats

Rob Orford, Charlotte Hague, Monique Mathieu-Nolf, Herbert Desel, Daniela Pelclova, Gabija Dragelyte, Laura Settimi, Lisbeth Hall, Ann Goransson Nyberg, Jose Javier Garcia del Aguila, Raquel Duarte-Davidson

118. Survey of toxicological analyses availability in the Italian national health system: Preliminary results and a national pilot database

Carlo A Locatelli, Eleonora Buscaglia, Pietro Papa, Teresa Coccini, Sarah Vecchio, Valeria M Petrolini, Davide Lonati, Andrea Giampretti, Olha Maystrova, Marta Mazzoleni, Giovanni Serpelloni, Marco Leonardi, Virgilio Costanzo

119. Development of syndromic surveillance system in toxicovigilance: Lessons learned from mushroom poisonings and Hymenoptera envenomations in France

Delphine Viriot, Sandra Sinno-Tellier, Vanina Bousquet, Abdessattar Saoudi, Jacques Manel, Robert Garnier

120. The Global Educational Toxicology Uniting Project

Anselm Wong, Rais Vohra, Anne Michelle Ruha, Zeff Koutsogiannis, Kimberlie A Graeme, Paul I Dargan, Anne Creaton, Shaun L Greene
Animal poisonings

132. How often do North American crotalid bites need surgical management?  
Andrew B Theilen

133. Weever fish envenomation - analysis of enquiries to the Poisons Information Centre Erfurt from 1994-2013  
Simone Just, Dagmar Prasa, Iris Bergmann, Gisela Enden, Germaine Frimlova, Helmut Hentschel, Gisela Liebetrau, Bettina Plenert, Anne Stürzebecher, Detlef Thiede, Michael Deters

134. Magnetic resonance appearance of the brain in snake bite patients: Resonating the venomous findings  
Ashish Bhalla, Chirag Ahuja, Surjit Singh, Niranjan Khandelwal

135. Incidence and severity of hypotension and bradycardia in ciguatera  
Thomas YK Chan, Jones CM Chan, Raymond SM Wong

136. Complement cascade activation by Bothrops lanceolatus venom: A pathway to improving patient management in case of envenomation?  
Marie Delafontaine, Danielle Paixão-Cavalcante, Fernanda CV Portaro, Laurence Mathieu, Joël Blomet, Denise V Tambourgi

137. Vipera berus bite causing compartment syndrome in a 14 year old boy  
Tara Arif, Kinga Bartecka-Mino, Karl Hruby

138. Scorpion stings in Mali: Epidemiological aspects  
Sanou K Coulibaly, Hinde Hami, Ababacar Maiga, Rachida Soulaymani-Bencheikh, Max Goyffon, Abdelrani Mokhtari, Abdelmajid Soulaymani

139. Envenomation by a sea anemone on the French Atlantic Coast  
Magali Labadie, Denis Dondia, Patricia Bernadet, Coralie Braganca, Françoise Penuill

140. Bitis arietans envenomation in snake charmers in the Province of Tiznit, Morocco: First two case reports  
Fouad Chafiq, Nadia Chrouqui, Emmanuelle Mangin, Abderrahmane Mataame, Naima Rhalem, Abdelmajid Soulaymani, Abdelghani Mokhtari, Narjis Badrane, Mohammed Fekhaoui, Rachida Soulaymani-Bencheikh

141. Risk profile Vipera berus bites  
Julia Eidt, Michael Deters, Adrienne Kilian, Cornelius Radamm, Anne Stürzebecher, Rafael Wagner, Andreas Schaper

142. Compartment syndrome after a bite by the South American rattlesnake (Crotalus durissus terrificus): Case report  
Fabio Bucaretchi, Eduardo M De Capitani, Stephen Hyslop, Sueli M Mello, Luciane CR Fernandes, Carla B Fernandes, Maira M Branco, Fernando H Bergo, Felipe BP Nascimento

143. Serum sickness after the administration of Australian snake antivenoms  
Nicole M Ryan, Simon SGA Brown, Geoffrey K Isbister
144. Cats experiencing toxicity after use of a new "Spot-on" pesticide product containing indoxacarb
   Chantal CJ Roelen, Antoinette JHP van Riel, Irma de Vries, Jan Meulenbelt

**Experimental investigations and mechanisms of toxicity**

145. Investigation of respiratory effects of norbuprenorphine and their modulation in the rat to define its contribution to buprenorphine toxicity
   Emilie Souton, Camille Cohier, Lucie Chevillard, Patricia Risède, Bruno Mégarbane

146. High mobility group box 1 protein changes in serum of subjects exposed to irritant factors released during uncontrolled fire
   Anna Krakowiak, Renata Winnicka, Maciej Czerniak, Ewa Nowakowska-Swirta

147. The antioxidant effect of Glehnia littoralis on Ûamanitin induced hepatotoxicity
   Soohyung Cho, Yongjin Park, Kyunghoon Sun

148. Acid burns, comprehension of the lesions mechanism: The sulfuric acid example
   Céline Fosse, Colombe Gronnier, François Lutz, François Burgher, Laurence Mathieu

149. Pilot study comparing hemodynamic measures and survival in swine anesthetized with alphachloralose and isoflurane
   Christine M Murphy, Cliff Williams, Michael Quinn, Brian Nicholson, Thomas Shoe, Anna R Dulaney, Michael C Beuhler, Russ Kerns

**New recreational drugs**

150. Phenethylamine poisonings reported in a French Poison Control Center
   Gael Le Roux, David Boels, Alain Turcant, Chloe Bruneau, Marie Bretaudeau, Benedicte Lelievre, Severine Ferec, Patrick Harry

151. Acute intoxications by new psychoactive substances: Patterns of use and circumstances of exposure
   EU Project SPICE II Plus
   Josephine Kithinji, Volker Auwärter, Bela Szabo, Maren Hermanns-Clausen

152. Increasing illegal use of melanotan: The Barbie Drug hype
   Anja PG Wijnands-Kleukers, Irma de Vries, Jan Meulenbelt, Antoinette JHP van Riel

153. New psychoactive substances and illicit drugs used among 16 year old high school students in Romania
   Sorin Oprea, Milica Georgescu Visan, Ruxanda Iliescu, Silvia Florescu, G Viorela Nitescu

154. Urinary test for mephedrone/methcathinone in suspected intoxicated patients: Comparative evaluation between a new screening (ELISA) assay and liquid chromatography–mass spectrometry method
   Teresa Coccini, Elisa Roda, Davide Lonati, Sarah Vecchio, Eleonora Buscaiglia, Pietro Papa, Laura Rocchi, Carlo A Locatelli

155. Data evaluation from synthetic cannabinoids screening in biological samples by ELISA assay and liquid chromatography–mass spectrometry analysis
   Elisa Roda, Davide Lonati, Valeria M Petrolini, Antonella Valli, Laura Rolandi, Andrea Giampreti, Teresa Coccini, Carlo A Locatelli
156. Awareness and use of the NBOMe novel psychoactive substances is lower than mephedrone in a high drug using population

_Caitlyn J Lovett, Fiona Measham, Paul I Dargan, David M Wood_

157. Detection of novel psychoactive substances through analysis of recreational drug samples obtained in the emergency department

_Takahiro Yamamoto, Anusuya Kawsar, John Ramsey, Ursula Collignon, Paul I Dargan, David M Wood_

158. Limited awareness and use of the novel psychoactive substance methiopropamine in men who have sex with men in South London nightclubs

_Caitlyn J Lovett, Fiona Measham, Paul I Dargan, David M Wood_

159. K2 - not the spice of life: Synthetic cannabinoids and ST elevation myocardial infarction, a case report

_Rita G McKeever, David Vearrier, Michael I Greenberg_

160. "WTF": A case of acute cerebral ischemia following synthetic cannabinoid inhalation


161. The electric koolaid NBOMe test: LC-TOF/MS confirmed 2C-C-NBOMe (25C) intoxication at Burning Man

_Patil Armenian, Roy R Gerona_

162. Acute agitation and chest pain from 5-fluoro-AKB48: A novel synthetic cannabinoid

_Naren Gunja, Karolina Kuligowski, Placid G Paul, Michael Collins, Ryan Anderson, James Kwan_

163. Synthetic cannabinoids: Impact of Australian legislation; is the problem Kronic or chronic?

_Jared A Brown, Naren Gunja, Nick A Buckley_

164. Death by spice: A case report of mortality following synthetic cannabinoid use

_Heather T Streich, William F Rushton, Nathan P Charlton_

165. Exposure to 5f-P22, 5 IAI and diclazepam: A case report

_Francis Grossenbacher, Julie Souille, Zoubir Djerrada, Olivier Passouant, Valerie Gibaja_

*166. Monoamine transporter and receptor interaction profiles of halogenated phenethylamines

_Anna Rickli, Marius C Hoener, Matthias E Liechti_

*167. Prevalence of analytically confirmed intoxications by new psychotoxic substances in Italy: Data from Pavia Poison Centre and National Early Warning System

_Carlo A Locatelli, Davide Lonati, Eleonora Buscaglia, Pietro Papa, Valeria M Petrolini, Sarah Vecchio, Andrea Giampreti, Catia Seri, Claudia Rimondo, Elisa Roda, Teresa Coccini, Teodora Macchia, Giovanni Serpelloni_

*168. Toxicity after reported use of benzofury compounds ([2-aminopropyl]-2,3-dihydrobenzofurans) compared with mephedrone. A report from the UK National Poisons Information Service

_Ashraf Kamour, David James, David J Lupton, Gillian Cooper, Michael Eddleston, J Allister Vale, John P Thompson, Ruben HK Thanacoody, Simon L Hill, Simon HL Thomas_
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Assessing the validity of capillary dried bloods spots used for gamma-hydroxybutyrate analysis from patients suspected of toxicity attending the Emergency Department

John RH Archer, Ann-Sofie Ingels, Paul I Dargan, David M Wood, Christophe Stove

Drug analysis and clinical effects in patients attending the emergency department with suspected gamma-hydroxybutyrate toxicity

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How common is injection drug use (“slamming”) amongst men who have sex with men attending night-time economy venues?

Caitlyn J Lovett, David M Wood, Fiona Measham, Paul I Dargan

A survey to establish current European data collection on emergency room presentations with acute recreational drug toxicity

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Milica Georgescu Visan, Ruxanda Iliescu, G Viorela Nitescu

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*Wui Ling Chan, Anne-Erika Vermette, Paul I Dargan, David M Wood*

182. What is the evidence of the misuse of benzodiazepines and the 'Z drugs' in UK men who have sex with men clubbers?

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183. Sudden sensorineural hearing loss after methadone overdose: A case series

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184. A case of MDMA associated rhabdomyolysis, disseminated intravascular coagulation, intracerebral hemorrhage, and multi-organ system failure potentially enhanced by propofol

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185. Drug-facilitated sexual assaults in Italy: Preliminary data of the Violence And Date Rape Drug project

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186. Misuse and abuse of fentanyl depot transdermal patches

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189. Full of grace to full of gas: A perforated body packer

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199. Blood lead levels and haemoglobin concentration in children below five years in Ajman, United Arab Emirates
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200. Cases of self-poisoning with elemental mercury administrated intravenously: Clinical observations
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209. Datura contamination of a large batch of frozen vegetables – some poisonings and a big hassle
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210. Exposure to Euphorbia lathyris. Efficacy of an amphoteric washing solution
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211. Do Amanita muscaria and Amanita pantherina poisoning differ? Andreja Vendramin, Miran Brvar

212. Surveillance of mushroom-related poisonings in Italy
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213. Toxic risk of traditional healers Ṣerragaḏ in infants, Morocco
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214. Fatal poisoning due to Indigofera
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215. Neurological toxicity of Nigella
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216. Suicidal Digitalis purpurea poisoning treated with specific Fab fragments Jonas Höjer, Viktoria Friman

217. Severe poisoning with ṢMaajoun: A case report
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219. Aggressive treatment results in complete resolution of Amanita bisporigera toxicity
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220. When folk medicine harms: Four pediatric cases following ingestion of Laurus nobilis infusion
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221. Poisonings with alkaloids of Veratrum in Russia
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222. Biological and botanical confirmation of solanaceous glycoalkaloid poisoning by susumber berries (Solanum torvum)
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223. The management of ventricular dysrhythmia in aconite poisoning: A review of published cases
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224. The use of plants and media vigilance
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225. Adverse effects due to the use of medicinal plants in the Moroccan diabetic
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227. Prolonged, intermittent Brugada after imipramine overdose
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228. Rate dependent bundle branch block in drug overdose: A case report
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229. Serotonin syndrome in tramadol overdose patients
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230. Polypharmacy reported by emergency department patients presenting with psychiatric crises
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251. Electrocardiographic predictors of adverse cardiovascular events in acute drug overdose: A validation study
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252. Respiratory failure from acute drug overdose: Incidence, complications, and risk factors
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253. Metformin removal by extracorporeal elimination techniques in cases of overdose: A literature review
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254. Intravenous lipid emulsion used in the therapy of a patient with prolonged cardiac pauses following a single pill ingestion of propafenone
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260. Successful treatment of angiotensin converting enzyme inhibitor angioedema with fresh frozen plasma
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261. Procedural safety in high dose insulin euglycemia therapy by adoption of a target-controlled infusion regimen
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262. Procedural safety in lipid rescue therapy for various intoxications by adoption of a protocol defining indications and application
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263. Necessity of early carboxyhemoglobin determination in carbon monoxide poisoning

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264. Lithium intoxications in patients on chronic therapy: Precipitating factors, management and outcomes - 2009-2012 experience of Milan Poison Control Centre

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266. Acute metformin overdose: Metformin serum concentrations during treatment

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267. Methanol poisoning in Tasiilaq, Greenland

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268. Lithium poisoning in the intensive care unit: A descriptive study and analysis of the predictive factors of hemodialysis

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269. Fat emulsion therapy given intraosseusly in massive verapamil overdose

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270. Gastric lavage after overdose of large size slow release drugs

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271. Gastric decontamination in poisoned patients operated for bariatric surgery

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272. Epidemiology of acute poisoning in children admitted to the emergency department of the Institute of Mother and Child of the Republic of Moldova

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274. Childhood poisoning in Sweden: A twenty years perspective

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275. Prospective follow-up study on battery ingestion in children younger than six years

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277. Characteristics of severely poisoned children admitted to the tertiary pediatric intensive care unit: A shift from organophosphate poisoning to corrosives
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278. Levothyroxine: Acute toxicity in newborns

279. Development of respiratory acidosis following the ingestion of a liquid detergent capsule by a 1 year 10 months old boy: A case report
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280. Characterization of the use of naloxone in pediatric patients using data from the Toxicology Investigators Consortium
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281. Accidental ingestion of paliperidone (Invega R) in children: A case series
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282. A poisoning prevention program aimed at adolescents in Wales: Is it needed?
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283. A review of pediatric cases exposed to unknown xenobiotics
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284. Suicide attempt and suicide by medication poisoning in children and adolescents: Moroccan Poison Control Centre data
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285. A case of inadvertent ingestion of cinacalcet by a 1-year-old child
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286. Pediatric dimetinden exposures
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287. Exposures to liquid detergent capsules in children
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289. Cerebral injury in 2-chloroethanol intoxication
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290. Premature diagnostic closure of metabolic acidosis and hypotension attributed to propylene glycol toxicity in a cirrhotic patient
   
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291. Fatal insulin overdose: Role of the clinical laboratory
   
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292. Acute heart failure after venlafaxine overdose: Post-mortem myocardial examination in two cases
   
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293. High clinical suspicion and prompt treatment are life saving in accidental cyanide poisoning in children
   
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296. Severe toxicity after use of 2,4-dinitrophenol reported to the UK National Poisons Information Service
   
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299. A case of intentional oral intake of T61
   
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300. Accidental peroral Veratrum tincture poisoning: A case report
   
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301. Rare occurrence of arsenic hydride poisoning in children
   
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302. Magnetic resonance imaging findings and follow-up in a case with full recovery after ethylene glycol poisoning
   
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303. Unsuspected source of accidental group carbon monoxide poisoning
   
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304. When the clinical findings are confusing, and the chemical analyses misleading. A toxic gas event in Oslo
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307. Aluminum phosphide poisoning in the Tunisian Anti Poison Center
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308. Laundry detergent pod causing esophageal and gastric injury in an adult
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309. A case of death associated with ingestion of liquid neutral detergent
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310. Severe gastric necrosis following household bleach ingestion
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311. Assessment of life threatening sulfuric acid ingestion using computed tomography imaging
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312. Plain abdominal radiography: A powerful tool to prognosticate zinc phosphide-poisoned patients’ outcome
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313. Descriptive study of reported cases of intoxication by caustic household hydrochloric acid in Morocco
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314. A descriptive analysis of US prehospital care response to hazardous materials events
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315. Prognostic factors in acute organophosphate poisoning
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316. Thrombopenia and anaemia following acute 2,4-D human poisoning
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317. Epidemiology of pesticide exposures in Slovakia: A twenty year review
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318. Burns on civilians by exposure to old WW1 chemical weapons
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319. Rapidly fatal poisoning with an insecticide containing rotenone
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320. Unintentional poisoning in the elderly: Ingestion of bar soap
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321. Caustic and thermal eye and skin injury in four children caused by exposure to chemicals from the
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322. Role of magnesium sulphate in management of organophosphate poisoning
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323. A characterization of the overuse of toxic alcohol screening tests
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324. Causality assessment of herb-induced liver injury using Roussel Uclaf Causality Assessment Method
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325. Clinical application of therapeutic drug monitoring of frequently used antipsychotics
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326. The effect of obligatory review of emergency department physician requests for paracetamol serum
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327. How do emergency physicians make discharge decisions for alcohol-related patients?
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328. What are the drugs involved in sudden deaths?
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329. Antipsychotic overdose QT nomogram risk assessment
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330. Monitoring self-poisoned patients with non-invasive capnography in the emergency department:
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