

## INVITED SPEAKERS

Strengthening poisoning reporting system in Malaysia: Working together for a safer nation



**Dr. Badria Alhatali** is the head of the poison control section, in the department of environmental and occupational Health, at the Ministry of Health in Sultanate of Oman. She is a consultant in the emergency medicine department at the Royal Hospital and hold the program director position of the emergency medicine specialty in the Oman Medical Specialty Board (OMSB). She also serves as the Middle East and North Africa Association of Medical Toxicology (MENATOX) President and International Advisory Board chair for National Institute for Health and Care Research RIGHT4 (Preventing Death from Acute Poisoning in Low and Middle Income Countries). She graduated from Oman Medical Specialty Board in 2012 as well as certified by the Arab Emergency Medicine Board. She finished her Post Doctoral Fellowship in medical toxicology at Emory University and the Georgia Poison Center in Atlanta, USA in 2014. She developed the poison consultation services in the country and has lectured in countries around the world and has numerous awards to her credit. Dr Alhatali has a true passion for Toxicology and advancing the field in the MENA region.

### Lessons learned from the 2023 chlorine gas epidemic in Oman

Chlorine gas is widely used in industrial processes, and accidental releases can result in harmful exposures with potentially severe health consequences. This case report describes the clinical course and management of individuals exposed to chlorine gas following a leakage from an industrial area. Forty-two male individuals were exposed, with 23 arriving at the Emergency Department (ED) presenting with a range of respiratory and ophthalmologic symptoms, including shortness of breath, cough, low oxygen saturation, wheezing, rhinorrhea, sore throat, itching, redness, and tearing. Non-specific symptoms such as chest pain, palpitations, diaphoresis, headache, nausea, and vomiting were also reported. Triage and decontamination measures were promptly initiated, with victims categorized based on symptom severity. Oxygen supplementation was provided to all victims, along with nebulized bronchodilators (salbutamol) and intravenous hydrocortisone (200 mg) for those with low oxygen saturation and wheezing. Although no patients required intubation or non-invasive ventilation support, one patient with a history of bronchial asthma required ICU admission for 24 hours. Most victims exhibited normal venous blood gas levels, with a few showing respiratory alkalosis, likely due to CO<sub>2</sub> washout. Chest X-rays of those with respiratory symptoms were unremarkable. Twelve patients admitted to the regular ward were observed and discharged within a day, while the ICU patient was discharged after 2 days. Follow-up examinations after 48 hours and 1 month revealed persistent complaints of chest pain, cough, and sore throat, highlighting the prolonged effects of chlorine gas exposure. This case report emphasizes the importance of prompt triage, appropriate medical interventions, and thorough follow-up in mitigating the impact of chlorine gas toxicity on affected individuals.