

did not provide enough time to evacuate patients in all hospital departments simultaneously, resulting in a shortage of human resources. There was a planned shutdown of the electronic clinical record system at 0 hours to avoid water damage and evacuation of its server, but three hours were not enough to prepare patient clinical summaries.

Discussion: There is a need for greater and earlier preparation for evacuation to reduce or discharge patients who can leave the hospital when a flood disaster is predicted. Only in-hospital vertical evacuation was considered because it is very risky to transfer critical patients without an evacuation order from government or municipal officials. In fact, over 10,000 patients would need to be evacuated in the region if the Arakawa River floods. Therefore, a regional plan is indispensable for such large scale and simultaneous hospital evacuations.

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Organohalogen Contamination in Vietnamese Women Electronic Waste Recyclers Living and Working in Rural Northern Vietnam

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Introduction: Electronic waste (e-waste) is increasing worldwide and is often shipped from developed to developing countries. Many of these products contain toxic levels of metals, organics, etc. When unsafe recycling approaches or methods are used (e.g., burning wire to reclaim copper), the resulting occupational exposures can adversely affect the health of e-waste recyclers.

Aim: To identify which polybrominated and which polychlorinated dibenzo-p-dioxins/furans are higher in electronic waste recyclers when compared to non-recyclers.

Methods: This study focused on female e-waste recyclers and non-recyclers that live in rural northern Vietnam. Whole blood, urine, and serum of forty e-waste recyclers and twenty Vietnamese comparisons and were evaluated for metals, organics, and dioxin-like exposure by the Center for Disease Control. This paper will be reporting on serum organohalogenes. The Vietnamese cohorts were compared to the U.S. general population, using the National Health And Nutrition Examination Survey. TEQ's were calculated and statistical significance was determined using Wilcoxon Rank Sum Test. The IRB of the University of Texas Health Science Center Houston and the Ethics Board of the Hanoi School of Public Health oversee this study.

Results: 12378-PeCDF, 123678-HxCDD, 123678-HxCDF, and 1234678-HpCDF were significantly different between recyclers and Vietnamese comparisons. Total dioxin TEQ was higher in e-waste recyclers than comparisons. Of the polybrominated dioxins and furans, 12378-PeBDD and 2378-TeBDF were significantly different between recyclers and comparisons.

Discussion: This is the only study with data on polybrominated dibenzo-p-dioxins/furans in female electronic waste recyclers from rural Northern Vietnam, and the first to describe serum levels of both polychlorinated and polybrominated

dibenzo-p-dioxins/furans in Vietnamese female e-waste recyclers. Improved occupational protocols may reduce potential adverse health effects such as cancer, endocrine, reproductive, developmental, and other disorders.

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PARABORN: A Training Program for “Outdoor” Activities by Pregnant Urgent Patients for Paramedics

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Introduction: Spontaneous delivery is a completely physiological phenomenon. Occupational obstetric care in a hospital environment focuses on supporting the mother, the smooth progression of the baby, and the treatment of the newborn child. Occupational activities play a rather supportive and assisting role. The obstetrician and the midwife are ready to respond immediately in the hospital environment to any complications or sudden emergencies. During a birth outside of the hospital environment, there are a number of influences that can cause complications in an unprepared environment without professional assistance, endangering the condition of both the child and the woman.

Methods: The educational concept of PARABORN focuses on situations outside the hospital environment. It is generalized and adaptable to varying geographic, economic, and cultural-political conditions of the target providers, particularly to rescue and paramedic teams. Educational concepts are specialized, interactive courses. The course includes a theoretical and practical block. In the theoretical part, the participants acquire knowledge of urgent obstetric conditions in an out-of-hospital environment including an overweight birth, bleeding, premature delivery, or a complicated delivery (non-standard position, umbilical cord prolapse, etc.). In the practical block, participants acquire the skills of acute interventions as well as methods of communication in these emergency situations. Practical training takes the form of case studies and can be tailored to the real geographic and cultural conditions in which the intervention units operate such as remote terrain, conflicts zones, etc.

Discussion: The knowledge of the cultural and political environment is a necessary prerequisite for managing the urgent situation. Paramedics, as first responders, should have adequate training to manage maternity situations in an out-of-hospital environment where a hospital environment is not available or accessible either by choice or circumstance.

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Pediatric Outpatient/Urgent-Care Emergency and Disaster Planning

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Introduction: Children are frequently victims of disasters, however important gaps remain in pediatric disaster planning. This includes a lack of resources for pediatric preparedness planning for patients in outpatient/urgent-care facilities. The

New York City Pediatric Disaster Coalition (NYCPDC) is funded by the NYC Department of Health and Mental Hygiene (DOHMH) to improve NYC's pediatric disaster preparedness and response.

Aim: After creating planning resources in Pediatric Long-Term Care Facilities, Hospital Pediatric Departments, Pediatric and Neonatal Intensive Care Units and Obstetric/Newborn Services within NYC hospitals, the NYCPDC partnered with leaders and experts from outpatient/urgent-care facilities caring for pediatric patients and created the Pediatric Outpatient Disaster Planning Committee (PODPC). PODPC's goal was to create guidelines and templates for use in disaster planning for pediatric patients at outpatient/urgent-care facilities.

Methods: The PODPC includes physicians, nurses, administrators, and emergency planning experts who have experience working with outpatient facilities. There were 21 committee members from eight organizations (the NYCPDC, DOHMH, Community Healthcare Association of NY State, NY State DOH, NYC Health and Hospitals, Maimonides Medical Center and Presbyterian/Columbia University Medical Center). The committee met six times over a four-month period and shared information to create disaster planning tools that meet the specific pediatric challenges in the outpatient setting.

Results: Utilizing an iterative process including literature review, participant presentations, discussions review, and improvement of working documents, the final guidelines and templates for surge and evacuation of pediatric patients in outpatient/urgent care facilities were created in February 2018. Subsequently, model plans were completed and implemented at five NYC outpatient/urgent-care facilities.

Discussion: An expert committee utilizing an iterative process successfully created disaster guidelines and templates for pediatric outpatient/urgent care facilities. They addressed the importance of matching the special needs of children to available space, staff, and equipment needs and created model plans for site-specific use.

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Perceptions of Climate Change and Disaster Risk in Oceania

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Introduction: This study profiles climate change as an emerging disaster risk in Oceania. The rationale for undertaking this study was to investigate climate change and disaster risk in Oceania. The role of this analysis is to examine what evidence exists to support decision-making and profile the nature, type, and potential human and economic impact of climate change and disaster risk in Oceania.

Aim: To evaluate perceptions of climate change and disaster risk in the Oceania region.

Methods: Thirty individual interviews with participants from 9 different countries were conducted. All of the participants were engaged in disaster management in the Oceania region as researchers, practitioners in emergency management, disaster health care and policy managers, or academics. Data collection was conducted between April and November 2017. Thematic analysis was conducted using narrative inquiry to gather first-hand insights on their perceptions of current and emerging threats and propose improvements in risk management practice to capture, monitor, and control disaster risk.

Results: Interviewees who viewed climate change as a risk or hazard described a breadth of impacts. Hazards identified included climate variability and climate-related disasters, climate issues in island areas and loss of land mass, trans-nation migration, and increased transportation risk due to rising sea levels. These emerging risks are reflective of both the geographical location of countries in Oceania, where land mass due to rising oceans has been previously reported and climate change-driven migration of island populations.

Discussion: Climate change was perceived as a significant contemporary and future risk, and as an influencing factor on other risks in the Oceania region.

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Perspective of an Academic Consortium for Preparedness of Emergency/Disaster Medical Response during 2020 Tokyo Olympic/Paralympic Games

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Introduction: A large number of visitors to Tokyo during the Tokyo Olympic and Paralympic Games in 2020 resulted in an increase of injury/illness and burden to the routine emergency medical services system. Furthermore, extremely hot and humid weather, terrorism, and outbreaks of infectious diseases are marked risks.

Aim: We introduce the present status of an academic consortium (AC2020) to fulfill our mission as academic organizations. The Japanese Association for Acute Medicine (JAAM) and six academic associations have initially established the AC2020 since 2016, which consists of the 23 associations at this time. The role of the AC2020 is to provide knowledgeable evidence, intelligence, and support for constructing response plans for medical problems via the website (<http://2020ac.com/>).

Methods: The joint committee of the AC2020 (JC-AC2020) has been launched to accomplish consortium activities; make statements and recommendations, compile manuals, conduct seminars, and coordinate the training program of on-site medical teams. The JC-AC2020 organizes nine working groups of heat stroke, lightning strike, nursing, athletes, first responders, foreigners, pre and in-hospital response of MCI, and data collection for audit.

Results: As of December in 2018, AC2020 has released 30 documents and 10 event-news on the website including seven