

information and warning, Emergency Operations Center (EOC) management, and long term recovery.

**Methods:** We conducted Disaster Simulations in Hospital Preparedness and Community Readiness for Emergency and Disaster (HPCRED) project for (1) Posts Rehearsal, (2) Emergency Medical Team (EMT), and (3) Hospital Disaster Plan (HDP). This was a pilot project, for 3 tertiary hospitals in 3 provinces in Indonesia. We assisted them to set up their HDP including their EMT team.

**Results:** The 3 important challenges in conducting disaster simulation are triage, prerequisite skills, and documentation. Triage in the field is not simple, it is a complex, comprehensive, and controversial procedure. It needs to be immediate and timely, adequate and accurate assessment, decisions based on assessment, intervened according to acuity condition, complete in documentations. A first Responder team should have prerequisite skills to control airway-breathing-circulation, to control external bleeding, to treat shock, to treat wounds, and to splint injuries to stabilize extremities. Documentation should record initial condition of patient, patient's description of injury or illness, initial and later vital signs, treatment given, personnel who took-over care, and any other pertinent information.

**Conclusion:** Good planning and exercising the ED system in daily practice can help maintain hospital disaster preparedness & critical functions. The triage system should be feasible to be implemented during disaster. We need to build capacities in Life Support, First Responder, Triage, and Ambulance Protocol.

*Prehosp Disaster Med* 2017;32(Suppl. 1):s215–s216

doi:10.1017/S1049023X17005593

### Conception d'un exercice de type ORSAN AMAVI mobilisant plus de 30 établissements hospitaliers pour le compte de l'ARS de Normandie

*Jan-Cedric Hansen*

Member Of The Board, Société Française de Médecine de Catastrophe, Canteleu/France

**Study/Objective:** Étudier la capacité organisationnelle du centre 15 zonal et de 30 établissements sanitaires normand face à une attaque terroriste combinée de type fusillade/explosion dans un centre commercial entraînant près de 200 victimes.

**Background:** Les événements de novembre 2015 et la perspective des compétitions sportives internationales devant se dérouler en France durant l'été 2016 on conduit les autorités à vouloir tester la capacité des ARS et des établissements sanitaires de province à concevoir, mettre en œuvre et organiser le RETEX d'un exercice ORSAN AMAVI.

**Methods:** L'ARS de Normandie a fait appel à l'expertise de la Société Française de Médecine de Catastrophe pour l'assister dans la construction et le pilotage de cet exercice stratégique innovant, premier du genre sous l'égide d'une ARS.

**Results:** L'intérêt d'un scénario vraisemblable, avec des plastrons bien conçus, reproduisant les proportions attendues de victimes adultes/gérontologiques/pédiatriques blessées/blastées/brûlées, avec pour cellule d'animation le PMA animé par un expert de la SFMC

assisté d'un médecin régulateur détaché du SAMU Zonal, jouant sur les conditions météo du jour, en temps réel, permet une appropriation des points faibles logistiques/informatiques/organisationnels par l'ensemble des participants en évitant l'écueil du Crash Test aux effets démobilisants.

**Conclusion:** Ce type d'exercice basés sur plus de 10 ans d'expertise dans la conception et la mise en œuvre de simulation de crise et de formation au pilotage stratégique de crise permet des RETEX de qualité autorisant une réelle amélioration de la planification et de la réactivité des équipes dans une logique conforme à l'esprit de la roue de Deming.

*Prehosp Disaster Med* 2017;32(Suppl. 1):s216

doi:10.1017/S1049023X1700560X

### The 2016 International Simulation Drill of an Earthquake Disaster in Columbia: The Development of the

**Massachusetts General Hospital Emergency Medical Team**  
*Annekathryn Goodman<sup>1</sup>, Miriam Aschkenasy<sup>2</sup>, Kevin Murphy<sup>3</sup>, Hilarie Cranmer<sup>3</sup>*

1. Obstetrics And Gynecology, Massachusetts General Hospital, Boston/MA/United States of America
2. Global Disaster Response, Massachusetts General Hospital, Boston/MA/United States of America
3. Global Disaster Response, Massachusetts General Hospital, Boston/MA/United States of America

**Study/Objective:** To describe the Massachusetts General Hospital Global Disaster response team's experience in an International Disaster Simulation.

**Background:** Disaster response is increasingly professionalized. The United Nations developed an Internet-based mechanism for the certification and registration of emergency medical teams (EMTs) for use in a crisis such as an earthquake. In September 2016, International Search and Rescue Groups (INSARAG) collaborated with Pan American Health Organization (PAHO) organizing the 6th annual Simulation Exercise (SIMEX) this year, for the second time, included EMT's participation. The goal of the 5-day exercise was practice coordination and communication with the international search and rescue teams, regional EMT's, and the government of Colombia to test procedures and policies in place for a response, and to work and learn together.

**Methods:** We describe the simulation exercise.

**Results:** There were 778 participants at the SIMEX, from 14 different countries of South America Groups ranging from the district level in Bogota, to regional teams, and international participants. There are three phases to this SIMEX: familiarization, preparation in the workshops, then simulation. The Coordination and Management Cell (CICOM – EMT), which provides information, coordinates the response, and supports the Health coordination team in decision making, was reviewed. Teams officially registered on Virtual OSOCC (Onsite Operations Coordination Center) as a deployed EMT and set up a location to work, and to coordinate with other teams, and with the overall disaster response key stakeholders. We simulated a team that had x members, with x equipment, and could work in an affected hospital in the disaster zone.

**Conclusion:** Our team deployed as a specialized surgical cell, which plays an important role to support national medical efforts, and critical to function is coordination, communication, and preparation. The Virtual OSOCC site is an important tool to maintain EMT membership, and to monitor for updates information about disasters and effectively communicate with other key stakeholders.

*Prehosp Disaster Med* 2017;32(Suppl. 1):s216–s217

doi:10.1017/S1049023X17005611

### Undergraduate Inter-Professional Collaboration in a Simulated Mass Casualty Incident

*Ian Wishart<sup>1</sup>, Sandra Goldsworthy<sup>2</sup>, Irina Charania<sup>2</sup>, Cydnee Seneviratne<sup>2</sup>, Jeannette Waegemakers Schiff<sup>2</sup>*

1. Undergraduate Medical Education, University of Calgary, Calgary/AB/Canada
2. University of Calgary, Calgary/AB/Canada

**Study/Objective:** Measure undergraduate interprofessional collaboration and teach basic trauma skills in a simulated Mass Casualty Incident (MCI).

**Background:** Recent large scale natural disasters and Mass Casualty Incidents (MCIs), have highlighted the need for staff and hospital emergency preparedness. Disasters and MCI simulations are infrequent, and typically only involve post-graduate level trainees and staff in clinical roles. Trauma training at the undergraduate level has been identified as inadequate in multiple disciplines.

**Methods:** To address these shortfalls, a preclinical course for medical students was redesigned to include one day of trauma and inter-professional content. Curricular alignment was achieved among the Cumming School of Medicine, University of Calgary Faculties of Nursing and Social Work, and the Southern Alberta Institute of Technology (SAIT) Respiratory Therapy and Paramedic programs, to enable three hundred and forty six undergraduate students to participate in an MCI known as Trauma Day. Inter-professional teams of four to six students managed a standardized trauma victim in two separate scenarios, and observed expert modeling of a live trauma simulation between successive scenarios. The student teams were debriefed by co-facilitators from different professions, guided by the Mayo High Performance Teamwork Scale (MHPTS), the Canadian Inter-Professional Health Collaborative (CIHC) National Competency Framework, and the principles of Advanced Trauma Life Support (ATLS). Facilitators and students formally rated the team performance after each scenario using the MHPTS, and students completed a Self Efficacy Assessment at the end of the day.

**Results:** There were statistically significant improvements in team performance ratings as an overall measure, and in four of eight factors of the MHPTS. In the Self Efficacy Assessment survey students rated their confidence significantly higher after the simulations in all eight areas, with significant differences between professions.

**Conclusion:** An interprofessional simulated that MCI provides opportunities to improve team performance and self efficacy, based on the Mayo High Performance Teamwork Scale.

*Prehosp Disaster Med* 2017;32(Suppl. 1):s217

doi:10.1017/S1049023X17005623

### The Brooklyn Coalition Exercises Patient Movement in a Burn Mass Casualty Event

*Pia Daniel<sup>1</sup>, Patricia Roblin<sup>2</sup>, Stephan Kohlhoff<sup>2</sup>, Ramon Gist<sup>2</sup>, Bonnie Arquilla<sup>2</sup>*

1. Emergency Department, Columbia University Medical Center, New York City/NY/United States of America
2. Disaster, state university of New York, New York/NY/United States of America

**Study/Objective:** The hospitals of The Brooklyn Coalition (TBC) used a city-wide drill to test various components of the New York City Burn Plan that is under development.

**Background:** The borough of Brooklyn has no burn centers. The secondary transfer of burn victims in a Mass-Casualty Incident (MCI) is a gap identified from annual coalition-wide drills which built on each other.

**Methods:** A full-scale exercise evaluated the secondary transfer of victims in a burn MCI, utilizing the proposed NYC Burn Plan. Fire Department of New York (FDNY) centrally coordinated the transfer of 69 victims using faxed Patient Transfer Request forms. The NYSDOH e-FINDS was utilized for patient tracking. An electronic Situational Assessment Tool (SAT) delivered prompts and collected data.

**Results:** e-FINDS tracked 96% of patients; 100% of hospitals reported the required Patient Transfer Request forms were too long; 38% of hospital transfer requests required more than two attempts to reach FDNY; 26% of victims were refused transfer; 52% of victims required physician presence during transfer.

**Conclusion:** The NYC Burn Plan was successfully drilled by TBC and e-FINDS was a reliable tool. The method for communication between the hospitals and FDNY failed for multiple facilities, highlighting the need for alternative methods of contact. The required Patient Transfer Request form was too lengthy to utilize during an MCI and is being amended using only the essential information identified by this study. Many transfer requests were denied, leaving facilities to manage burn victims. Many victims needed a physician during transport, limiting the ability to transport victims. These results make it evident that non-burn centers need to develop contingency plans for burn victims of an MCI. These gaps in the NYC Burn Plan, identified by TBC drill, are impacting the current development of the protocol. The use of sequential, coalition-wide drills with increasing inclusivity is useful in identifying capability gaps and exercising existing protocols.

*Prehosp Disaster Med* 2017;32(Suppl. 1):s217

doi:10.1017/S1049023X17005635

### Incorporating an Active Shooter Preparedness and Response Program into the Healthcare Students' Simulation Educational Curriculum

*Paul P. Rega, Brian N. Fink*

Public Health And Preventive Medicine, University of Toledo, Toledo/OH/United States of America

**Study/Objective:** To increase healthcare learners' awareness to active shooter situations via simulation education.

**Background:** Active shooter incidents in San Bernardino, Paris, and Orlando illustrate "soft targets" vulnerabilities.