

•Personal Protective Equipment (PPE): 6.1 need for PPE stockpile management, considering transportation, storage space, and risk of throwing away out-of-date PPE (3.63).

•Equipment and supplies: 4.3 need for solutions to increase equipment and beds capacity (3.56).

•The human factor: 2.22 need for management of fake news and mitigation of violent incidents against healthcare personnel (3.56).

•Knowledge sharing, cooperation and coordination: 3.5 need to collect data, needs, gaps, and lessons in preparation for future outbreaks (3.56).

Better integrating health care into crisis management structures was highlighted during the Madrid conference.

**Conclusion:** NO-FEAR highlighted the importance of real-time international real-time knowledge sharing in a crisis, the need to better address the needs of the personnel during a long-term crisis, and better integrate health into crisis management structures

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s190–s191

doi:10.1017/S1049023X23004910

### Emergency Medical Team Type 2 and Intensive Care Unit: A Necessary Binomial

Mario Raviole MD, FACS, Nicole Goldschmidt MD, Nicola Tommasoni MD

Disaster Medicine Service 118, ASLCN1, Levaldigi, Italy

**Introduction:** A disaster involving significant casualties in a populated area demands the rapid development of a field hospital with personnel specialized in Disaster Medicine. In this scenario, the clinical response of Emergency Medical Teams should be guided by the knowledge of how the medical needs of the population change after the disaster itself. In order to reduce the loss of life and prevent long-term disability, it is essential to have the right tools to treat critical patients. In fact, disasters cause a variety of conditions ranging from minor to life-threatening injuries requiring admission to Intensive Care Unit (ICU).

**Method:** A systematic review was carried out and electronic healthcare databases were searched using terms such as “Disaster” or “Flood” or “Storm” or “Earthquake” or “Mass Casualty Incidents” and “Intensive Care Unit” or “Intensive Care” or “Health Impact”. Articles that met the search criteria, published in the last 15 years in the English language, were analyzed and summarized. The objective of the review was to identify the main health problems following disasters and, in particular, the diseases that may require intensive care in order to assess the need to include ICU in the minimum technical standard for Emergency Medical Teams type 2.

**Results:** The review included 12 studies identified as relevant and significant for our purpose. Health problems were sorted for disaster type and severity of the injury. The review demonstrates that health problems after a disaster are different depending on disaster type, but in all the scenarios there are diseases that potentially may require timely intensive care.

**Conclusion:** The presence of an ICU within an Emergency Medical Team type 2 (according to WHO EMT classification)

is an essential part of disaster management plans as ICU plays an irreplaceable role in saving lives and in reducing the health impact of a disaster.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s191

doi:10.1017/S1049023X23004922

### Mortality from Landmines and Explosive Hazards: Findings from a Global Epidemiological Analysis

Stacey Pizzino<sup>1</sup>, Michael Waller<sup>1</sup>, Vivienne Tippet<sup>2</sup>, Jo Durham<sup>2</sup>

1. University of Queensland, Brisbane, Australia

2. Queensland University of Technology, Brisbane, Australia

**Introduction:** Explosive hazards like landmines are known to contaminate over sixty countries and continue to threaten the health of affected communities across generations. The current study is the first to consider the impact of landmines and explosive remnants of war by drawing on global casualty data to determine mortality patterns.

**Method:** This study is a retrospective analysis of secondary multi-source data on over 100,000 explosive hazard casualties from 17 low and middle income conflict-affected countries. This data was collected from mine action centers, international non-governmental organizations, and international bodies (e.g., United Nations), and include surveillance data, retrospective and prospective survey, and data collected through organizational operations.

**Results:** The global case fatality rate was 38.8 deaths per 100 casualties. Males represented 87.4% (n = 34,642) of those killed, however females had higher odds of death when involved in an explosive incident (OR = 1.29, 95% CI: 1.24 – 1.34, p < 0.01). Adults experienced higher odds of death compared to children (OR = 1.60 95% CI: 1.55 – 1.64, p < 0.01). Case fatality ranged between countries with Lao PDR, Angola and Ukraine the countries with the highest proportion of deaths. Improvised explosive devices (IEDs) and ERW had higher odds of death compared to antipersonnel landmines (OR = 1.78, 95% CI: 1.67 – 1.91, p < 0.01; OR = 1.55, 95% CI: 1.50 – 1.60, p < 0.01).

**Conclusion:** Mortality from landmines and other explosive hazards remains a public health issue in conflict impacted countries. This study addresses the lacunae of global data for explosive hazard casualties and provides an understanding of how fatal injury is endured. Adult males represent the most deaths globally, however case fatality ranges across conflicts. ERW and IED had the highest risk of death. These findings underscore the need for a global health response and strengthen advocacy measures for conflict affected communities as well as weapons prohibition campaigns.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s191

doi:10.1017/S1049023X23004934

### Readiness of Emergency Medical Teams of Sri Lanka Army Medical Corps for Response to Natural Disasters in Sri Lanka

Saminda Kumara MBBS, PG Dip in Health Sector Disaster Management

Sri Lanka Army Health Services, Colombo, Sri Lanka

**Introduction:** Sri Lanka has been divided into 26 districts. These 26 districts are Colombo, Gampaha, Kalutara, Galle, Matara, Hambanthota, Trincomalee, Batticaloa, Ampara, Jaffna, Mullaitivu, Kilinochchi, Mannar, Vavuniya, Kandy, Matale, Nuwara Eliya, Anuradhapura, Polonnaruwa, Rathnapura, Kegalle, Badulla, Monaragala, Puttalam and Kurunegala. Ten key natural disasters have been identified in Sri Lanka as important to develop response capacity. These natural disasters are coastal erosion, cyclones, droughts, earthquakes, epidemics, floods, forest fires, landslides, lightning and tsunamis. Five battalions of the Sri Lanka Army Medical Corps (SLAMC) have been established in various parts of Sri Lanka. These battalions are named 1 SLAMC, 2(V) SLAMC, 3 SLAMC, 4 SLAMC and 5 SLAMC. The Army Hospital, Army Base Hospitals (ABH), and Medical Reception Stations have been located in various parts of Sri Lanka

**Method:** Each battalion and hospital have Emergency Medical Teams (EMTs) for response to disasters. An EMT consists of: one medical officer, two nurses, two nursing assistants and one ambulance with a driver. There are two EMTs in each battalion and each ABH. The Army hospital has three EMTs.

**Results:** 1 SLAMC is responsible for responding to disasters in Colombo, Gampaha, Kalutara, Galle, Matara, Rathnapura, Kegalle, Kurunegala and Puttalam. 2(V) SLAMC is responsible for responding to disasters in Hambanthota, Kandy, Matale, Nuwara Eliya, Badulla and Monaragala. 3 SLAMC will respond to disasters in Anuradhapura, Vavuniya, Mannar and Mullaitivu. 4 SLAMC will respond to disasters in Jaffna and Kilinochchi dis. 5 SLAMC is responsible for disasters arising in Polonnaruwa, Trincomalee, Batticaloa and Ampara. When disasters happen in adjacent districts, hospitals will respond to those disasters.

**Conclusion:** EMTs will be deployed to the disaster site as soon as possible and do treatments for casualties by staying seven days. The number of EMTs depends on the magnitude of the disaster.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s191–s192

doi:10.1017/S1049023X23004946

### The Results of a Foresight Exercise: Future Threats and Trends in Crisis Management

George Voicescu MD, PhD(c)<sup>1</sup>, Monica Linty<sup>1</sup>, Lian Guey Ler<sup>2</sup>, Stefan Kaufmann Prof.<sup>3</sup>, Francesco Della Corte Prof.<sup>1</sup>

1. Center for Research and Training in Disaster Medicine, Humanitarian Aid, and Global Health, Novara, Italy
2. Université Côte d'Azur, Polytech Lab, Nice, France
3. Institute of Sociology, Albert-Ludwigs-Universität Freiburg, Freiburg, Germany

**Introduction:** The challenges that the health systems face in the last years increased exponentially. No matter if we are talking about the impact of the COVID-19 pandemic or the Russian military action in Ukraine, the European health ecosystem is facing new problems. In the light of these uncertainties, we assessed which could be the next trends that can impact the healthcare systems, in order to better prepare and adapt to the new contexts.

**Method:** Using two foresights exercises (FSE), one in 2018 and the second one in 2022, we identified the most important trends in the political, economic, social, technological, security, environmental and medical sectors that could have an impact on health.

**Results:** 53 people participated in the first FSE and 40 in the second one. The respondents identified cyber security, an increased reliance on digital technologies for communications, CBRNE management of the patients, centrally coordinated attacks, demographic aging, reduced economic resources, violence against emergency medical staff and the increased need and demand for psychosocial support as the most important trends. Moreover, they considered that wars, hybrid threats, the fake news, pandemics and the influence of artificial intelligence could impact the healthcare systems.

**Conclusion:** Many of the trends identified in 2018 as having a possible impact on the health system proved to be relevant four years later. Therefore, we consider the FSE a relevant tool in foreseeing the main areas that could have an impact on health and its results could guide the preparedness for the future.

*Prehosp. Disaster Med.* 2023;38(Suppl. S1):s192

doi:10.1017/S1049023X23004958

### The Network of Practitioners For Emergency medical Systems and cRitical care project - A Case Study for Innovative Approach of Cooperation Between End-Users, Policy Makers, and Businesses

Luca Leonardi, Monica Linty

Università del Piemonte Orientale - CRIMEDIM, Novara, Italy

**Introduction:** The Network Of practitioners For Emergency medical systems and cRitical care project (NO-FEAR) was funded through an innovative call from the European Commission contained in the Horizon 2020 2016-2017 work program dedicated to Safe Societies - Protecting the freedom and security of Europe and its citizens.

The call assumed that professionals from many different sectors, including medical emergency teams, had little means and time to monitor innovation and research that could be useful to them. Moreover they have little opportunity to interact with academia or industry on these issues.

The project, funded in 2018 under a Coordination and Support Action Call, brings together practitioners, academia, policymakers and the industry involved in the response to medical emergencies, crises and health threats.

Since the very beginning, NO-FEAR has mobilized the vast network created during the project, to share real-time knowledge, experiences, lessons observed and challenges.

**Method:** Qualitative methodology

**Results:** This article intends to present the stages of the project during its journey where the creation of a network of practitioners dedicated to medical emergency services according to the three pillars methodology set in the project and which took place during the Covid 19 pandemic constituted a space to test innovative approaches in the relationship between end user and industry, in the identification of gaps and needs in the field and in responding to them, often going beyond the mandate of the