

the needs of many locations in several states. Consideration of basic infrastructure requirements such as Incident Command, security, HVAC, electricity, water and sanitation were part of a state supported vaccine clinic in an economically challenged neighborhood in downtown Miami, Florida.

Method: Topics to be discussed include staffing mixes, language/cultural concerns, handheld EMR applications, patient flow, immunization practices, testing practices, vaccine security, adverse event management, infection control procedures and the ever present supply chain challenges. The discussion will be framed from the perspective of the Chief Nursing Officer in an ever challenging vaccine environment.

Results: Over 20,000 vaccines were successfully provided in a little over three months, and a community-based Student Internship program was also implemented.

Conclusion: Vaccine administration is possible in a variety of settings. Foundational principles of vaccine security, management of the environment and provision of safety and security for patients and staff will help to ensure a successful public health campaign.

Prehosp. Disaster Med. 2023;38(Suppl. S1):s66–s67

doi:10.1017/S1049023X23002005

Bushfire and Biodiversity Disaster Risk Reduction Tool: A Community-Led Values-Based Bushfire Risk Management Project with Multi-Agency Support to Develop Strategies to Protect Biodiversity and Manage Bushfire in Upper Beaconsfield, Victoria, Australia

Caroline Spencer PhD, Suzanne Cross PhD, Frank Archer MPH
Monash University, Melbourne, Australia

Introduction: This Australian-first project explored residents' values about living in one of Australia's extreme bushfire risk areas. The project team developed the Upper Beaconsfield Bushfire and Biodiversity Tool (UPB&BT) which delivers tailored local information for residents living in the area. Designed to empower residents to make informed decisions, this user-friendly, online tool visualizes a community's devastating bushfire history, reveals residents' values about living in this area, and provides evidence-based actions to protect biodiversity and manage bushfire fuels on private property.

Method: Structured decision-making methodology informed the survey design to elicit residents' values about biodiversity protection and bushfire risk reduction, by inviting approximately 3000 residents to complete the survey. This community-led project applied a participatory approach by inviting collaboration between government, agencies, universities, and community representatives.

Results: Key results revealed 75% of respondents valued nature and lifestyle. 51% saw bushfire risk as an important factor for managing vegetation on private land, while 65% either mow or slash to manage vegetation. Synthesized data informed the content of the UPB&BT, which sourced evidence-based knowledge or specialists' expertise to provide tailored content and actions that met residents' diverse values. This included

the consequences of chosen actions, which helps residents understand the impact of their decisions. However, results identified confusion in roles and responsibilities.

Conclusion: This ground-breaking community-led, government-funded project joined with government, agencies, universities, and community representatives to develop a new bushfire and biodiversity tool to help residents understand biodiversity protection and bushfire management in their local community. Results aim to empower residents to make their own evidence-based and informed choices about managing their properties, thereby contributing to the community good. They decide what is important and identify available actions and their potential consequences. Other communities could replicate this process to localize their own disaster risk reduction strategies.

Prehosp. Disaster Med. 2023;38(Suppl. S1):s67

doi:10.1017/S1049023X23002017

Tracking Post-Disaster Chronic Disease: Protocol for the RECOVER Cohort Study

Claire Leppold PhD¹, Jessica Lockery MBBS, PhD², Penelope Burns BMed, MPH³, Kate Brady PhD¹, Meaghan O'Donnell PhD⁴, Joanne Ryan⁵, Lisa Gibbs PhD¹

1. Melbourne School of Population and Global Health, University of Melbourne, Melbourne, Australia
2. School of Health and Biomedical Sciences, RMIT University, Melbourne, Australia
3. College of Health & Medicine, Australian National University, Canberra, Australia
4. Phoenix Australia, Department of Psychiatry, University of Melbourne, Melbourne, Australia
5. School of Public Health and Preventive Medicine Monash University, Melbourne, Australia

Introduction: There is growing evidence that disasters may increase the risk of developing chronic diseases, including diabetes, dyslipidemia, chronic kidney disease, and cardiovascular disease. However, how much disaster exposure specifically affects chronic disease risk is unknown. This presentation introduces the study protocol for the Risk of hEalth CondiTiOn AdVerse Events after disasteRs (RECOVER) Cohort Study, which addresses this gap.

Method: The primary aim of RECOVER is to determine the extent to which disaster exposure specifically increases the risk of developing chronic disease (Aim 1). The secondary aims of the study are to determine if the nature, duration and severity of disaster exposure are risk factors for disease (Aim 2), to map mediators of post-disaster chronic disease risk (Aim 3), and to identify potential biomarkers of post-disaster chronic disease risk (Aim 4). RECOVER will recruit over 6000 adults (1:1 disaster exposed vs unexposed) in Australia to a nationally representative cohort for longitudinal follow-up. Detailed data will be obtained annually on disaster exposure, demographic, social and health factors. The primary health outcome (Aim 1) of chronic disease will be defined as new, incident diabetes, cardiovascular or respiratory disease, and will be ascertained through data linkage with the Pharmaceutical Benefits Scheme.

A biomarker sub-stream will include ~1,000 participants who provide a hair and saliva sample for cortisol and epigenetic analysis.

Results: N/A

Conclusion: There is an urgent need for detailed individual-level data to analyze the nature of the association between disaster exposure and chronic disease. In 2020 alone, 16.8 million Australians were exposed to disasters. The frequency and severity of disasters are only expected to grow due to climate change. As the first prospective cohort study to longitudinally track individual-level disaster exposure and chronic disease outcomes, RECOVER will fill a critical evidence gap.

Prehosp. Disaster Med. 2023;38(Suppl. S1):s67–s68

doi:10.1017/S1049023X23002029

The Knowledge and Training Needs of Disaster Medicine among Healthcare Professionals and Medical Students in Makkah City: A cross-sectional study

Bsaim Altirkistani¹, Mohammad Dairi², Reeman Babha³, Abad Babkier³, Ruba Abu khizanah³, Saleh Alabdulwahab⁴, Loui Alsulmani⁵, Taha Masri⁵

1. College of Medicine, King Saud bin Abdulaziz University for Health Sciences, Jeddah, Saudi Arabia
2. Department of Internal Medicine College of Medicine, Umm Al-Qura University, Makkah, Saudi Arabia
3. Faculty of Medicine, Umm Al-Qura university, Makkah, Saudi Arabia
4. College of Medicine, King Abdulaziz University, Jeddah, Saudi Arabia
5. Disaster Medicine Section, Emergency Medicine Department, King Abdulaziz University, Jeddah, Saudi Arabia

Introduction: Disaster medicine aims to prevent and respond to devastating events. Health professionals need to understand their role in disaster management to effectively respond when disasters occur. The aim of the study is to assess the knowledge level, preparedness, and the training gaps regarding disaster medicine among health professionals and medical students/interns in Makkah (Mecca) city.

Method: This is an online-based cross-sectional study design conducted in Makkah City. Physicians, nurses, and medical students/interns were included. Continuous variables were reported as means and confidence intervals. While categorical variables were reported as frequencies and percentages. Data were analyzed by Chi-square and Anova test as appropriate.

Results: Of the 651 participants, the mean age was 27.69 (95% CI 28.13 to 27.24) with 360 (55.30%) participants being males. The mean average score of disaster medicine knowledge was 7.90 (95% CI 8.29–7.51) for medical students/interns, 8.12 (95% CI 8.77–7.47) for nurses, and 4.85 (95% CI 5.21–4.49) for physicians ($P < 0.0001$). The majority of participants selected first-aid skills and triage and evacuation as crucial aspects to be covered in learning disaster medicine, 406 (62.4%) and 373 (57.3%) respectively.

Conclusion: In this study, the level of knowledge regarding disaster management is average among the healthcare population. Certain aspects of disaster medicine are needed to be focused on

such as first-aid skills and triage and evacuation. Incorporating disaster medicine as part of training programs is a demand.

Prehosp. Disaster Med. 2023;38(Suppl. S1):s68

doi:10.1017/S1049023X23002030

The Most Vulnerable Populations: Exploring the FEMA National Risk Index by Racial/Ethnic Group

Larissa Unruh MD, MPH, EMT-T

George Washington University, Washington, USA

Introduction: The US Federal Emergency Management Agency (FEMA) has created a publicly available National Risk Index (NRI) using natural disaster and community risk factor data to provide numeric and visual representations of communities' disaster risk. Of particular interest is the index's use of the social vulnerability and community resilience variables. This study's purpose was to identify and explore differences in vulnerability and resilience based on racial demographic data at the census tract level. By identifying communities at the highest risk, we can address modifiable risk factors to improve natural disaster outcomes for vulnerable populations.

Method: This project used merged data from the US Census Bureau's 2019 American Community Survey and source data for the FEMA NRI. Using Microsoft Excel, we created scatter plots of the social vulnerability and community resilience variables by census tract and predominant racial group, and calculated the mean, standard deviation, and statistical difference between those variables by race.

Results: In census tracts where Native Americans made up ≥50% of the population:

- 1) There was a positive linear association between percent of Native Americans and increased social vulnerability.
- 2) The average social vulnerability score (ASV) was significantly higher (ASV = 55.74) than for predominantly White tracts (ASV = 31.43) ($p < 0.001$).
- 3) The average risk score (ARS) was significantly higher (ARS = 30.18) compared to predominantly White tracts (ARS = 16.98) ($p < 0.001$).
- 4) The average resilience index score (ARIS) was significantly lower (ARIS = 51.83) than predominantly White tracts (ARIS = 55.08) ($p < 0.001$).

Conclusion: Results show that census tracts with predominantly Native American populations face significantly higher natural disaster risk and social vulnerability, and have significantly lower resilience scores compared to predominantly White tracts. Using modifiable factors to improve community resilience and decrease social vulnerability, the US can better protect communities at high natural disaster risk.

Prehosp. Disaster Med. 2023;38(Suppl. S1):s68

doi:10.1017/S1049023X23002042

Hypothermia Progression Time Course for Evacuation Planning

Kazue Oshiro^{1,2}, Tomikazu Murakami³

1. Hokkaido Ohno Memorial Hospital, Sapporo, Japan
2. Nihon University School of Medicine, Itabashi, Japan
3. Association for Mountain Medical Rescue, Sapporo, Japan