The Effectiveness of Incident Command System (ICS) Approach in Building Disaster Resilience of Health Care Facilities: A Scoping Review

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Introduction: Indonesia is a country that is vulnerable to natural, non-natural, and social disasters. The Indonesian Health Law mandates that health facilities have a hospital disaster plan document to increase disaster resilience. The Disaster Management Agency uses the command system approach (ICS) in disaster management for more efficient task distribution in the disaster response phase. The objective is to conduct a review of disaster plan documents prepared using ICS to effectively form disaster resilience.
Methods: This study is a scoping review, articles were obtained from the search process in the PubMed database and, Portal Garuda. The inclusion criteria for articles are English and Indonesian literature, published from 1997-2023, quantitative and/or qualitative research with a research population in the form of health service facilities or health workers working in health service facilities, and the full article can be accessed. Gradual screening was carried out and documented according to the PRISMA flowchart. The screening articles were assessed for validity, and article extraction and synthesis were carried out manually.
Results: In the screening process, twelve articles were obtained. The resilience of health facilities is mostly assessed using the hospital safety index instrument, with the command system component as one of the components assessed. Several articles continue the assessment using HSI with in-depth interviews.
Conclusion: The ICS approach is effective in disaster management within healthcare facilities and is recommended to be used in the organization of healthcare facility disaster management teams. Gadjah Mada University actively advocates to the Ministry of Health, Provincial and District Health Offices, as well as healthcare facilities in Indonesia, to use this approach in the development of their disaster management structure as part of their institutional contingency plan for health crisis management.

Prehosp. Disaster Med. 2026;41(Suppl. S1):s61
doi:10.1017/S1049023X26103069

Comparing Learning Outcomes in Cardiopulmonary Resuscitation (CPR) Basic Life Support Training for Self-Training Video with Learning Feedback and Traditional Onsite Training in Running Race Population

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Introduction: Sudden cardiac arrest (SCA) can occur during running events, and immediate and effective CPR significantly improves survival. Training race participants in basic life support (BLS) could potentially increase survival chances during these events. Online learning may improve access to BLS training by reducing instructor, travel, and organizational costs. While online video training alone may not fully replicate in-person learning, this study explores a refined online training model with online platform feedback. This study aimed to compare CPR performance, knowledge, and confidence scores in traditional onsite training vs. self-training video with learning feedback as an alternative method for teaching BLS.
Methods: Runners were invited into the study and selected between two BLS training methods:traditional face-to-face training (F2F) or self-training videos and online learning feedback (VDO). CPR training dummies were sent to parks and running groups for the VDO group to use. Both groups were evaluated for CPR performance by certified BLS instructors. Knowledge and confidence scores in BLS were collected by questionnaire and compared before and after training.
Results: 161 participants were in the VDO group and 577 in the F2F group. 88.2% and 93.2% of VDO and F2F groups achieved BLS competency (p value=0.25). Knowledge and confidence scores increased significantly in both groups. Although increased, the increase in scores for knowledge in the VDO group had an odds ratio of 0.5 (95% CI: 0.34, 0.74, p-value of 0.001), and in having confidence for assisting unconscious patients an odds ratio of 0.33 (95% CI: 0.22, 0.5, p-value of <0.001), compared to the F2F group.
Conclusion: Self-training videos with learning feedback achieved competent BLS skills in 88% of runners and improved knowledge and confidence in performing basic life support, but to a lesser extent than onsite training. Such a method could potentially be used to increase BLS training in runners.

Prehosp. Disaster Med. 2026;41(Suppl. S1):s61
doi:10.1017/S1049023X26103070

Development and Early Experience of a US-Based Pediatric Disaster Science Research Training Program

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Introduction: Children are often overlooked in disaster planning and response. Children are particularly vulnerable in a disaster, and their outcomes may be quite different from adults. Pediatric disaster research faces significant challenges in methodology and infrastructure, often relying on limited,

https://doi.org/10.1017/S1049023X26103082 Published online by Cambridge University Press

non-representative, and non-generalizable data. To advance this field, there is a critical need to train future disaster scientists who can develop research-informed solutions that advance the entire spectrum of the disaster cycle. We developed a curriculum that responds to the need to increase the number of professionals trained to perform pediatric disaster science research. This program was developed in collaboration with the HRSA-funded Pediatric Pandemic Network (PPN).

Methods: A consensus-driven pediatric disaster medicine research curriculum was developed using expertise from the PPN. Pediatric disaster medicine experts agreed to lead educational sessions in conjunction with program faculty. A diverse group of participants was recruited for the 2024 cohort to spend 10% of their time attending interactive Zoom educational sessions, individual mentoring sessions, developing a capstone project, and attending the PPN annual meeting to meet potential national mentors.

Results: Eighteen applicants were accepted from 15 different states. 1/3rd of applicants were underrepresented in medicine. Accepted scholars represented emergency medicine, critical care medicine, surgery, hospital medicine, and epidemiology. We included a feedback loop in our curriculum that led to the addition of an implementation science session, analysis of an early-stage investigator's disaster-specific grant proposals, sessions on QI, health services research, and other topics using disaster science research examples.

Conclusion: To our knowledge, this disaster science research training program is the first of its kind in the US. To increase sustainability, we have submitted an NIH application to continue to fund this program from 2026-2031.

Prehosp. Disaster Med. 2026;41(Suppl. S1):s61–s62
doi:10.1017/S1049023X26103082

Are We Prepared to Care for The Children? An Assessment of Pediatric Specific Pre-Deployment Training Provided by Non-Governmental Organizations Operating in Disaster Zones

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Introduction: Children face unique vulnerabilities during crises, necessitating specialized care. This study aims to assess the adequacy of pediatric-specific pre-deployment training provided by non-governmental organizations (NGOs) operating in crisis zones.

Methods: To identify NGOs active in disaster response, a list of those that responded to the 2023 Turkey-Syria earthquake was selected from Charity Watch's top-rated NGOs in the International Relief & Development category. A comprehensive analysis of their public websites was performed, and NGOs were contacted for information on pediatric-specific training. Response rates and the content of training offered were analyzed to evaluate the current state of pre-deployment training.

Results: Twelve of the twenty-three (52.1%) NGOs examined responded to inquiries. Among the responding NGOs, only one (12.5% of respondents) offered any pediatric-specific training. The sole NGO that provided such training sets a baseline minimum requirement for clinical staff to hold both pediatric and neonatal life support certificates (or equivalent). Furthermore, staff receive mandatory training on child safeguarding, as well as Integrated Management of Neonatal and Childhood Illness training. Other non-pediatric-specific courses, such as Personal Safety and Security, Psychological First Aid, and Hostile Environment Awareness Training, are also offered by this specific NGO.

Conclusion: This study underscores the critical need for standardized and comprehensive pre-deployment training for healthcare personnel in disaster zones, with a particular focus on pediatric care. NGO responses and practices revealed inconsistencies in training content, strategies, and programs, emphasizing the need for greater transparency. Establishing best practices and collaboration between NGOs, healthcare experts, and authorities is vital to ensure the effective care of pediatric patients in disaster zones.

Prehosp. Disaster Med. 2026;41(Suppl. S1):s62
doi:10.1017/S1049023X26103094

Attitudes Toward Routinely Recommended Vaccines Among Hawaii Parents Following the COVID-19 Pandemic

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Introduction: This study aimed to assess changes in attitudes toward routinely recommended vaccines among Hawaii parents following the COVID-19 pandemic and to identify associated factors influencing these changes.

Methods: An online survey was conducted in March 2023 among parents/caregivers of children aged 0-12 years residing in Honolulu, Hawaii. Data collected including sociodemographics and household characteristics, theoretical constructs of the Health Belief Model, emergency preparedness behaviors, risk perception of diseases, and attitudes toward vaccines. Descriptive statistics were used to assess parental vaccine attitudes, logistic regressions were employed to identify factors associated with changes in attitudes regarding routinely recommended vaccines (vaccines other than the COVID-19 vaccine).

Results: Participants (N=278) were mostly female (84.2%), college-educated (68.3%), food-secured (66.5%), and possessed an emergency preparedness kit (50.7%). Attitudes toward routinely recommended vaccines remained unchanged in 65.1% of participants (60.1% positive, 5% negative), while 34.8% reported changed attitudes (21.9% changed to positive; 12.9% changed to negative). Multivariable logistic regression revealed that factors that influenced changes in vaccine attitudes included race/ethnicity, having a family emergency plan,

https://doi.org/10.1017/S1049023X26103082 Published online by Cambridge University Press