

# **The Role of Emergency Nurses in Emergency Preparedness and Response**

## **Position Statement**



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# The Role of Emergency Nurses in Emergency Preparedness and Response

## Description

Hospitals, especially emergency departments (EDs), are essential in the medical system for all facets of emergency preparedness: mitigation, planning, response, and recovery (Federal Emergency Management Agency [FEMA], 2023; Health and Human Services Public Health Service, Agency for Toxic Substances and Disease Registry, 2013; World Health Organization [WHO], n.d., 2022). As a result, emergency nurses may routinely encounter patients who have been exposed to hazardous materials or infectious diseases, were victims of no-notice events, or were evacuees from an immediate threat to life. These patients may present via the emergency medical system, by private vehicle, or without prior notification and unrelated to a disaster (Administration of Strategic Preparedness and Response, Technical Resources, Assistance Center, and Information Exchange [ASPR TRACIE], n.d.; Environmental Protection Agency [EPA], 2023; FEMA, 2024; General Services Administration [GSA], 2022; Homeland Security, 2019). Patients affected by disaster may also present to the ED in large volumes, creating a surge in patient census, which can overwhelm EDs that are not prepared.

The United States Department of Homeland Security's National Response Framework describes a catastrophic incident as "any natural or manmade incident, including terrorism, which results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, or government functions" (FEMA, 2023b, p. 8). The International Federation of Red Cross and Red Crescent Societies goes on further to note that as a result of a disaster as described in the preceding a community's functioning is seriously disrupted beyond its capacity to cope on its own (IFRC, 2024). The increased risk associated with climate change and the need for coordination across the healthcare community to respond to the health effects of climate-related emergencies have been highlighted by the WHO. (WHO, n.d.) Both the increased risk and the need for coordination require focus as disaster plans are developed (Keller, 2015). Over the past decade an increasing number of severe weather events associated with climate change have resulted in loss of life, injuries, and public health effects (Crimmins et al., 2023).

Optimal care for patients involved in a disaster is best achieved using a systematic, standardized, and coordinated delivery approach across all facets of the healthcare system (ASPR TRACIE, n.d.; GSA, 2022; Health and Human Services Public Health Service, 2013). A leading method for preparing to manage all types of disaster events is an all-hazards, capability-based approach. (Crimmins et al., 2023; EPA, 2023; FEMA 2024). This approach has been endorsed by the Centers for Medicare and Medicaid Services (CMS) (2023) and is part of the updated standards that The Joint Commission (TJC) made effective in 2016.

Regular training for potential emergency incidents can assist in mitigating the extent of damage, injuries, and patient complications, as well as aid in the recovery from an event. Disaster training and preparation for any emergency is essential for the emergency nurse (ASPR-TRACIE, 2022a, 2024a; Alert Media, 2023). Emergency nurses have a responsibility to address the changing climate within the context of healthcare, where historically, "nurses have long been faithful to our contract with society, which obligates us to promote the health of the public, through caring service, using knowledge, skills, and competence, even in hazardous service" (Fowler, 2015 p. 6). In the modern landscape of healthcare, emergency nurses must balance responsibilities that they face daily. While ongoing education and training have been shown to improve outcomes in emergency events, there are significant barriers to regular training. Cost of training, facility workflow disruptions, healthcare workforce shortages, and staff

turnover, as well as competing regulatory training requirements, are all barriers to successful emergency preparedness training.

### ENA Position

It is the position of the Emergency Nurses Association (ENA) that

1. Emergency nurses play a pivotal role in the all-hazard's approach to emergency management centered around the four phases of a disaster process: mitigation, preparedness, response, and recovery.
2. Disasters can exacerbate socioeconomic disparities in health, disproportionately affecting vulnerable populations.
3. Emergency nurses actively participate in emergency preparedness education and training to include the all-hazards approach through both didactic and hands-on training.
4. The frequency of all-hazards emergency preparedness education and training is determined by the level of risk for each facility and based on the individual hospital's annual hazard vulnerability analysis process.
5. Mass casualty disaster plans should be clear, concise, and easy to follow and developed following the completion of a thorough evaluation of a healthcare facility and its surrounding community.
6. Emergency nurses collaborate with their community response partners to develop, implement, and evaluate disaster preparedness strategies, including training exercises and drills.
7. The development of emergency management guidelines, policies, and procedures is based on evidence-based practice.
8. Climate change has been scientifically shown to have a direct effect on the prevalence, scale, and impact of natural disaster events. Thus, emergency preparedness plans need to incorporate climate change effects as part of disaster planning.
9. Emergency nurses take individual accountability and develop a personal and family preparedness plan.

### Background

In 2006, the Pandemic and All-Hazards Preparedness Reauthorization Act was signed into law in an effort to prepare the United States for public health emergencies and disasters (Fowler, 2015). Still, the coronavirus disease 2019 (COVID-19) pandemic tested healthcare facilities' emergency plans and exposed vulnerabilities in healthcare emergency preparedness on a scale not previously experienced. (ASPR-TRACIE. n.d.). The goal of all-hazards preparedness is not to design plans for every possible risk but, rather, to make the planning risk-based and flexible. An example is a hospital that creates a plan for staff sheltering. The plan is designed to provide structure for situations when a hospital may shelter staff. The incident that triggers this plan may be weather-related, such as a snowstorm, or a public safety risk, such as a threat of violence in the surrounding area. The successful execution of an operational plan can be maximized through structured planning and training, including partnerships with healthcare coalitions. A recurring cycle of assessing, planning, training, exercising, and revising is vital to maintaining healthcare system preparedness, even in the absence of an immediate, high probability threat. As stated by the National Guidance for Health Care System Preparedness document and the National Response Framework, healthcare coalitions coordinate with healthcare organizations, emergency management

staff, other emergency support function personnel, relevant response partners, and stakeholders to develop plans through the all-hazards approach (ASPR TRACIE, 2022b). The use of social media during a disaster can provide up-to-the-minute news information, such as updates on road closures, evacuation routes, designated help areas, and shelter locations (hence, the importance of reaching out to the appropriate groups and individuals beforehand) (Niles et al., 2019). Today's health emergencies are increasingly complex due to factors such as globalization, urbanization, and increased connectivity where people, goods and potential vectors of disease are constantly on the move. This coordinated effort during planning, response, and recovery can lead to an improved state of preparedness (CMS, 2023).

Mass casualty disaster plans should be clear, concise, and easy to follow. Prevention, protection, response, recovery, and mitigation are all vital elements of this planning (FEMA, 2024; Health and Human Services Public Health Service, Agency for Toxic Substances and Disease Registry, 2013; WHO, n.d.; WHO, 2022). Basic to that planning is the completion and systematic review of the hazard vulnerability assessment (HVA) for the healthcare facility and its surrounding communities (Office of the Assistant Secretary for Preparedness and Response, 2016). A hospital's medical surge preparedness or surge capacity preparedness plays a significant role in reducing mortality and morbidity in the disasters (ASPR-TRACIE, 2024a). The HVA assists in identifying and preparing for the specific types of hazards that put a hospital or community at risk, such as acts of violence, environmental effects, infectious disease outbreaks, and hazardous materials exposures. For hospitals to be aware of these types of hazards, it would be beneficial for HVAs to be conducted, at minimum, once a year, as recommended by The Joint Commission (Thomasian et al., 2021; TJC, 2022). However, a HVA can be conducted if and when the perceived or actual risks to a hospital are identified. For example, the re-emergence of the Ebola virus disease may warrant an HVA to assess risk. Considerations for hospital preparedness should include personnel safety, incident command structure, disaster triage, syndrome surveillance, hazardous materials awareness and response, use of personal protective equipment, self-sustaining capability, and other relevant topics. It is essential that hospital emergency plans include an understanding of the resources available within a local area or through federally administered emergency management compacts. All-hazards planning also includes the needs of vulnerable populations, including communication, transportation, evacuation, shelter, supplies, mental health, chronic disease, and consideration of populations with animals (Landesman et al., 2021). ENA is in partnership with Emergency Medical Services for Children (EMSC) and continues to support and advocate for pediatric readiness in EDs (Gilchrist & Simpson, 2019; Landesman et al., 2021; Snow & Stone, 2019). One of the identified areas for improvement in U.S. emergency departments is developing disaster plans and conducting drills that integrate the specific needs of vulnerable populations such as children, particularly those in low- and middle-income areas (Gilchrist & Simpson, 2019; Kappy et al., 2022; Remick et al. 2018). Although progress has been made to improve pediatric readiness, there remain significant opportunities for further progress.

With the increasing number of disasters and communities affected, coupled with the threats from climate change, attention has been drawn to the risks of disasters, and what can be done about them. A hospital's HVA process should consider climate change and the environmental effects on their hospitals and communities. The WHO and the Centers for Disease Control and Prevention have concluded that climate change will exacerbate environmental impacts on health from severe weather, temperature extremes, and vector ecology (Crimmins et al., 2023; Keller, 2015; Prüss-Ustün et al., 2016; Sharpe & Davison, 2022). Due to the scope and scale of the problem, the projected health consequences of climate change have been identified as the most profound factor to affect human health over the next generation (Intergovernmental Panel on Climate Change, 2023; Prüss-Ustün et al., 2018; Romanello et al., 2021).

Despite the resource requirements of disaster preparedness exercises, their repetitive, iterative nature allows for staff exposure and continuous improvement of plans (Dasandi et al., 2022). This is so important when, often, research and educational materials regarding emergency preparedness and response are based on anecdotal evidence and case studies. It must be emphasized that the development of emergency preparedness guidelines, policies, and procedures must be based on evidence-based practice,

with these anecdotal documents/case studies being used as a resource to provide emergency nurses with a source of information to review and consider how they may be enhanced to meet the specific needs of an individual department (ASPR, 2024b; Dasandi, et al., 2022; Hung, et al., 2021; Moss & Gaarder, 2022). Training of staff through classroom, simulation, and drills is an essential aspect of hospital preparedness (ASPR, 2024b; Hung, et al., 2021). Although many researchers have demonstrated positive effects of disaster training, there remains a need to obtain input about the specific types of training that were useful and would be most useful from nurses who have been part of a disaster (Hung et al, 2021; Moss & Gaarder 2022; Samei et al., 2023). Prioritization of preparedness and training activities based on the HVA will enable hospitals, and especially emergency nurses, to focus resources on mitigating risks specific to their own organization, community, or region.

Besides being personally prepared to protect themselves and their families, emergency nurses can help to improve their own confidence in their ability to respond to an emergency through preparation, including education and training. An essential first step is establishing a personal disaster plan that considers their own care, along with the care of their families and friends, pets, and other support individuals. Having an established plan for a nurse's support group can alleviate stress and concern about the safety and security of their loved ones during an event. The website Ready.gov (2024) is a reliable source of information for self-planning before an event happens.

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