All-Hazard Preparedness: The Occupational and Environmental Health Nurse Role

INTRODUCTION

A hazard is something that is potentially harmful, while a disaster is an actual event that causes or threatens to cause loss of life, human suffering, significant damage to public and private property, and economic and social disruption (Hart, 2014; Rogers & Lawhorn, 2007). Serious trauma, illness and/or death may result from various types of incidents including those classified as:

- natural occurrences,
- human error, neglect, or intentional harm,
- technological,
- biological,
- chemical,
- radiological,
- nuclear, and
- environmental.

Numerous catastrophic events including worksite terrorist attacks, natural disasters and biological incidents (e.g. SARS, and other pandemics such as Pandemic Flu and COVID-19) have occurred recently, resulting in significant impact on workers and businesses, with effects extending to the broader community and critical infrastructure.

Given the extensive list of potential hazards that may result in disasters, it is unrealistic to devise a plan to respond to each distinct hazard. Comprehensive emergency preparedness requires attention to not just specific types of hazards but preparation for all types of hazards.

An all-hazards approach is a risk-based methodology to identify and evaluate all potential hazards and risks when formulating an emergency preparedness plan. This approach is consistently used across regulatory agencies in the United States and other nations as well as businesses and agencies with responsibility for regulating and/or promoting, preparing for, and responding to emergencies (Hart, 2014; Canton, 2013).

An all-hazards planning approach requires two components (Canton, 2013):

- risk or vulnerability analysis, and
- functional planning.

Risk or vulnerability analysis involves identification of potential hazards as well as community vulnerabilities to specific hazards so that planning resources are dedicated to hazards most likely to affect the community. Functional planning involves prioritized contingency planning to deal with multiple types of hazards.

A universal approach to all-hazard preparedness currently mandated by the National Incident Management Systems (NIMS) is the Incident Command System (ICS). The system has been adopted by state, federal, and global agencies and can be adapted for use at all levels as it is designed to be scalable and flexible (Hart, 2014).

RATIONALE

Occupational health nurses (OHNs) are uniquely qualified to play a critical role in disaster preparedness and emergency management (Rogers & Lawhorn, 2007). As collaborative workplace clinicians, OHNs possess the expert skills, knowledge, and experience to develop, manage, implement, and evaluate an all-hazard preparedness program within the workplace and the broader community.

To support the all-hazard preparedness framework, OHNs are able to utilize their expertise and knowledge of the workplace environment to support
a thorough risk analysis. This process includes utilizing their expertise to collaboratively perform a vulnerability assessment of potential hazards within the workplace and community. The OHN is also a valuable asset when prioritizing contingency plans in preparation for various potential hazards within the workplace and broader community. Their public health skills and medical expertise are particularly beneficial when there is a biologic incident.

As liaisons within the workplace and community, OHNs can use their leadership skills to proactively perform community surveillance activities, identify communication and education needs, and implement educational activities in the functional planning phase of risk analysis. This proactive approach to all-hazard preparedness will not only maximize opportunities to implement practice and training drills but will cultivate relationships within the broader community and emergency response systems and support familiarity with use of the ICS.

The OHN, with experience as a practiced clinician familiar with triage concepts will also be an asset in the functional planning component of all-hazard preparedness. This phase encompasses prioritizing contingency plans to deal with multiple types of hazards. Working collaboratively with other professionals, the OHN is a key player in all states of emergency management including initial threat assessment, identification of response options, response plan development, implementation of response during an event, and post-disaster recovery. As an employee/employer advocate, counselor, and confidant, the OHN is crucial in identifying and managing acute stress-reactions and post-traumatic stress disorders resulting from disaster-like events and implementing crisis intervention with appropriate community resource referrals to support return to a productive life.

In addition, OHNs are instrumental in the after-action debriefing and planning phase of all-hazard preparedness to support improvement of future responses. This phase involves data analysis, ongoing community planning, and follows a continuous improvement cycle so that deficiencies are identified and adjustments to the plan made as needed.

CONCLUSION

The position of the American Association of Occupational Health Nurses, Inc. (AAOHN) is that OHNs play various critical roles within a multidisciplinary team when developing, managing, implementing, and evaluating a disaster/emergency plan. The American Association of Occupational Health Nurses, Inc. posits that an all-hazard preparedness approach should be utilized to identify and evaluate hazards and risks and that OHNs collaboratively utilize their expert skills, knowledge, and experience when preparing for such workplace emergencies. It is the responsibility of occupational and environmental health nurses to assume leadership roles and utilize their expertise to protect workplaces, their workforces, and individual workers from current and future threats. This will support continuity of business and protection of critical infrastructures, particularly those that provide essential services and products necessary to maintain economic life of the affected community/enterprise. Additional resources available to guide the OHN include the emergency preparedness chapter of the Fundamentals of Occupational Health Nursing: AAOHN Core Curriculum, and the emergency preparedness and response section of the Centers for Disease Control website.

REFERENCES


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