



SOCIETY OF
PEDIATRIC NURSES

SPN Informational Paper: Disaster Management for Children and Families

INTRODUCTION

The Society of Pediatric Nurses (SPN) recognizes the significant impact of natural disasters on children, families, nurses and other professional health care providers who experience these catastrophic events. In 2017, for example, 122 countries reported 318 natural disasters that caused the death of more than 9,503 people, created 96 million victims and resulted in \$314 billion in damages. An alarming trend is the rise in school shootings with multiple casualties (Katsiyannis, Whitford and Ennis, 2018). The COVID-19 pandemic in 2020 impacted children and families medically, financially, socially, and psychologically. The loss of parental income from workforce reductions and/or furloughs sometimes creates double or even triple events in the life of a child and family. The pandemic-related transition to online learning and mandated social distancing have impacted ways of learning during school year as well as the children's social network and support systems.

Regardless of the type of disaster or severity of its impact, the goals are to respond to save lives, to assist individuals to cope with the consequences of the disaster, and to prevent further damage and hazards. SPN also recognizes that children have unique needs during disasters. There is consistent multidisciplinary evidence that children and their families are vulnerable and are at risk for adverse short- and long-term physical, social, psychological, and economic outcomes as a result of experiencing a disaster. Furthermore, nurses and other health care professionals who manage the care of victims of disasters may experience stress, compassion fatigue, burnout, and other difficulties as a consequence of this situation.

Although children represent nearly 25 percent of the U.S. population, current state and local disaster preparedness plans often do not include specific concerns for children and their families (Institute of Medicine [IOM], 2014). Furthermore, in its 2009 Interim Report, the National Commission on Children and Disasters (NCCD) found serious deficiencies in the emergency preparedness for children. The subsequent 2010 Report to the President and Congress builds on the findings and recommendations in that earlier report. More specifically, this report highlights the unique needs of children and sheds light on the differences between planning for children and planning for other at-risk populations (Cornette & So, 2011). A National Pediatric Disaster Coalition convened in 2015 to identify important gaps in pediatric disaster preparedness (National Pediatric Disaster Coalition, 2015). In 2016, the Federal Office of the Assistant Secretary for Preparedness and Response developed and released the new *Health Care Preparedness and Response Capabilities for 2017 to 2022*. This document included plans for the nation for disaster response and addressed the unique needs of children and adolescents (Office of the Assistant Secretary for Preparedness and Response, 2016).

DEFINITION(S)

The World Health Organization and the Pan American Health Organization define a disaster as “an event that occurs in most cases suddenly and unexpectedly, causing severe disturbances to people or objects affected by it, resulting in the loss of life and harm to the health of the population, the destruction or loss of community property, and/or severe damage to the environment. This leads to disruption in the normal pattern of life, resulting in misfortune, helplessness, and suffering, with adverse effects on the

socioeconomic structure of a region or a country and/or modifications of the environment to such an extent that there is a need for assistance and immediate outside intervention” (Lynch and Berman 2009). Natural disasters include but are not limited to floods, hurricanes, typhoons, wildfires, tsunamis and earthquakes. Man-made disasters (human made) include active shooters, biological or biochemical terrorism, radiological (nuclear) events, fire, transportation events, and acts of war (Veenema, 2013). Recently, the onset of the COVID-19 pandemic has created a new level of disaster planning. Because of the rapid onset, the original impact on the pediatric population was not widely known. However, as the pandemic has continued, more information related to the impact on children is beginning to emerge.

RATIONALE AND SUPPORTING INFORMATION

Pediatric experts have emphasized that when compared with adults, children are more susceptible to disasters of all types because of their unique physiologic, anatomic, developmental, and psychosocial characteristics (American Academy of Pediatrics [AAP], 2015a; Murray, 2011). Their developing minds and bodies make them especially vulnerable to the impact of disasters, regardless of type and severity. The psychosocial response of children to natural and human-generated disasters, such as a terrorist act, is contingent upon age and developmental level (Jones & Schmidt, 2013).

Children with special needs present unique challenges before, during, and after a disaster. Baker and Cormier (2013) note that during a disaster, children may be separated from their families and may not be able to communicate their special medical problems. Children are vulnerable if they are separated from their caregivers, and depending on their age or developmental level, they may not know how to share their identity or that of their caregivers or parents (Chung and Blake, 2014). For example, thousands of children were separated or missing during Hurricane Katrina and dozens of unaccompanied children were found after an Alabama tornado in 2011. Thus, they need constant supervision and protection from real and potential hazards. Their psychological response to the short or long-term separation from their caregivers must be recognized with adequate provisions for their temporary care.

Much discussion has been directed toward children’s psychological and emotional responses to disasters. A child’s emotional and cognitive developmental level impacts the child’s psychological response to a disaster. For example, toddlers may have increased temper tantrums and sleeping and eating problems. Preschool children will often demonstrate separation anxiety, nightmares, and regressive behaviors. School-age children may present somatic complaints and disruptive behaviors. Adolescents will often experience anxiety, withdrawal, and increased involvement in risky behaviors such as substance abuse (Murray, 2010).

Jones and Schmidt (2013) report that approximately 42% of children who experienced a disaster are still in need of mental health services. Disaster response for young children can be much improved with attention to their developmental and physical needs, including their increased vulnerability and dependence on caregivers to keep them safe and support their recovery (Osofsky & Reuther, 2013).

One of the studies conducted by the National Advisory Committee on Children and Disasters (2015) found that only 47% of hospitals have disaster plans that address the needs of the pediatric patient. Disaster management involves preparedness, mitigation, response, recovery, and evaluation (Hassmiller & Stanley, 2014). It is critical that disaster management includes plans for bioterrorist attacks, potential toxic chemical waste/spills, and natural disasters, such as hurricanes, tornadoes, floods, earthquakes, wildfires, tsunamis, and volcanoes, for vulnerable communities. Children and families are at risk and vulnerable for adverse outcomes if plans are not in place to evacuate, provide safe housing, and address their medical and psychological needs, including access to health care providers and facilities. To avoid such risk, there is a need for all stakeholders, including family members, health care administrators, and providers, to share in the responsibility of developing and evaluating personal and family disaster preparedness plans that reflect community-wide preparedness policy and procedures. Nurturance, protection, and support are required for both resilience and full recovery for young children.

The management of children and families during these catastrophic situations is an intense, traumatic and

stressful experience. Caring for this population may have negative consequences. For example, an article in the 2014 issue of *The American Nurse* reported the findings of a study that described the psychological toll on nurses who worked during Hurricane Sandy. More than half of the nurses surveyed in that study found the experience extremely stressful. Sterling (2014) noted some evidence of compassion fatigue, a unique type of burnout among health care providers, including nurses involved in disaster relief.

RECOMMENDED GUIDANCE

As pediatric nurses we must continue to scrutinize the gaps in our knowledge and skills as well as measure the results of our nursing care provided to children who have experienced the trauma of a disaster (Wiggins, 2015). Pediatric nurses must have a key role in the design, implementation, and evaluation of emergency preparedness plans for health care and community-wide services. The impact of disasters has not been well studied. In an effort to promote effective emergency preparedness and management for children and families before, during, and after a disaster, the Society of Pediatric Nurses has provided the following guidance:

1. Promote disaster preparedness through federal, state and legislative advocacy to ensure access to adequate health care, adequate public shelters, quality post-disaster housing, and access to schools, and promote interventions and resources for health care personnel who provide care to disaster victims ([AAP, 2015a, AAP, 2015b; Blake and Fry-Bowers, 2018).
2. Promote pediatric disaster readiness and response at regional, state and local levels (AAP, 2015b; Emergency Nurses Association [ENA], 2012).
3. Require disaster preparation for schools, hospitals and other agencies providing services to children (IOM, 2014).
 - a. Emergency planning should include the ability to be self-sustained for at least 96 hours with essential elements of utilities, communication, food/water, medications, and staffing (AAP, 2015a; ENA, 2012; National Association of Pediatric Nurse Practitioners [NAPNAP], 2011; National Association of School Nurses [NASN], 2014).
 - b. Develop a plan for rapid identification and reunification of displaced children with their families or referral to appropriate care, especially in the event parents do not survive the disaster (NCCD, 2010; NAPNAP, 2011; Chung and Blake, 2014).
 - c. Develop plans and coordinate resources to address the medical needs of children (NCCD, 2010) paying particular attention to preparedness for children and youth with special needs (AAP, 2015a, b; ENA, 2012; NAPNAP, 2011, NASN, 2014).
4. Develop disaster case management programs that provide consistent holistic services that achieve tangible, positive outcomes for children and families affected by the disaster (NCCD, 2010).
 - a. Programs should address the mental health and psychological needs of children and families and provision of training in psychological first aid (NAPNAP, 2011; NCCD, 2010).
 - b. Incorporate disaster anticipatory guidance in Head Start, and primary care settings, including vaccinations to prevent illness (NCCD, 2010; NAPNAP, 2011)
 - c. Educate all staff responsible for children with special needs during a disaster/emergency (ENA, 2012; NAPNAP, 2011).
5. Include pediatric-specific disaster preparedness educational content for pediatric and school nursing programs and continuing education. This includes core curricula content relative to all hazards disaster nursing and emergency response (ENA, 2012; NAPNAP 2011; NASN, 2014). Children's hospitals and/or pediatric nurses should serve as a resource to the community for pediatric disaster preparedness education (Blake and Fry-Bowers, 2018).
6. Encourage families to develop their own disaster and reunification plans. Families who have knowledge of disaster preparedness are more likely to initiate a written household disaster plan and disaster kits and resources. In addition, there are several resources for families that nurses can share to develop a home toolkit. (Healthychildren.org, 2018; Thomas et al. 2015; AAP, 2015b; ENA, 2012; NAPNAP, 2011).
7. Encourage all health care providers to develop their own disaster and reunification plan (AAP, 2015b; ENA, 2012; NAPNAP, 2011).

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