

Children and Disaster

Emergency Management: Threat Assessment, Hazard Identification, and Risk

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Regional Healthcare Coalition 2020 Top 5 Hazard Vulnerabilities



1 Blizzard Snow

- **Awareness:** Children are at greater risk of injury and death due to severe weather events. Pediatric admissions to hospitals associated with frostbite, hypothermia, and carbon monoxide poisoning should be anticipated.
- **Preparedness:** Workforce with children may travel long distances to and from their children impacting their ability to respond to disasters.
- **Response:** Families with children who are dependent on medical devices are known to seek assistance from 911 and hospitals during a severe weather power outage.
- **Mitigation:** Children rely on their families, childcare providers, and schools to prepare and gather supplies prior to freezing winter storms.



2 Active Shooter

- **Awareness:** There were 70 school shootings in Michigan and 55 in Ohio in 2020. Most shootings occur within proximity to schools.
- **Preparedness:** Active shooter drills in schools were associated with a 42% increase in anxiety & stress and 39% in depression. The American Academy of Pediatrics recommends that drills be conducted in a manner that does not traumatize children.
- **Response:** PsySTART Triage assists providers in allocating mental health resources to children and adults after the event. Limiting children's media exposure when an incident occurs reduces anxiety. Practice age-appropriate community messaging to reassure children.
- **Mitigation:** Stop-the-bleed training is for everyone, including middle and high school students. Hospitals need to ensure there is a practiced plan for family reunification and unaccompanied children.



3 Chemical Exposure

- **Awareness:** Children have a greater risk of respiratory failure and acute toxicity. Children breathe more air per kilo and have a higher body surface area that increases the absorption of toxins. Agents of the highest concern include nerve, blistering, asphyxiants, and disabling agents.
- **Preparedness:** Childcare, schools, and families should have plans for sheltering in place. Prehospital providers and Hospitals decontamination equipment and PPE.
- **Response:** Anticipate the decontamination of children within a short period of time. Prevent hypothermia using warmed water for decontamination. Prepare for pediatric medical countermeasure administration.
- **Mitigation:** Communities should have reliable mechanisms to alert the community to a toxic exposure and how to shelter in place.



4 Mass Casualty

- **Awareness:** Only 13% of communities have a mass casualty plan that includes children. Trauma accounts for approximately 20% of pediatric EMS encounters under normal conditions. Children are at greater risk of blunt chest and abdominal trauma, including traumatic asphyxia.
- **Preparedness:** Adopting a single standard for pediatric triage such as JumpSTART or SALT improves on-scene triage between responders.
- **Response:** Children with critical trauma or burns require a regional coordinated system of response. EMS transport mutual aid, including air transport to distant pediatric regional centers, should be anticipated.
- **Mitigation:** Promote Stop-the-Bleed Programs. Place stop-the-bleed kits with public access defibrillators.



5 Cyber

- **Awareness:** Every year thousands of children become victims of cybercrime. The National Center for Missing and Exploited Children (NCMEC) [Cybertipline](#) reports included over 69 million images, videos, and other files related to child sexual exploitation.
- **Preparedness:** Secure computer networks in schools, libraries, and other areas where children gather. Train caretakers in the signs of child cybercrime.
- **Response:** As children move to online learning the need to monitor and report cybercrime events against children through appropriate law enforcement channels including the NCMEC.
- **Mitigation:** Promote programs known to reduce the risk of cybercrime of children from the FBI and National Center for Missing and Exploited Children.