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Addressing the Needs of Children in Disaster Preparedness Exercises

2nd Edition



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Illinois Emergency Medical Services for Children is a collaborative program between the Illinois Department of Public Health and Loyola University Chicago. The Pediatric Preparedness Workgroup is composed of physicians, nurses, paramedics, pharmacologists, psychologists, state/local health department personnel as well as representatives from key organizations, such as the American Red Cross, Illinois Association of School Nurses, Illinois Chapter of the American Academy of Pediatrics, Illinois College of Emergency Physicians, Illinois Hospital Association, Illinois State Council of the Emergency Nurses Association, Illinois Medical Emergency Response Team and Illinois Poison Center, among others.

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How to Use This Document

This document is offered as a resource to agencies/organizations as they plan and conduct disaster drills and exercises. Inclusion of infants and children in disaster drills and exercises is an essential component in preparedness efforts, and can assist in preparing agencies/organizations to meet the needs of children during an actual disaster or mass casualty incident (MCI).

A glossary on page 32 can assist with defining common terms used in this document.

Please note that any recommendations in this document are based on current information and guidelines found within the medical literature at the time of publication.

NOTE: This document defines the age of a child as 15 years of age and younger in accordance with the Emergency Medical Services and Trauma Center Code adopted by the Illinois Department of Public Health. Exceptions may include the population of children with special healthcare needs/children with functional access needs.

This document is available on-line at www.stitch.luc.edu/emsc. For additional copies or more information, contact Illinois EMSC at (708) 327-EMSC (3672).

Overview

Although disaster preparedness has been a major focus in the United States since the events of September 11, 2001, disaster preparedness drills/exercises have not consistently included or addressed the needs and special vulnerabilities of children. Unique considerations for children in planning and preparing for disasters of any type include the following factors:¹

- ◇ Infants, toddlers, and young children do not have the motor skills or strength to escape from a disaster area. Younger children also lack cognitive decision-making skills to determine how to flee from danger or to follow directions from others. Developmental and cognitive levels of children may impede their ability to escape danger.
- ◇ Triage guidelines differ for children.
- ◇ Appropriately sized equipment/supplies as well as age and weight appropriate medications, including antibiotics and antidotes, are required.
- ◇ Physiologic differences such as thinner skin, faster breathing, and a higher sensitivity to certain agents can lead to more severe symptoms in children when exposed to chemical, biological, or radiological agents.
 - * Higher respiratory rates per minute put children at risk for greater exposure to aerosolized agents.
 - * More permeable skin and larger skin surface to mass ratio increases the exposure risk in children to some agents.
 - * Children have an increased vulnerability to the effects of radiation exposure, requiring a more vigorous medical response than adults.
- ◇ Children are more susceptible to dehydration and shock. A child's condition can shift from stable to life-threatening rapidly due to their smaller circulating blood volume and fluid reserves. If treatment is not immediate, even relatively small amounts of blood/fluid loss can lead to irreversible shock or death.
- ◇ Children are more sensitive to changes in body temperature and have a faster metabolism. This can lead to hypothermia/hyperthermia more rapidly than adults. Adult decontamination processes/procedures are not ideal for children and they are more vulnerable to hypothermia during the decontamination process.
- ◇ Children with special health-care needs (CSHCN)/children with functional access needs (CFAN) are particularly at risk if their survival depends upon medications or technology such as respirators.
- ◇ Children have unique psychological vulnerabilities. Children's lives and routines are oftentimes disrupted during a disaster, making it particularly difficult for them to adjust within a changing and often unstable environment.
- ◇ Children are at higher risk for abduction and abuse during disasters.
- ◇ Children typically do not carry identification and may become separated from parents/caregivers. Depending upon age and cognitive development, they may not be capable of readily conveying medical history.

Because of these unique vulnerabilities, it is essential that the special needs of children are addressed in every stage of disaster management (prevention/mitigation, preparation, response, and recovery). Often, children and children with special health care needs (CSHCN)/children with functional access needs (CFAN) are not included in drills/exercises. This lack of inclusion leaves responders and organizations/agencies unprepared. By setting a standard practice to include children and CSHCN/CFAN in every drill and exercise, organizations/agencies can adequately test the capacity of the system to handle a disaster with child victims.

Any type of disaster will likely impact children since they comprise a significant percentage of the population. In the United States, children age 17 years and younger, represent approximately 23% of the population.² Illinois' population is comprised of approximately 3 million children and adolescents, with nearly 800,000 of those children age 5 or younger³. Thus, it is critical that all response agencies, including health care organizations, first responders (EMS, Fire and Law Enforcement), public health, schools, child care centers, and emergency management agencies, become more aware of where children are located within their community by identifying places where children congregate in large numbers, such as schools, child care centers, recreational facilities, sports arenas, juvenile detention centers and health care/live-in facilities for those children with chronic conditions and special health care needs. Knowing where children are in the community before an incident can help response agencies plan for the needs of children during disasters.

In the years since September 11, 2001, many groups have advocated for the inclusion of children in disaster planning and response. These groups have developed reports based on their evaluations of federal, state and local planning, policies and procedures, as well as exercises and training to ensure the needs of children are addressed on all levels. Most of these reports also contain recommendations that can assist with plan improvement. The following are a few key reports that have been released since 2001. Although each of these reports provides many recommendations on the overall care of children in disasters, below are the recommendations specifically related to the inclusion of children in exercises and drills.

- ◇ 2003: National Advisory Committee on Children and Terrorism (NACCT): Recommendations to the Secretary:⁴
 - * "Develop training programs to prepare a pediatric healthcare workforce to gain the knowledge, skills and abilities to address the special needs of children and that can be readily integrated into the public health network. Training should include:
 - ◆ Recognizing indications of a terrorist event in their infant, child and adolescent patients;
 - ◆ Treating infant, child and adolescent patients in a safe and appropriate manner; and
 - ◆ Rapidly and effectively alerting the public health system of such an event at the community, state and national level."
- ◇ 2010: National Commission on Children and Disasters (NCCD): 2010 Report to the President and Congress⁵
 - * "Entities (federal, state and local level; health care, schools, child care, juvenile justice, child welfare facilities, and response teams) should include the needs of children in disaster training, exercises, and equipment purchases.
 - * Conduct regular staff training and exercises of the plans that address the needs of children.
 - * Exercises test capabilities and training around more common and realistic events faced by State and local responders, rather than just catastrophic events.
 - * Evaluate performance in meeting the needs of children during exercises/drills and in after action reports and improvement and corrective action plans."
- ◇ 2015: National Advisory Committee on Children and Disasters (NACCD): Healthcare Preparedness for Children in Disasters: A Report of the NACCD Healthcare Preparedness Working Group.⁶ HHS/ASPR should:
 - * Promote Incident Command System (ICS) training and exercises/drills for healthcare professionals that provide care to children.
 - * Include all appropriate types of first responders in pediatric disaster preparedness training,

including school nurses and child care providers and encourage participation and involvement of community and primary care pediatricians.

- * Issue federal recommendations/guidelines for all hospitals to conduct exercises and drills that include children and children with special needs as well as work with regulatory bodies to design and enforce mandatory pediatric disaster management training and exercises for hospitals.
- * Work to develop pediatric disaster training standards for physicians, nurses, school nurses, and federal response teams.

Although progress has been made over the years to include the needs of children in disaster exercises/drills, it is clearly still a component of disaster preparedness that responders struggle with. The goal of this document is to assist with incorporating children in all exercises/drills. There are three sections in this document:

- 1) The first section outlines the types of exercises that various agencies/organizations should conduct that include children, along with a brief description of components to test within each of those exercises.
- 2) The second section reviews how to include children in exercises/drills and provides information such as how to obtain volunteer children for “disaster victims, “ or how to simulate children in exercises.
- 3) The final section provides sample scenarios for several common exercises and includes sample objectives and victim lists to assist with exercise planning.

Disaster Drill/Exercise Components to Address the Needs of Children

Individual agencies/organizations that respond in a disaster all have different roles and responsibilities during the overall response to an incident. Disaster drills/exercises should be tailored to the specific roles/responsibilities of each individual agency/organization as well as how they will address the needs of children within their scope of the incident.

This next section outlines general response activities and roles specific to children that each different agency/organization may be responsible for during an incident. Therefore, it is encouraged that all agencies/organizations consider addressing and including children in drills/exercises.

AGENCY/ ORGANIZATION	CONSIDERATION	RESPONSE ACTIVITIES/ROLES TO INCLUDE IN EXERCISES	SAMPLE EXERCISES SCENARIO #
Clinics/ Physician Offices/Urgent Care Facilities	Evacuation	<ol style="list-style-type: none"> 1. Planned versus immediate evacuation 2. Secured staging areas 3. Patient tracking and reunification 4. Obtaining medical records during evacuation 5. Transport resources to assist with safe transport of patients during evacuation (if injured/ill or parental transport no longer available) 	Scenario # 3
	Recovery	<ol style="list-style-type: none"> 1. Re-establishing care with patients/community/health care system 2. Providing resources to family 3. Addressing mental health needs 4. Accepting new patients who have been displaced 	Scenario # 3
	Reunification	<ol style="list-style-type: none"> 1. Process to assist local hospitals with reunification of family 	Scenario # 3
	Surge during outbreaks Mass vaccination/ prophylaxis	<ol style="list-style-type: none"> 1. Receiving/obtaining accurate information 2. Communicating accurate information to parents 3. Communicating with staff & colleagues 4. Surveillance and reporting/communicating with local health department 5. Obtaining supplies 6. Scheduling increased number of patients 7. Accepting non-established patients to receive vaccinations 8. Keeping well patients who arrive for prophylaxis separate from ill patients 9. Staff shortages 	Scenario # 4
Emergency Management Agencies	Community evacuation	<ol style="list-style-type: none"> 1. Resources to transport children safely during evacuation (e.g. MOU with bus companies, accessing car seats) 	Scenario # 3
	Shelter set up	<ol style="list-style-type: none"> 1. Obtaining supplies for children in shelters (e.g. bedding, food, formula, distraction devices) 2. Obtaining supplies for CSHCN/CFAN (e.g. refrigeration, power sources) 	Scenario # 3
	Supply request coordination	<ol style="list-style-type: none"> 1. Identify where to obtain requested supplies for children 2. Request for medical resources (RFMR) process 3. Illinois ESF-8 Plan: Pediatric and Neonatal Surge Annex 	Scenario # 2
EMS/Fire	Decontamination/ Hazmat	<ol style="list-style-type: none"> 1. Use of warm water (98°-110° F) with low pressure/high volume flow 2. Keeping families together 3. Process to safely move non-ambulatory (e.g. infants/young children/CSHCN/CFAN) to avoid carrying children through the decon shower 	Scenario # 2

AGENCY/ ORGANIZATION	CONSIDERATION	RESPONSE ACTIVITIES/ROLES TO INCLUDE IN EXERCISES	SAMPLE EXERCISES SCENARIO #
EMS/Fire (continued)	Mass Casualty Incident (MCI)	<ol style="list-style-type: none"> 1. Casualty Collection sites <ul style="list-style-type: none"> ◇ Safety of pediatric patients ◇ Obtaining additional pediatric supplies 2. Transporting children to non-hospital locations (e.g. alternate treatment sites {ATS}, alternate care sites {ACS} or temporary medical treatment sites {TMTS}) 3. Transporting children between hospitals 4. Release of non-injured children 5. Disaster equipment resources (e.g. MCI EMS Bus) to adequately care for and transport children 	Scenario # 1
	MCI Triage	<ol style="list-style-type: none"> 1. Use of JumpSTART and START MCI triage 2. MCI triage tags 	Scenario # 1 Scenario # 2
	Mass Fatality	<ol style="list-style-type: none"> 1. Standard Operating Procedures (SOPs) to withdraw or terminate resuscitation efforts in the field 	Scenario # 1
	Patient Tracking	<ol style="list-style-type: none"> 1. Use of tracking system/protocols 2. Transporting family members together 	Scenario # 2
Hospital	Decontamination/ Hazmat	<ol style="list-style-type: none"> 1. Use of warm water (98-110° F) with low pressure/high volume flow 2. Accessing warming devices 3. Use of device to safely move infants/young children through decon shower to avoid carrying children through shower 4. Keeping families together 5. Process to track family members if parents need to be separated from their children 6. Additional staff/resources/time needed to decon children, CSHCN/CFAN 	Scenario # 2
	Evacuation	<ol style="list-style-type: none"> 1. Planned versus immediate evacuation of high risk, secured units (nursery, NICU, pediatrics, PICU, adult med/surg areas that admit children, pediatric psychiatric unit) 2. Reverse triage process specific to children 3. Use of evacuation equipment to safely evacuate hospital units that admit pediatric/neonatal patients 4. Ability to access resuscitation equipment during an evacuation of hospital units that admit pediatric/neonatal patients 5. Securing the staging areas for those hospital units that admit pediatric/neonatal patients 6. Patient tracking and reunification 7. Obtaining medical records during evacuation 8. Transport resources to assist with safe transfer of pediatric and neonatal patients to another facility during an evacuation 	Scenario # 3

AGENCY/ ORGANIZATION	CONSIDERATION	RESPONSE ACTIVITIES/ROLES TO INCLUDE IN EXERCISES	SAMPLE EXERCISES SCENARIO #
Hospitals (Continued)	MCI Surge	<ol style="list-style-type: none"> 1. Influx of children that tests surge capacity and stresses resources 2. Space: Where children receive care (traditional areas and alternate treatment sites {ATS}) 3. Space: Set up and use of Pediatric Safe Areas for non-injured/non-ill children who do not need medical care 4. Supplies: Obtaining needed pediatric and neonatal supplies from both on-site stockpiles and MOUs 5. Supplies: Obtaining needed pediatric and neonatal supplies to establish and use in alternate treatment sites 6. Staff: Trained staff to care for pediatric patients, including mental health professionals 7. System: Incident Command System 8. System: Staff support processes 9. System: Process of admitting pediatric and neonatal patients and CSHCN/CFAN to hospitals that normally transfer these patients to tertiary care centers 10. System: The ability to provide additional staff, space and systems to address the safety and security needs of children (e.g. lockdown, banding, reunification, security in ATS areas, etc.) 	Scenario # 1 Scenario # 2
	MCI Triage	<ol style="list-style-type: none"> 1. Use of JumpSTART and START MCI triage 2. MCI triage tags 	Scenario # 1 Scenario # 2
	Mass fatality	<ol style="list-style-type: none"> 1. Supplies to care for mass fatality of large numbers of children (e.g. storage capabilities, memory kits/ bereavement kits for families, etc.) 2. Identification of pediatric victims 3. Evidence preservation vs. parental viewing 	Scenario # 5
	Reunification	<ol style="list-style-type: none"> 1. Tracking all children that arrive at a hospital during a disaster (patients, visitors, unaccompanied by parent/guardian) 2. Process to track family members if they need to be separated (e.g. parent and child both acutely ill/ injured and unable to be transferred to the same hospital; child visitor of a parent/guardian who is sick/injured and needs to be admitted/ transferred) 3. Reuniting children with family, including use of community partners 4. Set up and use of Pediatric Safe Areas to care for children waiting for reunification 5. Set up and use of a Family Information and Support Center (or equivalent) 6. Verifying guardianship before releasing unaccompanied minors 	Scenario # 1 Scenario # 2

AGENCY/ ORGANIZATION	CONSIDERATION	RESPONSE ACTIVITIES/ROLES TO INCLUDE IN EXERCISES	SAMPLE EXERCISES SCENARIO #
Hospitals (continued)	Recovery	<ol style="list-style-type: none"> 1. Re-establishing care with primary care providers 2. Providing resources to family 3. Addressing mental health needs 4. Accepting new patients who have been displaced 	Scenario # 3
Law Enforcement	Reunification	<ol style="list-style-type: none"> 1. Key role officers play that is outlined in plans of community partners (EMS, hospitals) 2. Access existing child identification kit and/or database information (e.g. fingerprint kits and/or databases that parents can voluntarily enter their child's information), if available, to assist with reunification 	Scenario # 5
	Unaccompanied minors/non-injured children	<ol style="list-style-type: none"> 1. Protecting unaccompanied minors 2. Placement of unaccompanied minors 	Scenario # 5
	Interacting with children	<ol style="list-style-type: none"> 1. Identifying what children of different ages and developmental levels need 	Scenario # 1 Scenario # 5
	Active shooter in schools/child care centers/homes	<ol style="list-style-type: none"> 1. Participate in active shooter drills in schools and child care centers/homes 2. Provide education to schools and child care centers/homes regarding response techniques 	Scenario # 6
	Mass fatality	<ol style="list-style-type: none"> 1. Identification of child victims 2. Evidence preservation vs. parental viewing 	Scenario # 5
Long Term Care Facilities	Evacuation	<ol style="list-style-type: none"> 1. Planned versus immediate evacuation 2. Reverse triage process specific to children 3. Use of evacuation equipment to safely evacuate 4. Ability to access resuscitation equipment during an evacuation 5. Securing staging areas 6. Patient tracking and reunification 7. Obtaining medical records during evacuation 8. Transport resources to assist with safe transfer of patients during an evacuation to another facility (e.g. local EMS, Collaborative Healthcare Urgency Group {CHUG}, Private Provider Emergency Response System {PPERS}) 9. Notifying families/guardians 	Scenario # 3
	Reunification	<ol style="list-style-type: none"> 1. Tracking all children that leave facility and what facility they will be transferred to 2. Assisting receiving facility with reuniting children with family 	Scenario # 3
	Shelter in place	<ol style="list-style-type: none"> 1. Supplies: Obtaining needed supplies (medical equipment, food, formula, water) from both on-site stockpiles and MOUs 2. Supplies: Back up power sources 3. Staff: Adequate staff to care for patients 4. Systems: Incident Command System 5. Systems: Staff support processes 6. Systems: Communicating with families/guardians 	Scenario # 3

AGENCY/ ORGANIZATION	CONSIDERATION	RESPONSE ACTIVITIES/ROLES TO INCLUDE IN EXERCISES	SAMPLE EXERCISES SCENARIO #
Long Term Care Facilities (continued)	Recovery	<ol style="list-style-type: none"> 1. Re-establishing care with patients 2. Providing resources to family/guardians 3. Addressing mental health needs 4. Accepting new patients who have been displaced 	Scenario # 3
Public Health	Alternate care sites (ACS)/ Temporary Medical Treatment Sites (TMTS)	<ol style="list-style-type: none"> 1. Triggers to establish ACS/TMTS 2. Types of patients, especially pediatric patients, to receive care at sites 3. Space: A designated area where children receive care 4. Supplies: Obtaining needed pediatric supplies from stockpiles, MOUs, and state request for medical resources (RFMR) process 5. Staff: Trained staff to care for pediatric patients, including mental health professionals 6. Systems: Incident Command System 	Scenario # 3
	Evacuation	<ol style="list-style-type: none"> 1. Transport resources to assist with evacuation that can safely transport community members of all ages, including CSHCN/CFAN 	Scenario # 3
	Mass prophylaxis	<ol style="list-style-type: none"> 1. Receiving/obtaining accurate information 2. Communicating accurate information to hospitals, community 3. Communicating with staff and colleagues 4. Activation of the Strategic National Stockpile (SNS) 5. Obtaining supplies for children 6. Obtaining medications for children 7. Keeping well patients who arrive for prophylaxis separate from ill patients 8. Staff shortages, especially staff trained to provide medications to children 	Scenario # 4
	Shelter set up/assistance	<ol style="list-style-type: none"> 1. Space: Designated child friendly areas (child safe areas/child play areas) 2. Space: Addressing unaccompanied minors 3. Space: Family areas 4. Space: Quiet areas for CSHCN/CFAN 5. Supplies: Obtaining needed pediatric supplies for children (bedding, food, formula, distraction devices) 6. Supplies: Obtaining additional equipment needs for CSHCN/CFAN (e.g. refrigeration, power source) 7. Staff: Trained staff to manage children, including mental health professionals 8. System: Coordinate with sheltering organizations (e.g. ARC) for shelter set up 	Scenario # 3
	Supply request coordination	<ol style="list-style-type: none"> 1. Process to obtain additional pediatric medical supplies (RFMR process) 2. Activation of the Strategic National Stockpile (SNS) 3. Illinois ESF-8 Plan: Pediatric and Neonatal Surge Annex 	Scenario # 2

AGENCY/ ORGANIZATION	CONSIDERATION	RESPONSE ACTIVITIES/ROLES TO INCLUDE IN EXERCISES	SAMPLE EXERCISES SCENARIO #
Public Health (continued)	Surveillance	<ol style="list-style-type: none"> 1. Receiving/obtaining accurate information 2. Communicating accurate information to partners 3. Communicating with staff and colleagues 	Scenario # 4
Schools and Child Care Centers/Homes	Evacuation	<ol style="list-style-type: none"> 1. Test evacuation plans 2. Evacuating to primary and secondary sites 3. Communicating with families-test all notification methods currently in place (e.g. phone call, group text) 4. Communicating with the media 5. Reunification with families after evacuation 6. For community evacuations or incidents, test the use of the school for sheltering, mass prophylaxis sites, etc., and how classes will continue in these situations 	Scenario # 5 Scenario # 6
	Recovery	<ol style="list-style-type: none"> 1. Restarting school/child care center at current location 2. Restarting school/child care center in a temporary location 3. Providing resources to families 4. Addressing mental health needs 	Scenario # 5
	Reunification	<ol style="list-style-type: none"> 1. Process to reunite children with parents/guardian 2. Process to travel with child to hospital 3. Process to assist hospitals with reunification/ verification of guardianship 4. Process of contacting community agencies if parent/guardian and additional identified family members unavailable after disaster to pick up child 	Scenario # 1 Scenario # 2 Scenario # 5
	Shelter in place	<ol style="list-style-type: none"> 1. Test shelter in place plans 2. Communicating with families - test all notification methods currently in place (e.g. phone call, group text) 3. Communicating with the media 4. Obtaining supplies from stockpiles (e.g. bedding, food, medications/treatments for CSHCN/CFAN) 	Scenario # 5 Scenario # 6

Including Children in Disaster Drills/Exercises

Incorporating children into drills/exercises can be challenging for many reasons including:

- ◇ Lack of familiarity with the types of exercises/drills
- ◇ Uncertainty on what types of plans should be tested specific to children
- ◇ Unsure how many children should be included in the drills/exercises
- ◇ Uncertainty of how to include children into the drills/exercise
- ◇ Inexperience with working around/with children on a day to day basis.

This next section will address these challenges and others by providing recommendations on how agencies/organizations can incorporate children into their disaster drills/exercises.

Types of Drills/Exercises

The Homeland Security Exercise and Evaluation Program (HSEEP)⁶ has become the standard in disaster preparedness training exercises. It represents a capability based exercise program that includes a range of exercise activities of varying degrees of complexity and interaction. HSEEP provides a standardized methodology and consistent terminology for designing, developing, conducting, and evaluating all exercises⁷. The program provides tools and resources to assist with the building of self-sustained training and exercise programs, and it allows different groups to be able to practice and exercise together seamlessly⁷. Within HSEEP, the types of exercises range from discussion based (seminars, workshops and tabletops {TTX}) to operations based exercises (drills, functional exercises {FE} and full scale exercises {FSE}). An exercise program typically is designed as a multi-year approach to allow the agency/organization to conduct a series of exercises that increase in complexity with each exercise and provides time to address areas for improvement identified in one exercise before moving onto the next. It also allows time to train staff and test various individual components of the plan, building up to a full scale exercise that tests the plan in its entirety. This progressive approach may help improve staff's knowledge and familiarity of the plans and their participation in the exercises while preventing them from becoming overwhelmed. After exercises, an evaluation should be completed that includes the development of an After Action Report (AAR) to outline the strengths and areas for improvement identified during the exercise. An Improvement Plan (IP) should also be developed that outlines how the identified areas for improvement will be addressed. The HSEEP process is the same for drills/exercises that include children. For more information on exercise design and the HSEEP process, visit the Federal Emergency Management Agency HSEEP website at: <https://www.fema.gov/media-library/assets/documents/32326>

The increasing occurrence of disasters (both natural and human-caused) in the United States and abroad, serves as a reminder of the need to conduct emergency preparedness activities to minimize risk, prepare for response and lessen the overall effects that an incident will have on communities and its population. The scenarios used in drills/exercises should be based on the hazards that the community, agency or organization is at higher risk for. For example, Illinois has experienced flooding, tornadoes, blizzards and other weather-related emergencies. In addition, Illinois communities are at risk for a number of other types of disasters since Illinois:

- ◇ has more nuclear power sites than any other state;
- ◇ has the third largest city in the country (Chicago), which may be a target for terrorists;
- ◇ is a major thoroughfare with multiple highways and railways crisscrossing the state that frequently are routes for transporting hazardous materials, including Bakken Crude Oil;
- ◇ is located along major waterways (Lake Michigan and Mississippi River) which provide for large container movement;
- ◇ comprises a significant agricultural community with fertilization and crop dusting practices which can provide avenues for potential disasters and terrorist activities;
- ◇ is vulnerable to earthquake activity.

Using scenarios based on hazards that a community, agency or organization is at risk for brings realism to the drill/exercise and helps to better prepare those involved in the training.

Testing Disaster Plans

The table on the previous pages (Disaster Drill/Exercise Components to Address the Needs of Children) outlines examples of the types of drills/exercises to incorporate children into as well as response activities/roles based on each agency/organization type. It is important to note that in order to test these response activities/roles in drills/exercises, they must first be written into the agency/organization's disaster plans. For example, a hospital's decontamination plan should contain the following information to address the needs of children:

- ◇ Use of warm water (98° -110° F) with low pressure/high volume flow
- ◇ Use of a device(s) to safely move infants/young children through the decon shower to avoid carrying children through the shower, which is a safety risk
- ◇ Process to keep families together
- ◇ Process to track family members if they need to be separated from each other
- ◇ Outline the additional staff/resources/time that will be needed to decon children, especially CSHCN/CFAN
- ◇ Process to access warming devices



Regardless of how an agency/organization chooses to arrange their disaster plans and include considerations for children, the detail response activities/roles should be outlined within the plans. Once this information has been incorporated, the plans (and the details within those plans) are what should be tested in drills/exercises.

If there is equipment available to assist staff with implementing components of the plan, this equipment should be utilized during the drills/exercises. Using the example outlined above, if a laundry basket is part of the hospital's decon equipment to safely decon infants, the basket should be available and used during decontamination related drills/exercises.

If the agency/organization functions through the use of multiple shifts (e.g. hospitals, LTC, EMS/Fire agencies), it is vital that drills/exercises involve staff from all shifts to ensure, no matter what time of day or day of the week a disaster occurs, all staff have been trained to respond.

Child "Victims" in Disaster Drills/Exercises

How Many Children Should Be Included

The exact number of children that should be included in drills/exercises will vary based on considerations such as the type of exercise, the size of the agency/organization, and the overall goals and objectives of the drill/exercise. If the goal/objective of the drill is to allow staff on the decon team to become more familiar with a new piece of equipment to assist with decontaminating young children and CSHCN/CFAN, having one or two child "victims" would be sufficient. When conducting drills/exercises to test sections of a plan or the entire plan, agencies/ organizations should develop the drill/exercise so that it stresses the system in order to identify gaps that might exist. For example, if a local health department (LHD) is conducting a mass prophylaxis/vaccination exercise for an outbreak affecting the pediatric population in a large urban area, simulating that the LHD provides vaccinations to four children would not provide adequate stress on the system compared to simulating the need to vaccinate 100 children. One method to identify the minimum number of child "victims" for a drill/exercise is to

ensure the number of “victims” represents an accurate percentage of children in the population. If 25% of the population in a community is children, then 25% of the total number of victims in the drill/exercise should be children.

Age groups of children to incorporate into exercises

- Infants (≤ 1 year old)
- Toddlers (1-3 years old)
- Pre-school (4-6 years old)
- School age (7-12 years old)
- Adolescent (≥ 13 years old)
- CSHCN/CFAN: Children who have physical, sensory, mental health, cognitive and/or intellectual disabilities affecting their ability to function independently without assistance.

The child “victims” in an exercise should vary by age. Ensuring that exercises include children within the age groups outlined to the left is ideal. In addition, it is important to ensure that CSHCN/CFAN are included as well.

Options for Incorporating Child “Victims”

Ideally, live volunteers (including children) should be used as “victims” in every disaster drill/exercise. Incorporating the use of live volunteers into drills/exercises will provide greater insight as to how a plan will unfold compared to using manikins or paper (e.g. Flat Stanleys) to simulate victims. Live volunteers can also provide feedback on the plan/processes being tested. Although there are significant benefits in using live volunteers, including children, in drills/exercises, there are challenges

such as:

- ◇ Additional time and resources are needed to recruit and coordinate live volunteers.
- ◇ Approval from administration and risk management for use of live volunteers, especially children, may be difficult to obtain due to liability concerns.
- ◇ There are possible safety concerns that need to be addressed with live volunteers, especially children. For example, identifying who is responsible for the supervision of the volunteer children (e.g. staff, parents/guardians, and teachers/chaperones).

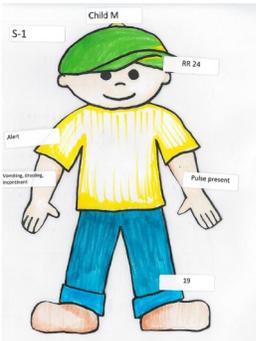
To address these barriers, work with administration/risk management to outline the benefits that would occur by including live volunteers and the processes that have been put in place to address liability concerns. Speak with other agencies/organizations that use live volunteers to identify how they have addressed safety issues (e.g. obtaining consent/release forms, assigning extra staff to the volunteers, requiring parents/chaperone to be present during the drill/exercise). Sample consent/release forms can be found in Appendix A of this document.

An important consideration when including child volunteers in drills/exercises is that children, especially younger children, may become scared, resistant and even uncooperative during the drill/exercise. A child’s reaction to the scenario of the drill/exercise and what they are expected to do as a result of the scenario will be dependent on many factors such as: age, developmental level, their understanding of the circumstances within the scenario (e.g. staged incident versus a real incident), and previous experience with a similar scenario. For example, a child who was involved in a real tornado may have a traumatic reaction during a tornado drill at their school. Be prepared (and prepare staff) to encounter these reactions and address

Sources for child volunteers:

- ⇒ *Employees’ children*
- ⇒ *Boy scout/girl scout troops*
- ⇒ *Local drama clubs*
- ⇒ *Local schools and child care centers*
- ⇒ *Other local child based community programs*

their needs in order to prevent the drill/exercise from being traumatic.



If it is not possible to incorporate live child volunteers into the drills/exercises, it is still crucial that children are represented in other ways. Manikins, dolls and/or paper victims (e.g. Flat Stanley's) should be utilized to simulate child victims within the drill/exercise. Cards or a similar system could be attached to the "victim" that provides the responders with information about the victim and their needs. In addition to using cards, exercise designers can pair the simulated child victim with an adult victim, especially if the adult is a live volunteer. For example, a doll can be paired with an adult volunteer who can simulate that child's parent/caregiver, school administrator or child care center director. Another option would be to use a doll/manikin as an unaccompanied minor and have a live adult volunteer simulate a distraught parent/guardian arriving at the scene, school or hospital, looking for that child.

Other Considerations

Agencies/organizations may feel that it is not necessary to incorporate children in their drills/exercises. Children comprise nearly a quarter of the population in most communities. Therefore, in most incidents that occur in a community, children will be affected and need assistance. Each agency/organization has a responsibility to ensure that they are prepared to provide assistance to all victims, regardless of how many children their agency/organization interacts with on a daily basis.

Children with special healthcare needs (CSHCN)/children with functional access (CFAN) needs also comprise a significant portion of a community. The range of conditions/disorders that are included in the definition of CSHCN/CFAN is quite extensive and can be challenging to prepare for. Agencies/ organizations should attempt to identify common childhood conditions/disorders in their community and ensure they are simulating what these children will need during drills/exercises. For example, if a community has a resource center for children with autism, agencies/communities should incorporate the needs of autistic children in their drills/exercises since during a real incident, they will likely need to provide these children and their families with assistance.

After every drill/exercise, a debriefing session or "hot wash" typically is conducted. Be sure to include your volunteer victims in this session to gather their feedback on the process that was tested. Child volunteers can also be included, if age appropriate to do so. Obtaining feedback from a child's viewpoint may provide valuable learning opportunities and assist with addressing their needs in response plans.



Each agency/organization has a responsibility to ensure they are prepared to provide assistance to all victims, regardless of how many children their agency/organization interact with on a daily basis.

Sample Exercise Scenarios

Exercise Scenario # 1: School bus accident

Scenario:

A group of first and second grade students with their teacher/chaperones are enroute via school busses on a field trip. As the caravan of busses, filled to capacity, slow for their exit off the highway, a speeding semi-trailer truck behind the last bus crashes into it, forcing that bus forward into the bus ahead. The back of the rear bus is crushed into the mid-section; the forward bus is overturned. The contents of several 55 gallon drums from the truck spill onto the highway. The placards on the truck read "Dangerous." The state trooper who witnessed the collision calls in that the truck driver is unconscious. Some children have been ejected from a bus, some are trapped and a few are walking along the road appearing dazed. None of the children are carrying identification. Their luggage and box of emergency forms were housed in the back of the rear bus, which is now filling with smoke. A school nurse is one of the chaperones for the field trip.



Agency/organization and components to test:

This section outlines the involved agencies/organizations and the different components specific to children that could be tested in a drill/exercise using exercise scenario #1. Altering the scenario (e.g. changing the ages of the students to pre-school age and toddlers) would allow the scenario to test different components of each agency/organization's plans and allow the scenario to apply to specific agencies/organizations, such as child care centers. The information listed below can assist an agency/organization in identifying the components to test within their plans and guide the development of exercise objectives.

- ◇ EMS/Fire
 - 1) Scene safety
 - 2) MCI Triage (use of START and JumpSTART[®] triage)
 - 3) Care of children at casualty collection sites
 - 4) Release of non-injured children
 - 5) Resources to transport numerous pediatric victims (e.g. MCI EMS bus)
 - 6) Withholding and/or terminating resuscitation efforts on pediatric victims triaged as Expectant
- ◇ Hospitals
 - 1) Influx of children that tests surge capacity
 - 2) MCI Triage (use of START and JumpSTART[®] triage)
 - 3) Identifying additional space within hospital to care for surge of pediatric patients
 - 4) Obtaining additional supplies and staff to care for surge of pediatric patients
 - 5) Tracking and reunification of unaccompanied minors
- ◇ Schools/Child care centers
 - 1) Notification of parents/guardians, staff and their families regarding incident

- 2) Releasing students from the care of EMS
- 3) Staff accompanying students to hospital
- 4) Reunification of students with parents/guardians
- 5) Assisting hospitals with reunification of students with their parents/guardians

Sample victim list:

The following is a sample victim list that can assist exercise designers with incorporating child victims when using exercise scenario # 1. Five child victim profiles are provided. Based on the scale of the drill/exercise and the capabilities being tested, the information below for each victim as well of as the number of victims could be expanded upon to meet the objectives of the exercise. In addition, adult victims could be added following the same format.

VICTIM	RESPIRATORY RATE	PERFUSION	MENTAL STATUS	OTHER
7 y/o F	RR 10	Distal pulse present	Groans in response to painful stimuli	Lying in ditch 15 feet from accident
8 y/o M	Talking	Distal pulse present	Asking for help	Walks toward you, clothing is torn, no bleeding evident
6 y/o F	RR 0	Faint distal pulse	Unresponsive	Found in rubble outside rear bus; apneic after 5 rescue breaths
8 y/o M	RR 36	Distal pulse present	Screaming	Found in ditch. Partial amputation of foot with minimal bleeding.
8 y/o F	RR 24	Distal pulse present	Asking for her wheelchair	Found wedged under bus seat

Exercise Scenario # 2: Chemical leak at a swimming pool

Scenario:

The local community recreational center has an indoor swimming pool, a child care center, and a fitness center. During the week, numerous local preschools, child care centers and special needs centers bring children for swim classes and other recreational activities offered at the center. Today, there are three different groups currently in the pool receiving lessons: a group of six school aged children with special health care needs; a group of ten preschool aged children from a local preschool; and a parent/infant swim group with six mothers and infants. In addition, there are three more groups pool side, waiting for their lessons to start after the current group exits the pool. There is a loud noise that erupts from the equipment room adjacent to the pool, which houses the chlorine used to treat the pool water. A strong, pungent odor is detected in the pool area. Most of the people in the pool area begin experiencing stinging/burning to the eyes, nose, and throat. Chaperones and parents of the groups at the pool side begin to lead their children out of the pool area. Meanwhile, many of the children and adults in the pool begin coughing and having difficulty breathing as they struggle to exit the pool.

Agency/organization and components to test:

This section outlines the agencies/organizations and the different components specific to children that could be tested in a drill/exercise using exercise scenario #2. Altering the scenario (e.g. number of children in the area, age groups of those exposed, type of chemical involved in the incident, location of the incident) would allow the scenario to test different components of each agency/organization's plans and allow the scenario to apply to different agencies/organizations (for example, the emergency management agencies if the chlorine leak was less localized and affected an entire community). The information listed below can assist an agency/organization in identifying the components to test within their plans and guide the development of exercise objectives.

◇ EMS/Fire

- 1) Decontamination/Hazmat
- 2) MCI triage (Use of START and JumpSTART[®] triage)
- 3) Patient tracking (Use of tracking system/protocols; transporting family members together)

◇ Hospitals

- 1) Decontamination/Hazmat
- 2) MCI triage (Use of START and JumpSTART[®] triage)
- 3) Influx of children that tests surge capacity
- 4) Tracking and reunification of unaccompanied minors

◇ Schools/Child care centers

- 1) Notification of parents/guardians, staff and their families regarding incident
- 2) Releasing students from the care of EMS
- 3) Reunification of students with parents/guardians
- 4) Assisting hospitals with reunification of students with their parents/guardians

◇ Public health

- 1) Supply request coordination



- ◇ Emergency management agency
 - 1) Supply request coordination

Sample victim list:

The following is a sample victim list that can assist exercise designers with incorporating child victims when using exercise scenario # 2. Five child victim profiles are provided. Based on the scale of the drill/exercise and the capabilities being tested, the information below for each victim as well of as the number of victims could be expanded upon to meet the objectives of the exercise. In addition, adult victims could be added following the same format.

VICTIM	RESPIRATORY RATE	PERFUSION	MENTAL STATUS	OTHER
6 m/o F	RR 60	Distal pulse weak	Lethargic	Severe respiratory distress
10 y/o M	RR 32	Distal pulse present	Crying loudly, wandering about	Becomes resistant and uncooperative when led into the decon shower
3 y/o F	RR 0	Faint distal pulse	Unresponsive	Found at the side of the pool; apneic after 5 rescue breaths
8 y/o F	RR 36	Distal pulse present	Screaming	Grabbing at and clinging to workers
1 y/o M	RR 28	Distal pulse present	Alert, quiet	In mother's arms who states they had just entered the locker room when incident occurred

Exercise Scenario # 3: Community flooding

Scenario:

After a very cold and snowy winter, spring has arrived and has brought significant amounts of rainfall across the Midwest region. Rivers, streams, creeks, and lakes are all nearing record levels. Flooding is imminent in many communities. One community issues a mandatory evacuation for all residents. The hospital and three long term care facilities (one of which provides services to children with special health care needs/ children with functional access needs) are all located in lower lying areas of the town and will need to be evacuated.



Agency/organization and components to test:

This section outlines the agencies/organizations and the different components specific to children that could be tested in a drill/exercise using exercise scenario #3. Altering the scenario (e.g. change the evacuation from a planned evacuation to an immediate evacuation after residents and health care facilities do not heed the evacuation warnings; flooding occurs in a rural area with limited health care resources so an alternate care site needs to be established near evacuation shelter) would allow the scenario to test different components of each agency/organization's plans and allow the scenario to apply to different agencies/organizations. The information listed below can assist an agency/organization in identifying the components to test within their plans and guide the development of exercise objectives.

- ◇ Hospitals
 - 1) Evacuation (evacuating high risk, secured areas; reverse triage process specific to children; use of evacuation equipment; patient tracking and reunification; transport resources to assist with evacuation; identification of hospitals to accept pediatric/neonatal patients)
 - 2) Recovery (re-establishing care of children with primary care providers; identifying when providers will return to area)
- ◇ Public health
 - 1) Shelter set up {identifying spaces, supplies and staff to care for children and unaccompanied minors in shelter(s)}
 - 2) Community evacuation (transport resources to safely transport community members of all ages and including CSHCN/CFAN during an evacuation)
- ◇ Emergency management agencies
 - 1) Community evacuation (resources to transport children safely during evacuation)
 - 2) Shelter set up (obtaining supplies for children in the shelter {e.g. bedding, food, formula, water, distraction devices}; obtaining supplies for CSHCN/CFAN {e.g. refrigeration, power sources})
- ◇ Long term care facilities who need to evacuate
 - 1) Reunification (patient tracking and reunification; notifying families/guardians)
 - 2) Evacuation (use of evacuation equipment; obtaining medical records; transport resources to assist with safe evacuation; identification of accepting facility)
 - 3) Recovery (re-establishing care when able to return to facility; addressing mental health needs of patients; accepting new patients who have been displaced)

- 4) Shelter in place for those who do not need to evacuate (address supply and staff issues; communicating with families/guardians)
- ◇ Clinics/physicians' offices/urgent care facilities
 - 1) Planned versus immediate evacuation
 - 2) Patient tracking and reunification
 - 3) Obtaining medical records during evacuation
 - 4) Providing services to patients at evacuation shelters
 - 5) Recovery (re-establishing care with patients, community/health care system; accepting new patients who may have been displaced; addressing the mental health needs of children and their families)

Sample victim list:

The following is a sample list of children that may be encountered during scenario # 3 that can assist exercise designers. Five child profiles are provided. Based on the scale of the drill/exercise and the capabilities being tested, the information below for each child profile as well of as the number of children could be expanded upon to meet the objectives of the exercise. In addition, adult profiles could be added following the same format.

- 1) A mother (with her ten year old child who is autistic and developmentally delayed), signs in at the shelter. When they enter the sleeping area, the child becomes stressed and begins to yell out and rock back and forth. The mother leads the child back out of the area, calms her down and makes another attempt. Once back in the sleeping area, the child gets upset again.
- 2) A family arrives at the shelter. Their six year old son is an insulin dependent diabetic. The parents are requesting a refrigerator to store his insulin.
- 3) A mother arrives at the shelter carrying her infant son. The child is one week old. The mother asks if there is a private area where she can breast feed and if there is a refrigerator to store her milk when she pumps. Later on, the mother is seen sleeping on the cot with the newborn next to her.
- 4) A father of 4 children ranging in age from three to thirteen years old has been in the shelter for one day. The father tells staff that he needs to leave to go to work tomorrow and wants to leave the children at the shelter. He says the thirteen year old can watch the other three children.
- 5) A child care center worker pulls up to the shelter entrance and asks to speak to the shelter manager. She has six children from her child care center in the van. She states the flood water was rising in her area so she had to leave before all the parents picked up their children. She has been unable to locate the parents of these six children and needs to leave them at the shelter so she can go check on her own home.

Exercise Scenario # 4: Influenza outbreak

Scenario:

Hospitals and physician offices have been reporting to their local health department an increased number of patients seeking treatment for flu-like symptoms. This is unusual for this time of year. Communities throughout the country are reporting similar cases. The CDC has identified that the symptoms are caused by a new influenza strain. Young children, pregnant women and the elderly seem more susceptible to the strain and have been requiring admission to the hospital and intensive care management due to the severity of the symptoms. Hospitals and pharmacies are experiencing shortages of oseltamivir phosphate (Tamiflu®). As the number of cases increases across the country, it is determined that a public health emergency exists nationwide. The Strategic National Stockpile (SNS) begins releasing supplies to protect from and treat influenza. Hospitals and physician offices/clinics are contacting their local health departments for guidance on patient management and to obtain medications to treat their patients.

Agency/organization and components to test:

This section outlines the agencies/organizations and the different components specific to children that could be tested in a drill/exercise using exercise scenario #4. Altering the scenario (e.g. cause of the outbreak {food borne}, different populations affected by the outbreak) would allow the scenario to test different components of each agency/organization's plans. The information listed below can assist an agency/organization in identifying the components to test within their plans and guide the development of exercise objectives.

◇ Public health

- 1) Surveillance
- 2) Receiving/obtaining accurate information and communicating information to hospitals, clinics, and the community
- 3) Activation of the Strategic National Stockpile (SNS)
- 4) Obtaining supplies and medications for children through the request for medical resource (RFMR) process
- 5) Keeping well patients who arrive for prophylaxis separate from ill patients
- 6) Staff shortages, especially staff trained to provide medications to children



◇ Clinics/physician offices/urgent care facilities

- 1) Receiving/obtaining accurate information and communicating this information to parents, staff and colleagues
- 2) Surveillance and reporting/communicating with local health department
- 3) Obtaining supplies and medications
- 4) Scheduling an increased number of patients
- 5) Accepting non-established patients to receive vaccinations
- 6) Keeping well patients who arrive for prophylaxis separate from ill patients
- 7) Staff shortages

Sample victim list:

The following is a sample list of children that may be encountered during scenario # 4 that can assist exercise designers. Five child profiles are provided. Based on the scale of the drill/exercise and the capabilities being tested, the information below for each child profile as well of as the number of children could be expanded upon to meet the objectives of the exercise. In addition, adult profiles could be added following the same format.

- 1) The stockpile of vaccinations and oseltamivir phosphate (Tamiflu®) has arrived at a local health department and a dispensing site has been established at a local school. As community residents begin to arrive, a family of four arrives that includes twin six month old infants. The nurses that are at the dispensing site do not feel comfortable administering IM injections to infants.
- 2) The stockpile that was received has a very limited quantity of liquid suspension of the oseltamivir phosphate (Tamiflu®) and the dispensing site quickly runs out. Numerous families with smaller children who need the liquid suspension formulation continue to arrive at the dispensing site requesting the prophylaxis medication.
- 3) A five year old child with multiple known allergies arrives with his parents to receive the vaccination. After verifying through multiple sources that his allergies do not exclude him from receiving the vaccination, the child receives the injection. Within fifteen minutes of receiving the injection, the parents return to the nurse who administered the injection because the child has developed hives and swelling to his face.
- 4) A woman who is six months pregnant arrives to receive the vaccination. She wants to know if the vaccination is safe for her unborn baby.
- 5) When the local news media announced information regarding the dispensing location, they included that residents can also receive their vaccination and/or prophylaxis medication from their primary physician's office. Since this announcement, the local pediatric clinic has been receiving many phone calls requesting appointments to obtain the vaccination/medications. In addition, some families are showing up to the clinic without an appointment and other families who have never been seen at the clinic have also come to the clinic requesting the vaccination and/or prophylaxis medication in a liquid.

Exercise Scenario # 5: F5 Tornado

Scenario:

An F5 tornado has struck a community causing significant, devastating damage to several areas of the town. The tornado occurred at 1:00 pm on a weekday. A few of the structures that were hit directly by the tornado include: a local factory, an elementary school, several stores, a housing subdivision, and a child care center.



Agency/organization and components to test:

This section outlines the agencies/organizations and the different components specific to children that could be tested in a drill/exercise using exercise scenario #5. Altering the scenario (e.g. different areas/structures hit by tornado, number of victims, and time of day) would allow the scenario to test different components of each agency/organization's plans and allow the scenario to apply to different agencies/organizations. The information listed below can assist an agency/organization in identifying the components to test within their plans and guide the development of exercise objectives.

- ◇ Schools/child care centers
 - 1) Shelter in place (during the storms and after the tornado strikes for those schools/child care centers not directly damaged by the tornado)
 - 2) Evacuation (evacuating students out of the building when damaged; relocating to secondary site once students are out of the building; communication with families)
 - 3) Reunification
 - 4) Recovery (restarting school either at current location or in a temporary location)
- ◇ Law enforcement
 - 1) Reunification (protecting children and assisting hospitals, schools and child care centers with placement of unaccompanied minors - e.g. locate parents, identify if parents were injured or killed during tornado)
 - 2) Mass fatality (identification of child victims)
- ◇ Hospitals
 - 1) Influx of pediatric patients
 - 2) Reunification
 - 3) Mass fatality (supplies to care for large number of pediatric fatalities - e.g. bereavement kits; identification of victims and family notification)

Sample victim list:

The following is a sample list of children that may be encountered during scenario # 5 that can assist exercise designers. Five child profiles are provided. Based on the scale of the drill/exercise and the capabilities being tested, the information below for each child profile as well as the number of children could be expanded upon to meet the objectives of the exercise. In addition, adult profiles could be added following the same format.

- 1) Schools (reunification): Part of the school was struck by the tornado. As students and teachers are making their way out of the school and first responders work to dig through the rubble to get additional students out, parents are arriving on scene, looking for their children. No records are

available to identify parental information. In the chaos of the incident and the amount of responders on scene, some of the parents quickly leave with their child without informing staff.

- 2) Schools (recovery): Part of the school received significant damage during the storm. During the recovery phase, there is a push from the community and local officials to open school again as soon as possible.
- 3) Law Enforcement (reunification): The local hospital has called to ask for help with locating the parents of four children that were brought to the hospital by EMS. All four children state their parents work at the local factory. The local factory was leveled by the tornado and responders are still on scene, digging through the rubble to find survivors.
- 4) Law Enforcement (mass fatality): Several students were killed when the tornado struck their elementary school. Parents have been directed to the police station to locate and possibly identify their children.
- 5) Hospital (mass fatality): Multiple child victims who were killed due to the injuries they sustained when the tornado struck their school were brought to the hospital by EMS. Families are starting to arrive at the hospital looking for their children. The parents were only told by school staff that their children were taken to the local hospital.

Exercise Scenario # 6: Violent intruder at an elementary school

Scenario:

A man claiming to be the father of two children who attend the elementary school is in the main office requesting staff bring his children to the office so he can leave with them. He is agitated and yelling. A staff member informs him that the children he is looking for do not attend this school and ask him to leave the school campus. A security staff member arrives at the office and the man agrees to leave. Staff notifies police. The next day, the security staff member is conducting his rounds outside the school building and notices the same man enter the building through an open door. Security calls the main office to inform them and then calls the local law enforcement agency. A few minutes later, gun fire is heard in the area of the main office. As the security staff member enters the school, he sees the man leave the main office and head toward the classrooms.

Agency/organization and components to test:

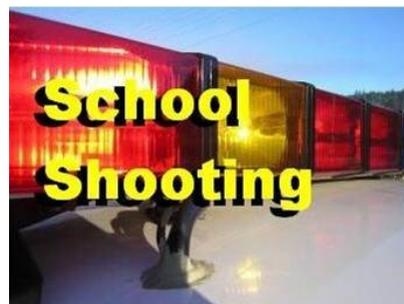
This section outlines the agencies/organizations and the different components specific to children that could be tested in a drill/exercise using exercise scenario # 6. Altering the scenario (e.g. location of the incident {type of school/child care center to vary the age groups affected}, weapons used {fire arms, explosive devices}) would allow the scenario to test different components of each agency/organization's plans. The information listed below can assist an agency/organization in identifying the components to test within their plans and guide the development of exercise objectives.

◇ Schools/child care centers

- 1) Lockdown
- 2) Violent intruder
- 3) Shelter in place
- 4) Evacuation
- 5) Reunification
- 6) Recovery (addressing mental health needs of students and staff)

◇ Law enforcement

- 1) Active shooter response
- 2) Mass fatality (identification of child victims)



Sample victim list:

The following is a sample list of children that may be encountered during scenario # 6 that can assist exercise designers. Five child profiles are provided. Based on the scale of the drill/exercise and the capabilities being tested, the information below for each child profile as well of as the number of children could be expanded upon to meet the objectives of the exercise. In addition, adult profiles could be added following the same format.

- 1) Law enforcement: As the team enters the school and begins to search for the intruder, an explosive device is found outside one of the classrooms with one teacher and 20 students inside.
- 2) Law enforcement: As the team enters one classroom, the first grade students run toward the officers and begin grabbing at and clinging to them.

- 3) Law enforcement: The armed man has barricaded himself in the cafeteria where there are six staff members and 40 children.
- 4) Schools: The notification of the armed intruder is sent out just as a class session ends and students are in the hallways, making their way to their next classroom.
- 5) Schools: Classes are cancelled immediately following the incident. What measures are needed to ensure the staff and students feel safe to return to school when classes resume?

Conclusion

Most disasters that occur will likely impact children since children comprise a significant percentage of the population. It is critical that all response agencies, including health care organizations, first responders (EMS, Fire and law enforcement), public health, schools, child care centers, and emergency management agencies, address the needs of children in their response plans and include children when they test these plans. By making it a standard practice to include children and CSHCN/CFAN in every drill and exercise, agencies/organizations can adequately test the capacity of the system to handle a disaster with child victims.

Glossary

- ◇ **Alternate care sites (ACS)/alternate treatment sites (ATS)/temporary medical treatment sites (TMTS):** Sites (either at hospitals in areas not traditionally used for patient care or in non-healthcare settings) that are used to provide medical care to victims during disasters when the health care system is overwhelmed
- ◇ **Children with special healthcare needs (CSHCN)/Children with functional access needs (CFAN):** Children with physical, developmental, behavioral and/or emotional conditions that require health and related services of a type that is beyond what is routinely required by children.
- ◇ **Disaster:** A disaster is an occurrence disrupting the normal conditions of existence and causing a level of suffering that exceeds the capacity of adjustment of the affected community.
- ◇ **Disaster Plan:** A written plan that describes the practices and procedures used to prepare for and respond to emergency or disaster situations. Same as an Emergency Operations Plan.
- ◇ **Emergency Operations Plan (EOP):** A written plan that describes the practices and procedures used to prepare for and respond to emergency or disaster situations. Same as a disaster plan.
- ◇ **Federal Emergency Management Agency:** FEMA's mission is to support our citizens and first responders to ensure that as a nation we work together to build, sustain and improve our capability to prepare for, protect against, respond to, recover from and mitigate all hazards.
- ◇ **Homeland Security Exercise and Evaluation Program (HSEEP):** Capabilities and performance-based exercise program which provides a standardized policy, methodology, and terminology for exercise design, development, conduct, evaluation, and improvement planning.
- ◇ **Illinois Emergency Support Function (ESF) 8 Plan: Pediatric and Neonatal Surge Annex:** The Illinois Department of Public Health's (IDPH) medical disaster state response plan is titled the IDPH Emergency Support Function (ESF) 8 Plan. To address the needs of specialty populations, annexes have been developed to the IDPH ESF-8 Plan. One of these annexes, the Pediatric and Neonatal Surge Annex, outlines the state response and provides local guidance during an incident that affects children. The Annex also contains patient care guidelines to assist practitioners when providing medical care to children during a disaster.
- ◇ **Incident Command System (ICS) :** A standardized organizational structure used to command, control, and coordinate the use of resources and personnel that have responded to the scene of an emergency. The concepts and principles for ICS include common terminology, modular organization, integrated communication, unified command structure, consolidated action plan, manageable span of control, designated incident facilities, and comprehensive resource management.
- ◇ **JumpSTART MCI Triage:** Pediatric disaster triage process that can be utilized during a mass casualty incident.
- ◇ **Mass casualty incident (MCI):** Any incident in which the medical response resources are overwhelmed by the number and severity of casualties.
- ◇ **Memorandum of Understanding (MOU):** Written agreement between two or more parties obtained before a disaster that outlines the relationship, establishes protocols, provides additional resources and/or assists with the coordination efforts in response to a disaster.
- ◇ **Response:** Activities that address the short-term, direct effects of an incident, including immediate actions

to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and incident mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes.

- ◇ **Reverse Triage:** Triage process used during the immediate evacuation of a hospital's inpatient units to determine the order in which to evacuate patients. Those patients who are ambulatory or require very few resources are evacuated first; those patients who require some resources are evacuated second; and those patients who require critical care or the most resources are evacuated last.
- ◇ **START MCI Triage:** Adult disaster triage process that can be utilized during a mass casualty incident.
- ◇ **Strategic National Stockpile (SNS):** The national repository of antibiotics, vaccines, chemical antidotes, antitoxins, and other critical medical equipment and supplies.

References/Resources

1. American Academy of Pediatrics (AAP). Children & disasters: Disaster preparedness to meet children's needs. <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Children-and-Disasters>
2. United States Census Bureau (2015). State and county quick facts. Retrieved from: <http://www.census.gov/quickfacts/table/PST045215/00>
3. Centers for Disease Control and Prevention (CDC). Bridged-Race Population Estimates . Retrieved from: <http://wonder.cdc.gov/bridged-race-population.html>
4. National Advisory Committee on Children and Terrorism (NACCT). (2003). Recommendations to the Secretary. Retrieved from: <https://www.hsdl.org/?view&did=437514>
5. National Commission on Children and Disasters. (2010). 2010 Report to the President and Congress. Retrieved from: <http://archive.ahrq.gov/prep/nccdreport/>
6. National Advisory Committee of Children and Disasters (NACCD). <http://www.phe.gov/Preparedness/legal/boards/naccd/Pages/default.aspx>
7. Federal Emergency Management Agency (FEMA). Homeland Security Exercise and Evaluation Program (HSEEP). <https://www.fema.gov/media-library/assets/documents/32326>
8. Illinois Emergency Medical Services for Children (EMSC). Pediatric preparedness resources available at: www.stitch.luc.edu/emsc

Appendix A: Sample Volunteer Release for Exercise Participation

This Appendix contains two forms that can assist agencies/organizations when using live volunteers (both adults and children) in a drill or exercise. These forms can be used together or separate. The first form is a Medical Questionnaire to ensure volunteers are healthy enough to participate in the exercise. The second form is to obtain consent from volunteers to participate in the exercise.

Volunteer Release for Exercise _____ (insert agency/organization)

MEDICAL QUESTIONNAIRE
PLEASE READ CAREFULLY

1. Do you consider yourself to be in good health? Yes No
(If you are not feeling well on day of exercise, please do not attend)
2. Do you have any existing medical condition(s) that would put you at risk if you participated in the exercise either causing injury to yourself or further exacerbating (making worse) your medical condition? Yes No
3. Do you take any medication that will put you at risk? Yes No
4. Have you had any knee or back problems? (This information will not prohibit your participation in the exercise but will aid us in giving you an appropriate assignment). Yes No
5. In your opinion, do you have any medical conditions that would limit your ability to perform the role of "victim" safely? Yes No
6. Do you place any limits on yourself to avoid physical or medical problems? (e.g. hearing, vision, mobility limitations). Yes No *** Please explain if you answered "Yes."

7. Do you have any allergies to medication(s), insects, other? Yes No
If yes, please list: _____
9. Is there anything else that we need to know about your medical condition? Yes No
If yes comment: _____

The information that I have provided above is true and accurate.

_____ (date) _____
(Signature of Participant)

_____ (Printed Name)

_____ (date) _____
(Signature of Participant's Legal Guardian if under 18 years of age)

Contact Information during exercise: _____

_____ (Printed name) _____ (Relationship to participant)

NOTES

