



ILLINOIS  
Emergency Medical Services for Children

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# Disaster Preparedness Exercises Addressing the Pediatric Population

*December 2006*

*Illinois Emergency Medical Services for  
Children is a collaborative program between  
the Illinois Department of Public Health and  
Loyola University Medical Center*



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Illinois Emergency Medical Services for Children is a collaborative program between the Illinois Department of Public Health and Loyola University Medical Center. The Pediatric Bioterrorism Work Group 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, Illinois Nurse Volunteer Emergency Needs Team and Illinois Poison Center, among others.

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## How to Use This Document

This document is offered as a resource to organizations as they conduct disaster drills and tabletop exercises. Inclusion of infants and children in disaster drills and exercises is an essential component in preparedness efforts, and can assist in preparing an organization to treat critically ill or injured pediatric patients during an actual disaster or mass casualty incident (MCI).

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 pediatric age range 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.

*This document is available on-line at [www.luhhs.org/emsc](http://www.luhhs.org/emsc). For additional copies or more information, contact Illinois EMSC at (708) 327-EMSC (3672).*

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## Background

The events of September 11, 2001, and subsequent anthrax events emphasize the need for public health agencies and health care organizations to better prepare for acts of terrorism. More recent natural disasters, such as the earthquakes in Indonesia, Pakistan and India, the hurricanes along the Gulf Coast in the United States and the devastating tsunami in Indonesia, have clearly identified a global need for disaster preparedness and response.

Illinois has experienced flooding, tornadoes, blizzards and other weather-related emergencies. In addition, our state is at risk for a number of other types of disasters. For example, 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
- 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

Any type of disaster occurring within our state will likely impact children since our pediatric population is significant in size. Currently there are more than 3 million children and adolescents age 17 years and younger in Illinois, and 900,000 of those children are age 5 or younger. The percent of Illinois children younger than the age of 18 years increased 10 percent between the last two census years (1990-2000). Thus, it is critical that health care organizations become more aware of the pediatric populations within their community by identifying places where children congregate in large numbers, such as schools, daycare 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.

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

- 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
- Higher respiratory rates per minute puts children at risk for greater exposure to aerosolized agents
- More permeable skin and larger skin surface to mass ratio increases children's exposure risk to some agents

- Children have special susceptibilities to dehydration and shock
- Children have an increased vulnerability to the effects of radiation exposure, requiring a more vigorous medical response than adults
- Adult decontamination units are not ideal for children and they are more vulnerable to hypothermia during the decontamination process
- Children with special health-care needs are particularly at risk if their survival depends upon medications or technology such as respirators
- Depending upon age and cognitive development, they may not be capable of readily conveying medical history
- Children have unique psychological vulnerabilities
- Children typically do not carry identification and may become separated from parents/caregivers

In May 2003, the National Advisory Committee on Children and Terrorism (NACCT) made a series of recommendations to the secretary of the U.S. Department of Health and Human Services (DHHS) that are aimed at better addressing children's needs. These recommendations include the following key elements:

- Support and enhance existing DHHS programs which assure the needs of children are met in the Emergency Medical Services (EMS) system
- Develop emergency planning that explicitly accounts for the possibility of children being congregated in various settings
- Ensure federal terrorism initiatives address the roles and needs of schools
- Ensure schools are fully integrated into preparedness, response, recovery, and mitigation efforts
- Involve primary care pediatric providers in all staging of preparation and response to disaster
- Include non-traditional first responders in emergency planning (clergy, educators, members of faith-based and community-based organizations, community leaders, health and human service providers, and community workers)
- Mandate mental health specialists in terror and disaster planning, preparation and response (psychosocial and medical effects of terrorism on children and families)
- Support sustainable training and evaluation by funding ongoing disaster and terrorism drills which include significant proportions of pediatric victims and child-related scenarios with a component of special needs children
- Ensure all hospital institutions are prepared to care for children in the event of a disaster or terrorist act

## Disaster Considerations

This document contains several scenarios and tabletop exercise templates that primarily involve children. In conjunction with these templates, the following checklist of considerations can be utilized to assist in determining whether there are opportunities to enhance your pediatric preparedness.

### Scene Considerations:

#### EMS:

- Have pre-hospital personnel received training in pediatric emergency care such as **Pediatric Education for Prehospital Professionals (PEPP)** and **Pediatric Advanced Life Support (PALS)**? Are they up to date with their training?
- Are pre-hospital personnel trained in **JumpSTART** Pediatric Multiple Casualty Incident Triage?
- Do the pre-hospital personnel have pediatric sized airways and resuscitation supplies?
- Do pre-hospital personnel have a mechanism/tool for appropriate medication dosing for kids?
- How would field decontamination be accomplished with a stable child? Unstable child?
- Who notifies area hospitals to expect potentially contaminated pediatric patients?
- Where are the nearest trauma centers? Pediatric tertiary care centers?
- How will EMS determine where to route/take patients?
- Has National Incident Management System (NIMS) training been conducted?
- Has Citizens Emergency Response Team (CERT) training been offered locally and did it contain any pediatric specific information?
- Have disaster drills/exercises included schools, daycare or other facilities where children congregate during the day?

#### Fire Department/Law Enforcement:

- How is the scene secured? How are bystanders, especially children, kept safe?
- Who decides if evacuation of a building is necessary?
- What process/protocol is used for evacuating unaccompanied children and infants?
- Who decides when occupants can safely return to a damaged building?

### Emergency Department (ED) Considerations:

- Has your nursing and medical staff received training in the care of children? Are they current with reviews and updates?
- In a biological/chemical event, what surveillance and agent identification processes are in place?
- If exposure is suspected, do you have ready access to treatment guidelines?
- Is there a mechanism for determining appropriate dosing for children?
- Do you have sufficient pediatric supplies, medications, vaccinations, ventilators to treat pediatric patients for at least 12 hours immediately following an incident?
- Do you have an adequate supply of personal protective equipment?
- If decontamination is necessary, how and where will the process occur?
- Do you have a process/protocol for decontamination of infants/young children?
- Does your decontamination process address keeping families together when appropriate?
- What warming devices are available? How many of each?
- Have the pre-hospital health care personnel exhibited any symptoms?
- What other area facilities have pediatric in-patient beds which may be available?
- Is there a process in place for contacting other hospitals when additional beds are needed to care for an influx of pediatric patients?
- Where are the closest trauma centers? Pediatric tertiary care centers?
- Is there a process in place for consultation with a pediatrician or pediatric specialist if needed?
- Who will track what pediatric victims were transported and where?
- Do you have available space for cohorting pediatric victims/families after triage?
- What staff rotation plan is in place to provide adequate ED coverage while also allowing for staff relief/rest?
- How will you meet routine care concerns of children with special health care needs?
- How will you meet routine care concerns for delivery of newborns?

- Is there a process in place for identifying unaccompanied children?
- Is there a process in place to reunite unaccompanied children with their families?
- What is your centralized patient locator system?
- Who will interface with families of children affected?
- Who will notify parents of children's disposition?

**Hospital and Long-term Considerations:**

- When would Hospital Incident Command System (HICS) be instituted?
- What is your pediatric surge capacity - potential patient beds for point in time/longitudinal care?
- Are you a site that receives pediatric transfers from other hospitals? If so, what process is in place for handling incoming transfers plus the victims delivered to your facility from the field?
- Have mutual aid agreements been established among area hospitals and other health care organizations for transferring pediatric victims?
- How many patients can be served based on the amount of pediatric supplies, medications, vaccinations, ventilators you have stocked?
- Do you have immunizations and antibiotics in sufficient amounts to treat victims and staff as needed?
- How readily available are pediatric supplies?
- Do you have a process in place or a Memorandum of Understanding (MOU) to obtain additional emergency supplies quickly if replenishing is necessary? (ie: pharmacies, medical supply companies, local food stores).
- If you are a facility that typically handles very few children, how would you access childcare supplies such as diapers, formula, electrolyte solutions, bottles and nipples?
- What other additional resources are available to triage and treat a large number of children and adults as the situation escalates/continues?
- If additional staff from outside your facility are needed (volunteers, local pediatricians) who grants credentialing waivers?
- Do you have the capability to set up a field hospital/alternative care site (ie: local shuttered hospitals, armories, gymnasiums)? If so, how will pediatric needs be addressed?
- Have you identified other community resources and established collaborative arrangements to assist with long-term management of pediatric patients? (ie: long-term care facilities, schools, sister hospitals).
- What communication processes are in place to handle multiple incoming calls and walk-ins seeking information about child victims that may have been brought to your facility?
- Are guidelines established for type and amount of information that can be given over the phone and for determining identity of caller?
- What processes are in place to deal with parents of "walking wounded" and "worried well"?
- What process is in place for identification of unaccompanied children?
- What is the process/protocol for reuniting children with their families?
- Have you identified a separate "holding/waiting area" for unaccompanied children? What personnel supervision provisions are in place?
- Is there daycare type capabilities available for dependents of staff called in during the incident?
- What resources are available for staff comfort?
- How will you provide acute and long-term mental health services for child victims, their families, and staff?
- When would you initiate contact with local or state support agencies for additional assistance?
- Have you included the local health department, fire department and police department in your planning?
- Have you pursued mutual agreements with agencies in nearby counties/towns for emergency assistance/response if necessary?
- Do you have redundant, inter-operational command capabilities?
- Is there a process in place to address security and traffic issues?
- Is there a process in place for dealing with media issues?
- Did staff follow NIMS during the drill/incident?
- Is there a process for post incident evaluation and debriefing?
- How will the information garnered from this experience be utilized to facilitate care of children during disasters?

## Scenario 1

8:15 a.m. A call to 911 is received. As 5<sup>th</sup> grade students were arriving by bus this morning to XYZ Middle School for a science lab field trip, several children noted an unusually large pipe on the lawn outside a classroom window near the back parking lot. The assistant principal, who phoned in the concern, offered to meet police outside the front of the school near the main office in about five minutes. There were two sick calls with office staff today, including the principal. Until substitute teachers arrive, the assistant principal is busy with morning announcements.

As the first police unit arrives, an explosion occurs near the back of the school, taking down the outside wall and windows of at least one classroom. The responding officer calls dispatch to report the event and requests additional personnel and EMS at the scene.

This middle school houses more than 500 individuals including students and staff. As the smoke outside clears, it is evident that at least one affected room is the science lab where the visiting 5<sup>th</sup> graders, a teacher and student teacher were present. The adjacent rooms are another science lab and the lab supplies storage room. Across the hallway in this wing of the school are the nurse's office and the furnace/utility room.

The first few victims are able to move/stumble out of the wreckage. They are coughing with eyes tearing, complaining of chest tightness, stomach cramping, and runny noses. On exam they all have constricted pupils.

The assistant principal, visibly shaken, mumbles something about the science teacher being recently separated from her husband, and that she had recently been able to secure an order of protection from him. Apparently he had retired from his post as an explosives expert in a branch of the military reserves. He also had been employed by the school district but was on leave pending a psychiatric assessment after threats he had made to his wife.

**STOP: At this point, please identify and list important considerations for this component of the scenario (it may be helpful to refer to Scene Considerations on page 4).**

Additional rescue units arrive on the scene. Neighbors and parents who have heard the sirens start to gather outside the school and are becoming panicked and hysterical. The first television news crews arrive and several morning traffic helicopters are heard overhead.

A fire erupts in the science storage lab where liquid chemicals had spilled and poured onto the floor. The fire quickly spreads across to the nurse's room where the parent information forms are stored. The nurse is found unconscious with head injuries. More victims are located in the science labs and hallway. Smoke is filling the school hallways.

8:45 am. You are the charge nurse of a local ED located a couple of blocks from the school affected by this incident and have been notified to expect victims. Your waiting room is already filled with patients waiting to be seen. You and the ED physician begin to discuss how to respond.

9 a.m. While you're trying to put in place all the pieces to handle the expectant arrival of victims from the school, several parents of children who attend XYZ School show up in your ED inquiring about their children. At the same time several children from the affected school and several teachers walk into your emergency department.

**STOP: At this point, what would you do next? Please identify and list important considerations for this component of the scenario (it may be helpful to refer to Emergency Department Considerations on page 4).**

**See next page for a list of victims for this Scenario**

Using the appropriate triage algorithm in Appendix A or B, categorize each of the victims and provide justification for selecting that category.

## Scenario #1 Victim List

<b>VICTIM</b>	<b>RESPIRATORY RATE</b>	<b>PERFUSION</b>	<b>MENTAL STATUS</b>	<b>OTHER</b>
Teen M	RR 38	Radial pulse present	Knows name and can recall incident	Facial burns, coughing, pupils constricted
Child F	RR 32	Palpable pulse	Alert, crying hysterically	Multiple small lacs with embedded wood and glass entire dorsal area of body, head to foot
Child M	RR 12	Weak, thready pulse	Disoriented to place and time	Hematoma forehead, facial lacerations
Adult M	RR 48	Capillary refill > 2	Moaning, unable to follow commands	Large glass shard protruding from abdomen, wheezing
Teen F	RR 8	Pulse absent	Unresponsive	Impaled onto shelving brackets on wall
Child M	RR 36	Pulse present	Won't speak but makes eye contact with touch	Bleeding from ears, bruise on neck
Child F	RR 0	Weak radial pulse	Unresponsive	Trapped under rubble; apneic after 5 rescue breaths
Child F	RR 52	Thready pulse	Confused	Coughing, brisk bleeding from facial and hand lacerations
Teen M	RR 40	Pulse present	Disoriented to place and time	Scalp lacerations, burns to upper extremities
Child M	RR 10	Weak rapid pulse	Unresponsive	Bunsen burner imbedded in upper arm - heavy bleeding
Child M	RR 40	Pulse present	Responds to pain	Open femur fracture, lacerations to hands and face
Teen F	RR 48	Pulse rapid and weak	Responds only to touch	Deformity right upper extremity, glass shrapnel in scalp
Child F	RR 32	Pulse present	Crying but oriented x 3	Open fracture lower leg; contusions to arms and chest
Child M	RR 36	Bounding pulse	Alert but won't speak	Burns to neck and torso, lacerations to arms
Teen F	RR 44	Pulse weak	Hysterical	Partial amputation right forearm
Adult F	RR 28	Capillary refill <2	Crying for help, able to recall events	Leg caught under lab desk and chairs - open fracture
Teen M	RR 10	Pulse present - slow	Unresponsive	No obvious injuries
Teen F	RR Unable to count	Rapid pulse	Crying hysterically, will not answer questions	Grabbing rescuers
Child M	RR 24	Pulse present	Alert	Vomiting, drooling, incontinent
Child F	RR 0	Absent pulse	Unresponsive	Trapped under rubble
Child M	RR 32	Rapid pulse	Alert and anxious	Coughing, vomiting, incontinent, tearing, runny nose
Child F	RR28	Rapid pulse	Alert	Crying, no obvious injuries
Child M	RR 34	Rapid pulse	Keeps asking same questions	Tearing, runny nose, incontinent
Child F	RR 30	Rapid thready pulse	Sleepy - difficult to arouse	Diaphoretic
Child F	RR 28	Pulse present	Alert	Can currently speak, facial, neck and upper extremity burns
Child M	RR 50	Pulse present	Confused	Wheezing, facial and torso burns
Child F	RR 44	Radial pulse weak	Responds to verbal stimuli, disoriented	Large bruise forming on abdomen, burns on legs

## Scenario 2

A group of first and second grade students with their teacher/chaperones are en route via school busses for 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. The nearest hospital is a small rural hospital. Their ED seldom sees critically ill/injured children. You are in charge of the ED on this day.

**STOP:** At this point, please identify and list important considerations for this component of the scenario (it may be helpful to refer to Scene and Emergency Department Considerations on page 4).

**See victim list below for this Scenario**

Using the appropriate triage algorithm in Appendix A or B, categorize each of the victims and provide justification for selecting that category.

### Scenario #2 Victim List

VICTIM	RESPIRATORY RATE	PERFUSION	MENTAL STATUS	OTHER
7 yo F	RR 10	Distal pulse present	Groans in response to painful stimuli	Lying in ditch 15 feet from accident
50 yo F	RR 20	Capillary refill 2 seconds	Obeys commands	Sitting on shoulder of road complaining of dizziness
8 yo M	Talking	Distal pulse present	Asking for help	Walks toward you, clothing is torn, no bleeding evident
6 yo F	RR 0	No pulse	Unresponsive	Legs trapped under seat from bus
39 yo M	RR 28	Capillary refill 4 seconds	Moaning	Bus driver trapped under collapsed dash in front bus
7 yo M	RR 48	Distal pulse present	Blank stare	Lying in wreckage, bilateral lower extremity deformity
30 yo M	RR 20	Capillary refill 2 seconds	Obeys commands	Walking at scene
8 yo F	RR 28	Distal pulse present	Follows commands	Facial and scalp lacerations - moderate bleeding
6 yo F	RR 0	Faint distal pulse	Unresponsive	Found in rubble outside rear bus; apneic after 5 rescue breaths
6 yo M	RR 40	Pulseless	Withdraws from painful stimuli	Arm deformity, sucking chest wound
8 yo M	RR 36	Distal pulse present	Screaming	Partial amputation of foot with minimal bleeding. Found in ditch
45 yo F	RR 0	Pulseless	Unresponsive	Driver of rear bus, found under front of bus
7 yo F	RR 24	Distal pulse present	Crying	Limping near busses
7 yo M	RR 38	Absent distal pulse	Groans, stops when spoken to	Lying near bus
8 yo F	RR 24	Distal pulse present	Asking for her wheelchair	Found wedged under bus seat
7 yo M	RR 22	Distal pulse present	Obeys commands	Complains cannot move or feel legs
6 yo M	RR 28	Distal pulse present	Not following commands	Sitting on shoulder of road, blood in ears.
25 yo F	RR 12	Capillary refill > 4 seconds	Eye movement in response to stimuli. Not speaking	Appears six months pregnant

## Scenario 3

The town emergency siren has been activated. A tornado has been spotted west of town. A local daycare facility currently housing 35 children from 2 months to 4 years of age appears to be in the direct path of the tornado. Indeed, the tornado passes through town causing severe damage throughout the town and in particular to the daycare facility.

An assessment of the daycare reveals the following: portions of the roof are missing; windows are shattered and shards of glass are everywhere; a large bookcase full of books, toys and supplies has toppled; file cabinets have been overturned as have some cribs, cots and chairs. One of the workers reports she smells gas. Outside the daycare center, trees and utility wires are down. A large tree branch is blocking the main entrance to the facility. There is no electricity and the telephone is dead. An infant is noticed crawling amidst broken glass on the floor and a crying toddler is sitting in the middle of the floor with cuts on his hands, face and upper torso. Outside approximately 20 yards from the building, a preschooler is on the ground and not moving. Other toddlers and children are wandering aimlessly about. It continues to rain hard with winds up to 20-30 mph.

**STOP: At this point, please identify and list important considerations for this component of the scenario (it may be helpful to refer to Scene and Emergency Department Considerations on page 4).**

### **See victim list below for this Scenario**

Using the appropriate triage algorithm in Appendix A or B, categorize each of the victims and provide justification for selecting that category.

### **Scenario #3 Victim List**

<b>VICTIM</b>	<b>RESPIRATORY RATE</b>	<b>PERFUSION</b>	<b>MENTAL STATUS</b>	<b>OTHER</b>
Preschool F	RR 10	Weak, thready pulse	Unresponsive	Outside building, face down on ground
Preschool M	RR 18	Irregular pulse	Responds to pain	Trapped under bookcase and books
Infant F	RR 24	Pulse present	Crying, responds to voice	Sitting on floor; cuts on face, hands and legs
Infant F	RR 12	Pulse present	Responds to stimuli, weak cry	On floor next to overturned crib; hematoma on forehead
Toddler F	RR 20	Pulse present	Crying loudly, wandering about	Grabbing at and clinging to workers
Preschool M	RR 22	Pulse present	Doesn't acknowledge workers; screaming	Standing in middle of room; no obvious injuries
Infant M	RR 32	Rapid pulse	Eyes open, quiet, still	Pieces of glass and debris in crib; no obvious injuries noted
Infant F	RR 0	Absent pulse	Unresponsive	Trapped under overturned metal file cabinet
Toddler M	RR 8	Faint pulse	Responds to pain	Both legs trapped under overturned file cabinet
Toddler F	RR 0	Palpable pulse	Unresponsive	Large gash on scalp; large piece of glass embedded in abdomen; spontaneous respirations after 5 rescue breaths

## Scenario 4

At the local sports arena (high school or college football stadium) the regional (or state) Special Olympics track meet is being held. After the parade of contestants and anthems, local politicians and their entourage welcome the children and parents to the event. Estimated attendance is more than 1,000 with hundreds of children and coaches gathered on the football field. Near the end of the opening speech an explosion occurs, apparently from the podium area. The blast sends several adults back toward the crowd of children and smoke billows over the field and the stadium seats adjacent to the explosion site. Initially many children are coughing and seem to be wheezing and crying. The scene is chaotic with panicked children and parents in the stadium seats attempting to find their children.

**Use information below to create a victim list**

### **Victims:**

- The left arm of one of the local politicians is partially amputated mid-arm, and his face and torso are badly burned. He is unconscious, RR is 12 and shallow, then ceases; distal pulse is thready.
- One assistant is face down and cyanotic with a large piece of wood protruding from his chest.
- The other aide appears to be six months pregnant and has burns to her arms, abdomen and has an open right tib-fib fracture.
- News reporters covering the event have burns and blunt trauma, with shrapnel embedded in their extremities.
- As first responders arrive they find at least 10 children who appear to seize and quickly progress to full arrest.
- Others in the area exhibit tearing, coughing, have runny noses and seem to drool.
- Additional victims further from the blast site complain of chest tightness and eyes tearing.

**STOP: At this point, please identify and list important considerations for this component of the scenario (it may be helpful to refer to Scene Considerations on page 4).**

Using the appropriate triage algorithm in Appendix A or B, categorize each of the victims and provide justification for selecting that category.

## Scenario 5

It's lunchtime on a warm sunny day at the local grade school. The first and second grade children are enjoying recess on the playground while the third and fourth graders are in the cafeteria. Without warning, gunfire erupts outside on the playground. A deranged young woman runs through the area shooting a gun. She charges into the school through the kitchen door, which is propped open to the playground, and continues to randomly fire a weapon in the cafeteria. She then runs out of the school, disappearing into the wooded lot behind the school. In less than two minutes more than a dozen children and five adults are down with countless more spattered with blood, crying and screaming. Two of the injured children are known to be HIV positive.

Your emergency department is the closest to the affected school. As usual, the ED has been busy and there are several patients in the waiting room. Your 11a.m. to 11p.m. shift is now at work and the Fast Track area is open.

At 12:15 p.m. you receive notification of the school shooting incident and to expect victims to your ED. You discuss the incident with the ED physician who indicates you need to contact the on-call trauma surgeon. The trauma surgeon is in surgery.

**STOP:** At this point, what would you do next? Please identify and list important considerations for this component of the scenario (it may be helpful to refer to Emergency Department Considerations on page 4).

**NOTE:** Create your own victim list based on the above information. Then, using the appropriate triage algorithm in Appendix A or B, categorize each of the victims and provide justification for selecting that category.

## Scenario 6

The museum is opening its latest exhibit. Several schools have brought children to the facility for a field trip. There are approximately 250 children from these schools in addition to the regular daily attendance. Midway through the day an unusual odor begins to fill the building, apparently coming from the ventilation system. It is the first day the heat has been on since being serviced in preparation for the cold weather. Many of the children and chaperones begin to complain of not feeling well. Initial symptoms include headache, lethargy and nausea.

In addition, snow has begun to fall heavily since morning and local roadways are in need of plowing. Numerous spin out vehicular crashes have been reported near the museum.

**STOP:** At this point, please identify and list important considerations for this component of the scenario (it may be helpful to refer to Scene and Emergency Department Considerations on page 4).

**NOTE:** Create your own victim list based on the above information. Then, using the appropriate triage algorithm in Appendix A or B, categorize each of the victims and provide justification for selecting that category.

## Tabletop Exercise A

A rapidly growing number of youngsters have been brought by parents to area hospitals, clinics and pediatrician offices with fever, chills, cough, headache, malaise and sore throat. It is the beginning of cold and flu season, however, some children have reportedly been very ill, with three fatalities occurring in surrounding counties over the past week.

The following common thread was found after extensive investigation. The area symphony was about to start their holiday season of performances and had invited grade school music students to attend their dress rehearsal. Children from several counties came by the busload into the city and attended the symphony recital in the crowded theatre. Chaperones recalled that throughout the theater there were episodes of coughing that were heard during the show, and in particular with one large group of students. These students were identified as being from a parochial school. Many of them had older siblings who had been on a mission trip over Thanksgiving weekend in an underdeveloped area where stray cats had wandered in and out of their sleeping quarters. Many of the mission students had returned with what appeared to be flea bites and had developed flu-like symptoms within the next week. The respiratory symptoms were initially attributed to seasonal viral illnesses.

### **Suggested Objectives:**

- Collaborate with surrounding counties to determine appropriate strategies and approaches.
- Coordinate surveillance efforts with appropriate agencies.
- Disseminate plan and pertinent information to appropriate organizations as necessary.
- Identify community resources available for assistance.
- Others?

### **Suggested Players:**

- Local health department representative
- Hospital administrator/representative
- Emergency department manager/representative
- Superintendent of schools representative
- Emergency medical services representative
- Mental health representative
- Others?

## Tabletop Exercise B

Police take down a methamphetamine lab and one of the suspects escapes the scene and travels a few blocks where he then enters a neighborhood daycare center. He takes 40 children and their teachers as hostages. In the lab, police find large quantities of chemicals, lab equipment and weapons. Reference materials on methods of production of weapons of mass destruction are located in an adjoining room. It appears that a container is missing from an open incubation cabinet. It is uncertain whether this container is with the suspect. The day care center involved in the hostage situation is located in your hospital medical office building.

### **Suggested Objectives:**

- Identify and prioritize response activities.
- Identify policies and procedures which are specific for this type of incident.
- Identify type and availability of resources needed.
- Identify critical operations.
- Identify community safety issues
- Heighten awareness of rapidly growing problem and dangers to children associated with Methamphetamine exposure.
- Others?

### **Suggested Players:**

- Hospital administrator/representative
- Office building manager
- Law enforcement representative
- Daycare manager
- Health/environmental representative
- Public information officer
- Emergency medical services representative
- Mental health representative
- Others?

## Tabletop Exercise C

While you are assisting with recovery efforts from a terrorist event that occurred at the grade school on the previous day, a tornado touches down at the Cub Scout campsite just outside of town where a district wide event is being held this weekend. Trees and tents are toppled. An estimated 150 boys and their leaders are spread across the campgrounds at different activity sites. Power is knocked out at many area facilities. A small local hospital has needed to access generator power.

### **Suggested Objectives:**

- Coordinate field operations.
- Ascertain safety of the area and measures to be taken to ensure safety.
- Determine adequacy of communication with scout leaders and other agencies.
- Determine if sheltering in place (at camp site) is possible.
- Others?

### **Suggested Players:**

- Local hospital administration/representative
- Emergency medical services/representative
- County official representative
- Camp site manager
- Scout troop leader representative(s)
- Public works director/representative
- Mental health representative
- Others?

## Tabletop Exercise D

A winter holiday festival is being held at the local shopping mall. Activities include free photos with Santa, arts and crafts workshops for children to make gifts, and performances of seasonal music by many area children's choirs. The mall is extraordinarily crowded this cold winter day.

Without warning the floor seems to move, knocking people off their feet. The suspended holiday decorations start swaying. Items are falling off store shelves and then glass panels in the store windows start to crumble and cascade to the floor. The risers holding a choir of 50 grade school children collapses. Suddenly there is panic and people start running toward the exits attempting to escape the facility, stumbling over whatever and whomever is in their way.

Overhead light fixtures are dangling. As one fixture drops to the ground, wires touch and sparks fall onto the canopy over Santa's chair. Fire erupts. Several distress calls are received by 911. Callers indicate that it feels like a bomb went off at the mall but no explosion was heard. Roads leading to the mall and the parking lot also have sustained structural damage.

### **Suggested Objectives:**

- Coordinate effective evacuation.
- Identify and prioritize responses required.
- Collaborate with other agencies and coordinate efforts to maximize timely response.
- Determine safety levels needed to allow re-entry into affected areas.
- Communicate with local hospitals to determine surge capacity (especially for children).
- Others?

### **Suggested Players:**

- Mall manager/representative
- City manager/representative
- Local hospital(s) emergency manager representative
- Local hospital(s) administrative management representative
- Pre-hospital emergency medical services representative
- Law enforcement representative
- Fire services representative
- Health/environmental representative
- Public information officer
- State/city building inspector representative
- Mental health representative
- Others?

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# Resources

## **Triage Training Resources**

*“Bioterrorism & Trauma Training: An All Hazards Approach to Multiple Casualty Events”  
CD- ROM, written by Critical Illness and Trauma Foundation Inc.*

*“Triaging Kids in Disasters” CD-ROM, developed by Delaware EMSC*

## **References/Other Resources**

*Agency for Healthcare Research and Quality’s Bioterrorism and Public Health Emergency Response Tools  
<http://www.ahrq.gov/path/biotrspn.htm>*

*American Academy of Pediatrics, Children – Terrorism and Disasters  
<http://www.aap.org/terrorism/index.html>*

*American College of Preventive Medicine  
<http://www.acpm.org/education/EHCMEOpportunities.htm>*

*American Hospital Association Emergency Readiness  
[http://www.hospitalconnect.com/aha/key\\_issues/disaster\\_readiness/resources/HospitalReady.html](http://www.hospitalconnect.com/aha/key_issues/disaster_readiness/resources/HospitalReady.html)*

*Center for Trauma Response, Recovery and Preparedness for Health Care Communities  
[http://www.ctrp.org/resources\\_healthcare.htm](http://www.ctrp.org/resources_healthcare.htm)*

*Fairfax County Public Schools  
Emergency Preparedness and Support  
<http://www.fcps.edu/emergencyplan/index.htm#mci>*

*Federal Emergency Management Agency  
Emergency Management Institute: Independent Study Program IS-139 Exercise Design (updated 3/24/06)  
[www.fema.gov](http://www.fema.gov)*

*Illinois Emergency Management Agency  
<http://www.state.il.us/iema/>*

*Illinois Emergency Medical Services for Children  
[http://www.luhhs.org/depts/emsc/links.htm#DISASTER/BIOTERRORISM\\_PREPAREDNESS](http://www.luhhs.org/depts/emsc/links.htm#DISASTER/BIOTERRORISM_PREPAREDNESS)*

*Illinois Homeland Security  
[http://www.illinoishomelandsecurity.org/preparedness/122101\\_update.htm](http://www.illinoishomelandsecurity.org/preparedness/122101_update.htm)*

*JumpSTART Pediatric Mass Casualty Incident (MCI) Triage Tool  
[http://www.jumpstarttriage.com/JumpSTART\\_and\\_MCI\\_Triage.php](http://www.jumpstarttriage.com/JumpSTART_and_MCI_Triage.php)*

*National Association of Children's Hospitals and Related Institutions (NACHRI)  
<http://www.childrenshospitals.net/AM/Template.cfm?Section=Homepage&Template=/customSource/homepage/homepage.cfm>*

*National Association of County and City Health Officials (NACCHO)*  
<http://bt.naccho.org/Bt-Toolbox/>

*National Association of School Nurses (NASN)*  
*Disaster and Preparedness: School Nurse Role*  
<http://www.nasn.org/Portals/0/positions/2006psdisaster.pdf>

*National Center for Disaster Preparedness*  
*Pediatric Preparedness for Disasters and Terrorism A National Consensus Conference*  
*Executive Summit 2003*  
[http://www.ncdp.mailman.columbia.edu/files/pediatric\\_preparedness.pdf](http://www.ncdp.mailman.columbia.edu/files/pediatric_preparedness.pdf)

*North Carolina Center for Public Health Preparedness*  
[http://www.sph.unc.edu/nccphp/training/all\\_materials/am\\_biot\\_lead.htm](http://www.sph.unc.edu/nccphp/training/all_materials/am_biot_lead.htm)

*Schools and Terrorism*  
<http://www.bt.cdc.gov/children/PDF/working/school.pdf>

*Simple Triage and Rapid Treatment (START) Triage System*  
<http://www.citmt.org/start/overview.htm>

*U. S. Food and Drug Administration*  
*Drug Preparedness and Response to Bioterrorism*  
*Pediatric Counter Terrorism Measures and Support*  
<http://www.fda.gov/cder/drugprepare/default.htm#Pediatrics>

## START

### Simple Triage and Rapid Treatment

Triage is a method of quickly identifying victims who have life-threatening injuries and who also have the best chance of survival. Identification of such victims serves to direct other rescuers and health care providers to these patients first when they arrive on the scene.

One of the most widely recognized Mass Casualty Incident (MCI) Triage systems in the United States is the **START** Triage System (Simple Triage and Rapid Treatment). This system uses the assessment of respiration, perfusion and mental status (RPM) to make a primary triage decision in less than 30 seconds. The **START** Triage System is one method of triage which can be used in a MCI, and it was developed by Hoag Hospital and the Newport Beach Fire Department of Newport Beach, Calif. It was designed to allow first responders to triage or assess multiple victims rapidly, usually taking less than a minute, to determine which category each should be assigned. The assessment and triage is based on three primary observations: **R**espiratory, **P**erfusion, and **M**ental Status (RPM). The four categories are: **RED** (immediate); **YELLOW** (delayed); **GREEN** (minor/ambulatory) and **BLACK** (deceased/non-salvageable).

The **START** Triage System is intended for adults, but may also be used for older children. Determining the appropriate system to use in the pre-adolescent and young teen population can be sometimes challenging, so the current recommendation is: If a victim appears to be a child, use **JumpSTART**; If a victim appears to be a young adult, use **START**.

The triage steps of the **START Triage System** are as follows:

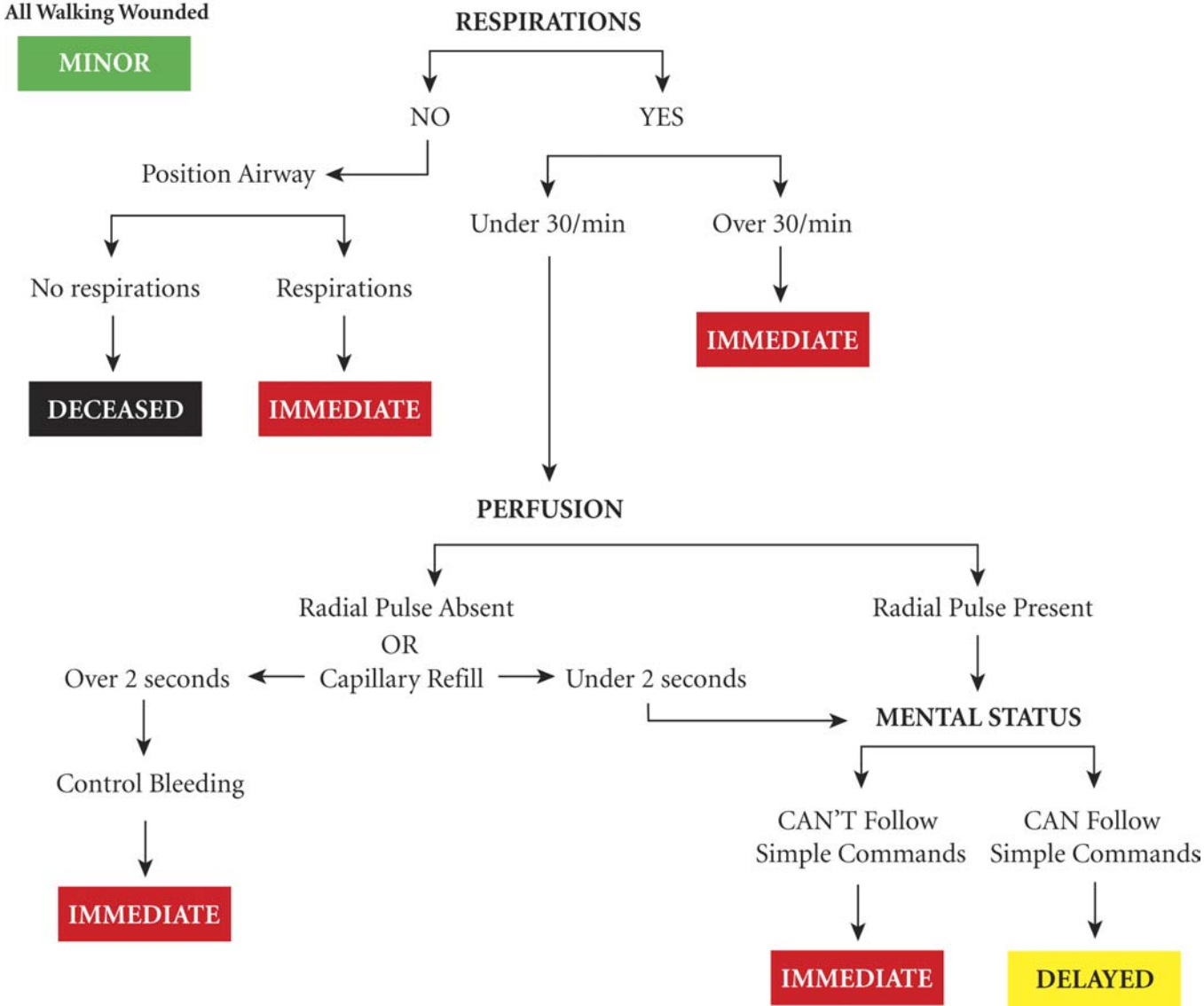
- Step 1: All victims who are able to walk are directed to an area designated for minor (**GREEN**) injuries where they will undergo a secondary and more involved triage and assessment. Any non-ambulatory victim reporting to this area, such as a wheelchair bound victim, must undergo a thorough evaluation upon arrival to ascertain the correct triage status.
- Step 2:
  - a) All remaining non-ambulatory victims are now assessed for the presence of spontaneous breathing (respirations). If spontaneous breathing is absent and not restored through conventional positional techniques to open the airway, the victim is tagged **BLACK** and the triage officer moves on to the next victim. If breathing is restored with repositioning, the victim is tagged **RED** (immediate) and the triage officer moves on.
  - b) If spontaneous breathing is present, the rate is assessed: a rate above 30/minute receives a **RED** and the triage officer moves on; if the rate is less than 30, the triage officer moves on to step 3.
- Step 3: The victim is now assessed for perfusion. This can be done by either capillary refill or radial pulse. If the radial pulse is absent or the capillary refill is >2 seconds the victim is tagged **RED**. If a radial pulse is present or capillary refill is <2 seconds, the triage officer proceeds to the next step.
- Step 4: The triage officer now checks the mental status of the victim. If the victim cannot follow simple commands, is unconscious, or has altered state of consciousness, he/she receives a **RED** tag for immediate treatment. If the victim can follow simple commands, he/she receives a **YELLOW** tag for delayed treatment.

**NOTE:** For all **RED** (immediate) victims, the triage officer must also attempt to control bleeding before moving on to the next patient. All victims tagged **BLACK**, unless clearly suffering from injuries incompatible with life, should be reassessed once critical interventions for **RED** and **YELLOW** victims are completed.

For more information please visit <http://www.citmt.org/start/overview.htm>

# START Triage Flowchart

## Detailed Flowchart



# JumpSTART

## Pediatric Multiple Casualty Incident Triage

A standardized triage system provides guidance for personnel making life and death decisions that otherwise may be influenced by emotional issues when triaging children.

*JumpSTART Pediatric Multiple Casualty Incident Triage* is an objective triage system that addresses the needs of children and can be a resource tool when planning a triage process for pediatric patients. Although the JumpSTART system parallels the START system, it takes into consideration the developmental and physiological differences of children by using breathing as the cornerstone for triage decisions. Adding a respiratory component to the triage system may increase triage time by 15-25 seconds, however, since the number of patients requiring a ventilatory trial would most likely be small, it is not thought to significantly affect overall triage time for an incident.

Additionally, since the physiologic indicators specified for START are not generally applicable to the pediatric victim, different criteria are needed to assess young patients. For example, neurological status under START depends on the patient's ability to obey commands. This index is clearly not applicable to young children who lack the developmental ability to respond appropriately to commands.

The **JumpSTART** Pediatric MCI triage system is designed for triaging infants and young children. Determining the appropriate system to use in the pre-adolescent and young teen population can be sometimes challenging, so the current recommendation is: If a victim appears to be a child, use **JumpSTART**; If a victim appears to be a young adult, use **START**.

In children, because of mechanical reasons such as weak intercostal muscles or mechanical airway obstruction, apnea may occur rapidly. **Thus circulatory failure usually follows respiratory failure.** There may be a period of time when the child is apneic but continues to maintain a pulse. It is during this time that airway clearance and a ventilatory trial may stimulate spontaneous breathing. If spontaneous breathing begins, the child is categorized as **RED** for further treatment. If spontaneous breathing does not follow the initial ventilatory trial, the child is categorized as **BLACK** or non-salvageable.

**JumpSTART** uses the same color-coding as **START**: **RED** (Immediate); **YELLOW** (Delayed); **GREEN** (Minor/Ambulatory); **BLACK** (Deceased/non-salvageable).

The triage steps of the JumpSTART Pediatric MCI triage system are as follows:

- Step 1: All children who are able to walk are directed to an area designated for minor (**GREEN**) injuries where they will undergo a secondary and more involved triage. Infants carried to this area or other non-ambulatory children taken to this area must undergo a complete medical and primary evaluation using modifications for non-ambulatory children to ascertain triage status. (Please refer to the Modifications for Non-Ambulatory Children\* section on the following page).
- Step 2:
  - a) All remaining non-ambulatory children are assessed for the presence/absence of spontaneous breathing. If spontaneous breathing is present, the rate is assessed and the triage officer moves on to step three.
  - b) If spontaneous breathing is not present and is not triggered by conventional positional techniques to open the airway, palpate for a pulse (peripheral preferred). If no pulse is present, patient is tagged **BLACK** and the triage officer moves on.
  - c) If there is a palpable pulse, the rescuer gives five breaths (approximately 15 sec.) using mouth to mask barrier technique. If the ventilatory trial fails to trigger spontaneous respirations, the patient is tagged **BLACK** and the triage officer moves on. However, if respirations resume, the patient is tagged **RED** and the triage officer moves on **without** providing any further ventilations.

- Step 3: If the respiratory rate is 15–45/minute, proceed to check perfusion. If the respiratory rate is less than 15 (less than 1/every 4 seconds) or faster than 45/minute or irregular, tag as **RED** and move on.
- Step 4: Assess perfusion by palpating pulses on a (seemingly) uninjured limb. If pulses are palpable, proceed to Step 5. If there are no palpable pulses, the patient is tagged **RED** and the triage officer moves on.
- Step 5: At this point all patients have “adequate” ABCs. The triage officer performs a rapid APVU assessment of mental status. If the patient is Alert, responds to Voice, or responds appropriately to Pain (withdraws from stimulus or pushes away), the patient is tagged **YELLOW** and the triage officer moves on. If the patient does not respond to voice and responds inappropriately to pain (moans or moves in a non-localizing fashion) or is Unresponsive, a **RED** tag is applied and the triage officer moves on to the next patient.

**NOTE:** All patients tagged **BLACK**, unless clearly suffering from injuries incompatible with life, should be reassessed once critical interventions for **RED** and **YELLOW** victims are completed.

### **\*Modifications for Non-Ambulatory Children**

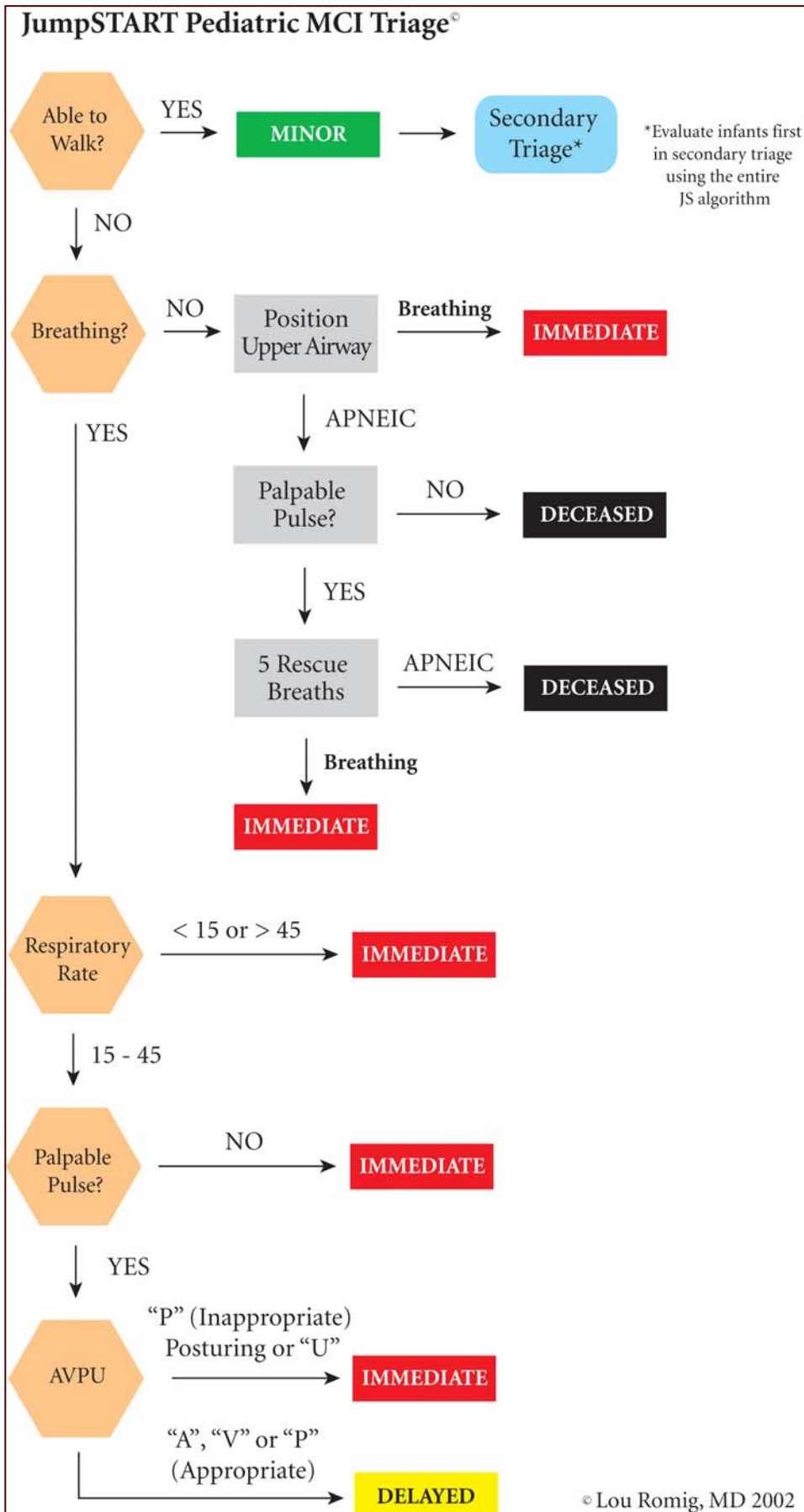
Children in which this modification would be used include:

- Infants who normally can’t walk yet
- Children with developmental delay
- Children with acute injuries which prevented them from walking **before** the incident occurred
- Children with chronic disabilities

Non-ambulatory children who meet the above criteria are evaluated using the **JumpSTART** algorithm beginning with Step 2. If the child meets any **RED** criteria, the child is tagged **RED**. A quick survey is then conducted to determine whether there are any significant external signs of injury (i.e. deep penetrating wounds, severe bleeding, severe burns, amputations, distended tender abdomen, or multiple bruises). If any significant external signs of injury are present, the child is tagged **YELLOW**. Non-ambulatory children without any significant external injury, with all other aspects of the **JumpSTART** algorithm normal, are tagged **GREEN**.

**NOTE:** Final disposition (transport destination) depends on local and regional resources. Drills and table top exercises should include discussion about transport based on the actual resources available to the participants.

This information was obtained from the JumpSTART Pediatric MCI Triage Tool website. The **JumpSTART** pediatric MCI field triage tool was developed by Lou Romig, M.D. Pediatric Emergency Medicine at Miami Children’s Hospital in Miami, FL in 1995 and modified in 2002. For additional information go to [www.jumpstarttriage.com](http://www.jumpstarttriage.com).



## Scenario and Tabletop Cause Considerations

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Scenario 1: School Science Lab : *Exposure could be nerve agent or choking agent*

Scenario 2: School bus accident : *Exposures include smoke inhalation and possibly contents from the truck*

Scenario 3: Day Care Center: *Tornado incident*

Scenario 4: Special Olympics: *Exposure could be a nerve agent such as sarin*

Scenario 5: School Playground: *Shooting incident*

Scenario 6: Museum: *Exposure is likely carbon monoxide; if choking symptoms consider phosgene*

Tabletop Exercise A : *Symphony recital; exposure could be Plague*

Tabletop Exercise B: *Methamphetamine lab/day care center hostage situation*

Tabletop Exercise C: *Campsite tornado*

Tabletop Exercise D: *Earthquake involving a shopping mall*

## SCENARIO 1 INSTRUCTOR RESOURCE

VICTIM	RESPIRATORY RATE	PERFUSION	MENTAL STATUS	OTHER	TRIAGE TAG
Teen M	RR 38	Radial pulse present	Knows name and can recall incident	Facial burns, coughing, pupils constricted	RED
Child F	RR 32	Palpable pulse	Alert, crying	Multiple small lacs with embedded wood and glass entire dorsal area of body, head to foot	YELLOW
Child M	RR 12	Weak, thready pulse	Disoriented to place and time	Hematoma forehead, facial lacerations	RED
Adult M	RR 48	Capillary refill > 2	Moaning, unable to follow commands	Large glass chard protruding from abdomen, wheezing	RED
Teen F	RR 8	Pulse absent	Unresponsive	Impaled onto shelving brackets on wall	RED
Child M	RR 36	Pulse present	Won't speak but makes eye contact with touch	Bleeding from ears, bruise on neck	YELLOW
Child F	RR 0	Weak radial pulse	Unresponsive	Trapped under rubble; apneic after 5 rescue breaths	BLACK
Child F	RR 52	Thready pulse	Confused	Coughing, brisk bleeding from facial and hand lacerations	RED
Teen M	RR 40	Pulse present	Disoriented to place and time	Scalp lacerations, burns to upper extremities	RED
Child M	RR 10	Weak rapid pulse	Unresponsive	Bunsen burner imbedded in upper arm - heavy bleeding	RED
Child M	RR 40	Pulse present	Responds to pain	Open femur fracture, lacerations to hands and face	YELLOW
Teen F	RR 48	Pulse rapid and weak	Responds only to touch	Deformity right upper extremity, glass shrapnel in scalp	RED
Child F	RR 32	Pulse present	Crying but oriented x 3	Open fracture lower leg; contusions to arms and chest	YELLOW
Child M	RR 36	Bounding pulse	Alert but won't speak	Burns to neck and torso, lacerations to arms	YELLOW
Teen F	RR 44	Pulse weak	Hysterical	Partial amputation right forearm	RED
Adult F	RR 28	Capillary refill <2	Crying for help, able to recall events	Leg caught under lab desk and chairs - open fracture	YELLOW
Teen M	RR 10	Pulse present - slow	Unresponsive	No obvious injuries	RED
Teen F	RR Unable to count	Rapid pulse	Crying hysterically, will not answer questions	Grabbing rescuers	YELLOW
Child M	RR 24	Pulse present	Alert	Vomiting, drooling, incontinent	YELLOW
Child F	RR 0	Absent pulse	Unresponsive	Trapped under rubble	BLACK
Child M	RR 32	Rapid pulse	Alert and anxious	Coughing, vomiting, incontinent, tearing, runny nose	YELLOW
Child F	RR28	Pulse present	Alert	Walking around and crying, no obvious injuries	GREEN
Child M	RR 34	Rapid pulse	Alert but keeps asking same questions	Tearing, runny nose, incontinent	YELLOW
Child F	RR 30	Rapid thready pulse	Sleepy - difficult to arouse	Diaphoretic	RED
Child F	RR 28	Pulse present	Alert	Can currently speak and walk, minor burn on left arm	GREEN
Child M	RR 50	Pulse present	Confused	Wheezing, facial and torso burns	RED
Child F	RR 44	Radial pulse weak	Responds to verbal stimuli	Large bruise forming on abdomen, burns on legs	YELLOW

**NOTE:** Triage tag designations are listed here as a guide based on the information provided for each victim. START was used for teen and adult victims. JumpSTART was used for infants and children. Your disaster drill may incorporate additional information on each victim which may result in a different triage assignment.

## SCENARIO 2 INSTRUCTOR RESOURCE

## APPENDIX E

VICTIM	RESPIRATORY RATE	PERFUSION	MENTAL STATUS	OTHER	TRIAGE TAG
7 yo F	RR 10	Distal pulse present	Groans in response to painful stimuli	Lying in ditch 15 feet from accident	RED
50 yo F	RR 20	Capillary refill 2 seconds	Obeys commands	Sitting on shoulder of road complaining of dizziness	YELLOW
8 yo M	Talking	Distal pulse present	Asking for help	Walks toward you, clothing is torn, no bleeding evident	GREEN
6 yo F	RR 0	No pulse	Unresponsive	Legs trapped under seat from bus	BLACK
39 yo M	RR 28	Capillary refill 4 seconds	Moaning	Bus driver trapped under collapsed dash in front bus	RED
7 yo M	RR 48	Distal pulse present	Blank stare	Lying in wreckage, bilateral lower extremity deformity	RED
30 yo M	RR 20	Capillary refill 2 seconds	Obeys commands	Walking at scene	GREEN
8 yo F	RR 28	Distal pulse present	Follows commands	Facial and scalp lacerations - moderate bleeding	GREEN
6 yo F	RR 0	Faint distal pulse	Unresponsive	Found in rubble outside rear bus; apneic after 5 rescue breaths	BLACK
6 yo M	RR 40	Pulseless	Withdraws from painful stimuli	Arm deformity, sucking chest wound	RED
8 yo M	RR 36	Distal pulse present	Screaming	Partial amputation of foot with minimal bleeding. Found in ditch	YELLOW
45 yo F	RR 0	Pulseless	Unresponsive	Driver of rear bus found under front of bus	BLACK
7 yo F	RR 24	Distal pulse present	Crying	Limping near busses	GREEN
7 yo M	RR 38	Absent distal pulse	Groans, stops when spoken to	Lying near bus	RED
8 yo F	RR 24	Distal pulse present	Asking for her wheelchair	Found wedged under bus seat	YELLOW
7 yo M	RR 22	Distal pulse present	Obeys commands	Complains cannot move or feel legs	YELLOW
6 yo M	RR 28	Distal pulse present	Not following commands	Sitting on shoulder of road, blood in ears.	RED
25 yo F	RR 12	Capillary refill > 4 seconds	Eye movement in response to stimuli, not speaking	Appears six months pregnant	RED

**NOTE:** Triage tag designations are listed here as a guide based on the information provided for each victim. START was used for teen and adult victims. JumpSTART was used for infants and children. Your disaster drill may incorporate additional information on each victim which may result in a different triage assignment.

**SCENARIO 3 INSTRUCTOR RESOURCE**

**APPENDIX F**

<b>VICTIM</b>	<b>RESPIRATORY RATE</b>	<b>PERFUSION</b>	<b>MENTAL STATUS</b>	<b>OTHER</b>	<b>TRIAGE TAG</b>
Preschool F	RR 10	Weak, thready pulse	Unresponsive	Outside building, face down on ground	<b>RED</b>
Preschool M	RR 18	Irregular pulse	Responds to pain	Trapped under bookcase and books	<b>YELLOW</b>
Infant F	RR 24	Palpable pulse.	Crying; responds to voice	Sitting on floor; cuts on face, hands and legs	<b>GREEN</b>
Infant F	RR 12	Palpable pulse	Responds to stimuli; weak cry	On floor next to overturned crib; hematoma on forehead	<b>RED</b>
Toddler F	RR 20	Palpable pulse	Crying loudly; wandering about	Grabbing at and clinging to workers	<b>GREEN</b>
Preschool M	RR 22	Palpable pulse	Doesn't acknowledge workers; screaming	Standing in middle of room; no obvious injuries	<b>GREEN</b>
Infant M	RR 32	Rapid pulse	Eyes open, quiet, still	Pieces of glass and debris in crib; no obvious injuries noted	<b>RED</b>
Infant F	RR 0	Absent pulse	Unresponsive	Trapped under overturned metal file cabinet	<b>BLACK</b>
Toddler M	RR 8	Faint pulse	Responds to pain	Both legs trapped under overturned file cabinet	<b>RED</b>
Toddler F	RR 0	Palpable pulse	Unresponsive	Large gash on scalp; large piece of glass embedded in abdomen; spontaneous respirations after 5 rescue breaths	<b>RED</b>

**NOTE:** Triage tag designations are listed here as a guide based on the information provided for each victim. START was used for teen and adult victims. JumpSTART was used for infants and children. Your disaster drill may incorporate additional information on each victim which may result in a different triage assignment.

