



# Pediatric Disaster Preparedness

## Resource Utilization not Resource Re-creation

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**City of Houston, EMS**





# Objectives

- ◆ Recognize the importance of outsourcing talent, skill sets, and resources when necessary
- ◆ Emphasize the importance of training for disasters
- ◆ Peruse some of the pediatric disaster preparedness resources readily available on web and elsewhere



# Regional Resource Utilization 101

## Connecting the Haves with the Have-nots

- ◆ The resource (the Haves)
  - Everyone in this room
  - Private sector institutions, businesses, and organizations
  - Local, regional, and state agencies
- ◆ The requester (the Have-nots)
  - Everyone in this room
  - We all need each other for something



# Mobile Pediatric Emergency Response Team (MPERT)

- ◆ Event: Katrina
- ◆ Requester - *eventually*
  - Harris County officials
  - City of Houston officials
- ◆ Resource – TCH and its community of contacts
  - Administrative, nursing and physician leadership
  - Section of Pediatric Emergency Medicine (PEM)
  - Pharmacy, central supply and environmental services
  - Links to the community pediatricians
  - Links to the private and public sector



## The Message for the Resource

- ◆ **Make yourself available** to the requestor – you will be affected
- ◆ **Insert yourself into the planning** – don't wait to be asked
- ◆ **Focus** on what “you” can fix and what you do well
- ◆ **Avoid** taking on more than you can deliver
- ◆ **Recruit** reinforcements and support staff
- ◆ **Listen**
- ◆ **Play well with others** – share responsibilities
- ◆ **Share** in the successes



## **The Message for the Resource**

- ◆ **Assume responsibility** in the failures
- ◆ **Be familiar with the rules of incident command**
- ◆ **Involve “collaborator type” leaders** and
- ◆ **Give those leaders power** to make decisions
- ◆ **Compromise**
- ◆ **Test your product**
- ◆ **Stay in touch** with the requestor
- ◆ **Learn**



# The Message for the Requester

- ◆ **Don't wait** to be rescued
- ◆ **Focus** on what “you” need fixed first
- ◆ **Don't reinvent** the wheel
- ◆ **Explore and Access** what's available before its needed
- ◆ **Invite everyone** to the table early
- ◆ **Listen**



# The Message for the Requester

- ◆ **Involve “collaborator type” leaders and**
- ◆ **Give those leaders power to make decisions**
- ◆ **Compromise**
- ◆ **Test your product in parts and as a single unit**
- ◆ **Stay in touch with the resource**
- ◆ **Learn**



**How do you locate the resources?**



# Resource: Look Local & Regional



<http://www.blairstripsteel.com/map%20north%20america.jpg>

# Regional Tertiary Pediatric Care Hospitals

## Please Meet *Ready, Willing and Able*



- ◆ Cincinnati Children's Hospital
  - Nathan Timm, MD
  - Chairman, Emergency Preparedness Committee
  - 513-636-8805 - [Nathan.Timm@cchmc.org](mailto:Nathan.Timm@cchmc.org)
- ◆ Chicago Memorial Children's Hospital
  - Sally Reynolds, MD
  - Co-chair of
    - » Chicago Department of Public Health Subcommittee on Pediatric Preparedness
    - » Children's Memorial Hospital Disaster Preparedness Committee
  - [SReynolds@childrensmemorial.org](mailto:SReynolds@childrensmemorial.org)
- ◆ Children's Hospital of Michigan
  - Jeff Stefancin, Emergency Preparedness Coordinator
  - 313-745-6606 - Fax: 313-993-7166, Pgr: 313-803-4671 #6794



# Regional & Local Resources

## Summary Suggestion

- ◆ Access available resources (i.e. “pick up the darn phone!”)
  - Regional Tertiary Pediatric Hospital Network (NACHRI)
  - City, County, and State Resources
  - AAP local groups (COPEM)
- ◆ Congregate, collaborate and compromise with stakeholders
- ◆ Establish contracts and/or memorandum of understandings
- ◆ Practice your plan
- ◆ Get informed and certified (NIMS and NDLS)



Easily Assessable Resources?

# Training Resource: National Disaster Life Support Foundation



- ◆ Basic Disaster Life Support (BDLS)
- ◆ Advanced Disaster Life Support (ADLS)
- ◆ Core Disaster Life Support (CDLS)
- ◆ Decon Disaster Life Support (NDLS-C)
- ◆ Instructor Disaster Life Support (NDLS-I)
- ◆ International Disaster Life Support (IDLS)
- ◆ Hospital Disaster Life Support (HDLS)

*<http://www.ndlsf.org/>*

# Training Resource: National Incident Management System



## NATIONAL INCIDENT MANAGEMENT SYSTEM

March 1, 2004



*<http://www.fema.gov/emergency/nims/index.shtm>*

# Training Resource: National Incident Management System Training



- ◆ Allows for federal, state, local and tribal and private sector and non-governmental organizations to work together to prevent for, respond to, and recover from domestic incidents
- ◆ Represents a core set of doctrine, concepts, terminology, and organizational processes to enable effective, efficient and collaborative incident management at all levels
- ◆ All federal departments and agencies must adopt NIMS
- ◆ All other agencies must adopt NIMS if they want federal assistance beginning FY 2005

*[http://www.fema.gov/emergency/nims/nims\\_training.shtm#0](http://www.fema.gov/emergency/nims/nims_training.shtm#0)*

# Training Resource: National Incident Management System Training



- ◆ ICS-100
- ◆ ICS-200
- ◆ IS-700
- ◆ IS-800
- ◆ ICS-300\*
- ◆ ICS-400\*

*[http://www.fema.gov/emergency/nims/nims\\_training.shtm#0](http://www.fema.gov/emergency/nims/nims_training.shtm#0)*



## Resource: Medical Reserve Corps Non-Pediatric



- ◆ 200 American communities
- ◆ Supported by Office of the Surgeon General
- ◆ Mechanism for health care professionals to volunteer their services during a disaster as part of the organized response in a community
- ◆ Does not have pediatrics as a requirement so they **NEED** your involvement

*<http://www.medicalreservecorps.gov/MessageSurgeonGeneral>*



# Resource: Medical Reserve Corps Non-Pediatric



## ◆MRC Program Office:

Tel. (301) 443-4951

MRCcontact@hhs.gov

[www.medicalreservecorps.gov](http://www.medicalreservecorps.gov)

## ◆MRC Regional Coordinators:

<http://www.medicalreservecorps.gov/Coordinators/Regional>

## ◆MRC State Coordinators:

<http://www.medicalreservecorps.gov/Coordinators/State>



# Resource: Agency for Health Care Research and Quality (AHRQ) Issue Briefs



Issue Brief  
No. 9

## Bioterrorism and Health System Preparedness

**Addressing Surge Capacity  
in a Mass Casualty Event**

The Agency for Healthcare Research and Quality (AHRQ) is the lead agency charged with supporting research designed to improve the quality of health care, reduce its cost, address patient safety and medical errors, and broaden access to essential services. AHRQ sponsors and conducts research that provides evidence-based information on health care outcomes, quality, and cost, use, and access. The information helps health care decisionmakers—patients and clinicians, health system leaders, and policymakers—make more informed decisions and improve the quality of health care services.

**Introduction**

*Surge capacity is a health care system's ability to expand quickly beyond normal services to meet an increased demand for medical care in the event of bioterrorism or other large-scale public health emergencies.*

A bioterrorist attack or other large-scale public health emergency has the potential to result in great numbers of human casualties. Substantial work has been done throughout the country at local, regional, State, and Federal levels to improve health system preparedness, and many health care organizations and systems have developed surge capacity and other medical care preparedness plans. Planning for a mass casualty event should also address what can be done outside the traditional health care system to cope with a surge in patient flow before, during, and after an event.

In 2004, the Agency for Healthcare Research and Quality (AHRQ) expanded its Bioterrorism Preparedness Research portfolio to include several projects that focus on surge capacity issues. Consistent with that focus, AHRQ sponsored three Web conferences on surge capacity and health system preparedness. The first dealt with education and training; the second with facilities and equipment; and the third in the series, held on October 26, 2004, examined some of the ways resources might be deployed in response to a mass casualty event. This issue brief summarizes this third Web conference.

Four panelists made presentations:

- ▲ Robert Claypool, M.D., Deputy Chief Medical Officer, Office of the Assistant Secretary for Public Health and Emergency Preparedness, U.S. Department of Health and Human Services
- ▲ Nathaniel Hupert, M.D., Assistant Professor of Public Health and Medicine, Weill Medical College of Cornell University



**AHRQ**  
Agency for Healthcare Research and Quality  
Advancing Excellence in Health Care • www.ahrq.gov

<http://www.ahrq.gov/news/ulp/btbriefts/btbrief9.htm>

# Resource: AAP Publications

## Mobile Pediatric Emergency Response Team (MPERT)



### PEDIATRICS®

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**Caring for Evacuated Children Housed in the Astrodome: Creation and Implementation of a Mobile Pediatric Emergency Response Team: Regionalized Caring for Displaced Children After a Disaster**

Paul E. Sirbaugh, Karen D. Gurwitsch, Charles G. Macias, B. Lee Ligon, Thomas Givagan and Ralph D. Feigin  
*Pediatrics* 2006;117;S428-S438  
DOI: 10.1542/peds.2006-0099Q

The online version of this article, along with updated information and services, is located on the World Wide Web at:  
<http://www.pediatrics.org/cgi/content/full/117/5/S2/S428>

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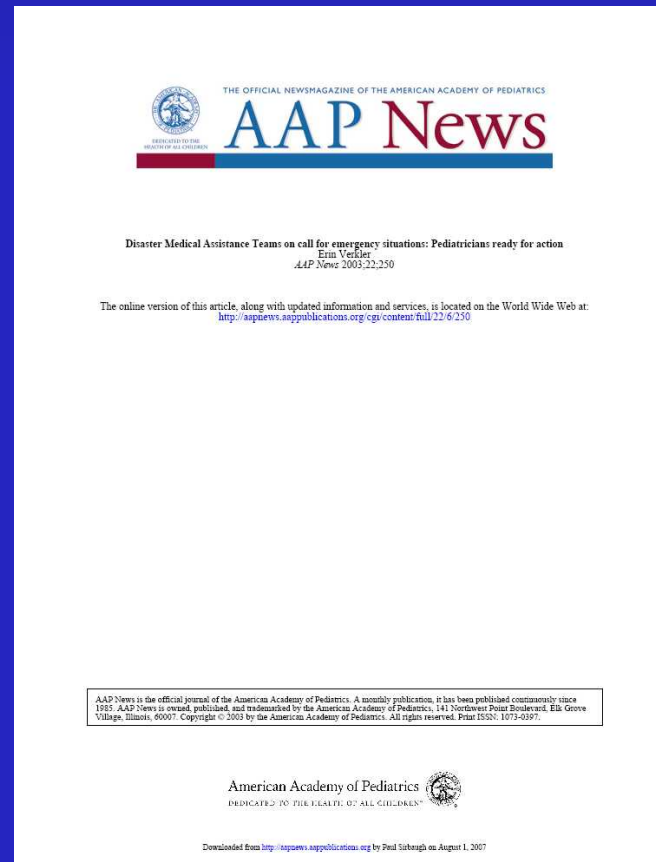


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<http://www.aap.org>

# Resource: AAP News Pediatric DMAT (2/60) Boston and Atlanta



<http://www.bt.cdc.gov/children/pdf/working/execsumm03.pdf>  
<http://oep-ndms.dhhs.gov>



## Resource: AAP CHILDDisaster Network

- ◆ Network of pediatric professionals interested in volunteering their time and skills to organizations responding to disasters
- ◆ Short-term notice
- ◆ The AAP will provide disaster relief organizations a list of practitioners who have completed a comprehensive application process

*<http://www.aap.org/disaster/>*

# Resource: AAP/AHRQ Publications Pediatric Terrorism and Disaster Preparedness Resource



*Bioterrorism and Other Public Health Emergencies*

## **Pediatric Terrorism and Disaster Preparedness**

### **A Resource for Pediatricians**

Prepared for:  
Agency for Healthcare Research and Quality  
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*<http://www.aap.org/terrorism/index.html>*

# Resource: AAP Policy Statements: Pediatrician and Disaster Preparedness



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**POLICY STATEMENT**

## The Pediatrician and Disaster Preparedness

Committee on Pediatric Emergency Medicine  
Committee on Medical Liability  
Task Force on Terrorism

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of All Children

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**ABSTRACT**

Recent natural disasters and events of terrorism and war have heightened society's recognition of the need for emergency preparedness. In addition to the unique pediatric issues involved in general emergency preparedness, several additional issues related to terrorism preparedness must be considered, including the unique vulnerabilities of children to various agents as well as the limited availability of age- and weight-appropriate antidotes and treatments. Although children may respond more rapidly to therapeutic intervention, they are at the same time more susceptible to various agents and conditions and more likely to deteriorate if not monitored carefully.

The challenge of dealing with the threat of terrorism, natural disasters, and public health emergencies in the United States is daunting not only for disaster planners but also for our medical system and health professionals of all types, including pediatricians. As part of the network of health responders, pediatricians need to be able to answer concerns of patients and families, recognize signs of possible exposure to a weapon of terror, understand first-line response to such attacks, and sufficiently participate in disaster planning to ensure that the unique needs of children are addressed satisfactorily in the overall process. Pediatricians play a central role in disaster and terrorism preparedness with families, children, and their communities. This applies not only to the general pediatrician but also to the pediatric medical subspecialist and pediatric surgical specialist. Families view pediatricians as their expert resource, and most of them expect the pediatrician to be knowledgeable in areas of concern. Providing expert guidance entails educating families in anticipation of events and responding to questions during and after actual events. It is essential that pediatricians educate themselves regarding these issues of emergency preparedness.

For pediatricians, some information is currently available on virtually all of these issues in recently produced printed materials, at special conferences, in broadcasts of various types, and on the Internet. However, selecting appropriate, accurate sources of information and determining how much information is sufficient remain difficult challenges. Similarly, guidance is needed with respect to developing relevant curricula for medical students and postdoctoral clinical trainees.

**INTRODUCTION**

Recent natural disasters and events of terrorism and war have heightened society's recognition of the need for emergency preparedness. Moreover, the possibility of

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All policy statements from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.  
**Key Words:** emergency preparedness, disaster, terrorism, biothreats  
**Abbreviations:** HHS—Health Resources and Services Administration; CDC—Center for Disease Control and Prevention  
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<http://aappolicy.aappublications.org/cgi/reprint/pediatrics;117/2/560>

# Resource: AAP Policy Statements: Emergency Preparedness Special Needs



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Emergency Preparedness for Children With Special Health Care Needs  
Committee on Pediatric Emergency Medicine  
*Pediatrics* 1999;104:e53  
DOI: 10.1542/peds.104.4.e53

The online version of this article, along with updated information and services, is  
located on the World Wide Web at:  
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2007 revision under development*

# Resource: AAP Policy Statements: Liability During Disasters



## AMERICAN ACADEMY OF PEDIATRICS

Committee on Pediatric Emergency Medicine and Committee on Medical Liability

### Pediatricians' Liability During Disasters

**ABSTRACT.** This statement addresses the need for professional liability insurance coverage for pediatricians during disasters and suggests measures to ensure adequate coverage.

**ABBREVIATION.** EMS, emergency medical services.

Physicians have often volunteered their services during and after disasters. During a disaster, health care providers may be called on to respond to community needs for assistance and to treat victims at the scene, casualty collection points, hospitals (where they may not have privileges), and shelters. These services, whenever possible, should be coordinated through the local disaster plan or emergency medical service (EMS) agencies.<sup>1-3</sup> After a disaster, offices or clinics may become sites for emergency care if area hospitals cannot provide adequate services. Local offices may be unusable, and alternate sites for primary care may need to be identified. Recent experiences have demonstrated that health care may be administered in parking lots, malls, and tents. In addition, pediatricians may still need to provide urgent and routine care to their practice-based patients outside of the usual practice location(s).<sup>4-7</sup>

The recent statement by the American Academy of Pediatrics, "The Pediatrician's Role in Disaster Preparedness," discusses the role of Academy members in disaster planning and care.<sup>8</sup> In the past many physicians have provided care without affiliation with recognized government or volunteer agencies. It is important that when providing medical service during a disaster providers are part of an organized program or they may be providing service without professional liability insurance coverage. Most malpractice coverage is limited to the provider's usual scope of practice and practice setting. Good Samaritan statutes provide some liability protection when rendering medical care at the scene of an emergency to one who would not otherwise receive it. Good Samaritan statutes cover physicians at the scene of acute incidents but vary among states and may not provide liability protection during or after disasters.<sup>9</sup> In many states, for health care providers to be covered for liability in a disaster, they must practice under the umbrella of an official disaster agency, such as the Federal Emergency Management Agency, the Department of Health Services, the local

EMS authority, or other recognized government or volunteer agency.<sup>10</sup> In some states, individual malpractice insurance policies cover neither out-of-office care nor the expanded scope of practice that may be required during a disaster.<sup>11</sup> Good Samaritan laws do not cover a physician if there is any payment for services or if there is an accusation of gross negligence.

The Committee on Pediatric Emergency Medicine and the Committee on Medical Liability recommend that pediatricians be prepared to give care during disasters. In addition, they should:

1. Be familiar with their state's Good Samaritan statutes and protections afforded while providing emergency care during a disaster.
2. Work with state legislatures to develop statutes to ensure appropriate liability coverage during the acute and recovery phases of a disaster.
3. Be familiar with their individual liability insurance coverage outside of the usual practice settings when providing urgent and routine care.
4. Become involved in local disaster planning activities and work with response agencies before an event occurs.
5. When volunteering to assist during or after a disaster, make every effort to work in concert with the lead organization coordinating disaster relief.

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# Resource: AAP Policy Statements: Radiation Disaster and Pediatrics



## AMERICAN ACADEMY OF PEDIATRICS

### POLICY STATEMENT

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of All Children

Committee on Environmental Health

#### Radiation Disasters and Children

**ABSTRACT.** The special medical needs of children make it essential that pediatricians be prepared for radiation disasters, including 1) the detonation of a nuclear weapon; 2) a nuclear power plant event that unleashes a radioactive cloud; and 3) the dispersal of radionuclides by conventional explosive or the crash of a transport vehicle. Any of these events could occur unintentionally or as an act of terrorism. Nuclear facilities (eg, power plants, fuel processing centers, and food irradiation facilities) are often located in highly populated areas, and as they age, the risk of mechanical failure increases. The short- and long-term consequences of a radiation disaster are significantly greater in children for several reasons. First, children have a disproportionately higher minute ventilation, leading to greater internal exposure to radioactive gases. Children have a significantly greater risk of developing cancer even when they are exposed to radiation in utero. Finally, children and the parents of young children are more likely than are adults to develop enduring psychological injury after a radiation disaster. The pediatrician has a critical role in planning for radiation disasters. For example, potassium iodide is of proven value for thyroid protection but must be given before or soon after exposure to radioiodines, requiring its placement in homes, schools, and child care centers. Pediatricians should work with public health authorities to ensure that children receive full consideration in local planning for a radiation disaster.

**ABBREVIATIONS.** TMI, Three Mile Island; KI, potassium iodide; SI, International System of Units; CT, computed tomography (scan); NRC, Nuclear Regulatory Commission; FDA, Food and Drug Administration.

#### INTRODUCTION

Several large-scale radiation disasters have befallen children in the past, including the detonation of nuclear bombs in Hiroshima and Nagasaki, Japan; the nuclear power plant disaster in Chernobyl; and exposure to a cesium-137 source scavenged from an abandoned hospital in Brazil. In each case, postevent medical surveillance proved that children were disproportionately affected after radiation exposure.

In recent years, accidents at several nuclear power plants have proven such events can lead to the widespread discharge of radioactive materials into the environment. Additionally, acts of domestic terror-

ism involving chemical and biological weapons have recently occurred, raising fears about the intentional use of a radioactive device against a civilian population that includes children. Because of these threats, there is a need for pediatricians to become more informed about the issues that would occur in the case of a significant radiologic event.

#### HISTORY

Several historical events have shaped our understanding of the consequences of radiation disasters. The atomic bomb blasts in Hiroshima and Nagasaki in 1945 during World War II remain the most defining moments in the consequences of a nuclear exposure. The Avalon Project at Yale Law School<sup>1</sup> estimated that in Hiroshima, the bomb released power equal to 15 kilotons of trinitrotoluene (TNT), killing an estimated 66 000 and injuring 69 000 of the 255 000 exposed. The Nagasaki release, containing a 22-kiloton force, killed an estimated 39 000 among the 195 000 exposed. In 1954, fallout from nuclear weapons tests on Bikini Island fell on neighboring islands, producing significant health effects in children; of 32 Marshallese exposed to fallout before 20 years of age, 4 developed thyroid cancer and 1 developed leukemia.<sup>2</sup> This event led the American Academy of Pediatrics to establish the Committee on Radiation Hazards and Congenital Malformations, the predecessor to the Committee on Environmental Health.<sup>2</sup>

On March 28, 1979, a nuclear power plant, Three Mile Island (TMI), had a near "meltdown" (overheating of the fuel rods and a release of radiation) that produced negligible doses among people living nearby: a maximum of 0.001 Sv (100 mrem) and an average dose to the community of 0.00001 Sv (1 mrem).<sup>3</sup> The TMI accident brought into question the safety of nuclear power plants and the potential consequences of a power plant mishap.<sup>4,5</sup> Immediate administration of potassium iodide (KI) was recommended for those living near TMI, but it was not available. There were no biological effects of the exposure but significant psychological sequelae occurred.<sup>4,5</sup>

In April 1986, a power plant in Chernobyl (also known as Chernobyl), Ukraine, had a mishap that produced a meltdown. The area around the reactor was heavily contaminated with plutonium, cesium, and radioactive iodine. An estimated 120 million Ci of radioactive material were released, contaminating

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<http://aappolicy.aappublications.org/cgi/reprint/pediatrics;111/6/1455>

# Resource: AAP Policy Statements: Psychosocial Implications of Disasters



AMERICAN ACADEMY OF PEDIATRICS  
Committee on Psychosocial Aspects of Child and Family Health

## How Pediatricians Can Respond to the Psychosocial Implications of Disasters

**ABSTRACT.** Natural and human-caused disasters, violence with weapons, and terrorist acts have touched directly the lives of thousands of families with children in the United States. Media coverage of disasters has brought images of floods, hurricanes, and airplane crashes into the living rooms of most American families, with limited censorship for vulnerable young children. Therefore, children may be exposed to disastrous events in ways that previous generations never or rarely experienced. Pediatricians should serve as important resources to the community in preparing for disasters, as well as acting in its behalf during and after such events.

### THE ROLES OF PEDIATRICIANS

**P**ediatricians have important roles before, during, and after a disaster. Not only should pediatricians be involved directly with children and their families, but they also may be asked to serve a more general community role in disaster preparedness.

#### Before a Disaster

Disaster preparedness is important throughout the United States. The pediatrician may help determine and arrange for the organization and availability of necessary pediatric equipment in shelters, local hospital emergency departments, and emergency vehicles.

As part of anticipatory guidance at health supervision visits, pediatricians can help families by reviewing how to help their children understand what to do for the types of disasters they are likely to encounter, how to identify local shelters, and what resources to contact for more help if needed. Pediatricians also may be asked to discuss disaster preparedness with school personnel, police, and emergency medical services personnel and should help organize and participate in disaster preparedness drills.

#### During a Disaster

During a disaster, pediatricians are an integral part of the health care delivery team. They are a major source of support and information to children, families, and the community. Pediatricians may be needed to treat patients with inadequate supplies in suboptimal settings under conditions they have rarely, if ever, experienced.

The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.  
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#### After a Disaster

The pediatrician has a unique perspective in recognizing a child's appropriate reaction to an uncontrollable event such as a disaster and for educating parents, caregivers, and school personnel.<sup>14</sup> Most healthy children who have experienced a situation beyond the usual scope of human experience may overreact or underreact to the resultant stress, trauma, and loss. Providing families with supportive community resources legitimizes their feelings of grief and loss.

A child's cognitive, physical, educational, and social developmental level and experience will determine the perception of the trauma resulting from the disaster.<sup>5</sup> The emotional state of the child and the family before the disaster provide the background for how the child may react to the disaster. Thus, the pediatrician's knowledge of the child and family is crucial in helping them to adjust after a disaster. Other factors can influence the effect of a disaster on a child's wellbeing, including physical injury sustained, proximity to the impact zone, witnessing the injury or death of a family member or friend, duration of life disruption, parental reactions, and family disruption.<sup>1</sup>

The most important effect of a disaster on children and adolescents is the disruption of the normal routine through personal injury; destruction of their home, school, or community; or injury or death of friends or relatives. In addition, the loss of predictability and control of their environment affects children of different ages in distinct ways.

Toddlers usually respond to the disruption by increased dependence on caregivers, sleep disturbances, and developmental regression. School children and preteens may show hostility toward peers and family members, reenact the trauma during play, regress in developmental milestones, and avoid activities enjoyed previously.<sup>1</sup> Adolescents also may have sleep disturbances, lack pleasure in activities enjoyed previously, show fatigue, and begin abusing illicit substances.<sup>7</sup> Children and adolescents also may display anxiety, depression, guilt, and symptoms of posttraumatic stress disorder, such as nightmares, sleep disruption, avoidance of reminders of the disaster, and irritability.<sup>10</sup>

Pediatrician assessment of the child and family, reassurance, and information can ensure family communication, keep the family working together, and provide emotional support.<sup>15</sup> Maintenance of friendships and peer support should be encouraged.<sup>10</sup> The reactions of children and adolescents to the trauma and resultant adjustment period usually last 1 to 2 months after a disaster. If symptoms such as depres-

# Resource: AAP Clinical Reports: Psychosocial Implications of Disasters



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### Psychosocial Implications of Disaster or Terrorism on Children: A Guide for the Pediatrician

Joseph F. Hagan, Jr. and the Committee on Psychosocial Aspects of Child and Family Health and the Task Force on Terrorism  
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The online version of this article, along with updated information and services, is located on the World Wide Web at:  
<http://www.pediatrics.org/cgi/content/full/116/3/787>

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# Resource: AAP Products (CDs)

*Feelings Need Check Ups Too*  
Addressing the Mental Health Needs of Children  
Following Catastrophic Events: An Educational  
Resource for Pediatricians



*Terrorism, war, divorce, natural disasters, bullying . . . Trauma has many faces and can affect the emotional lives of children in countless ways.*


*Do you know who these children are in your practice?*

*Learn how to better identify:*

- Acute stress reaction and PTSD in school-aged children following a disaster
- Bereavement following parental loss
- Anxiety in preschool children
- Depression in children and adolescents

*Please email your request to [feelings@aap.org](mailto:feelings@aap.org) to order a FREE copy of the newly released and thoroughly documented toolkit and, if you have not received it yet, of the award winning "Feelings Need Check Ups Too" CD-ROM.*

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*Thank you to the September 11th Children's Fund at the National Philanthropic Trust for their funding and support in the development and dissemination of this resource and materials.*

<http://www.aap.org/terrorism/toolkit.pdf>



# Resource: AAP Publications: When Should Kids Return Home

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## Clinician Recommendations Regarding Return of Children to Areas Impacted by Flooding and/or Hurricanes:

A Joint Statement from the Pediatric Environmental Health Specialty Units and  
the American Academy of Pediatrics

### Introduction

Children are especially vulnerable to environmental hazards. They eat, drink, and breathe more than adults on a pound for pound basis. Children are in a critical period of development when toxic exposures can have profound negative effects, and their exploratory behavior often places them in direct contact with materials that adults would avoid.

Key issues for habitability of an area impacted by flooding and/or hurricanes include restoration of drinking water and wastewater treatment facilities, safe road conditions, removal of solid waste and debris, and replacement or renovation of flood damaged homes. Before children return, schools and outdoor play areas should be cleaned and ready for use. Children, and whenever possible teens, should not be involved in clean up efforts but should return after the area is cleaned up. In short, children should be the last group to return to areas impacted by flooding and/or hurricanes.

These recommendations also apply to pregnant women.

**Note:** *This document does not contain specific criteria or a comprehensive list of environmental hazards. The decision to bring children and other residents back to areas impacted by flooding and/or hurricanes rests with local, State, and Federal officials. Standards for environmental testing and clean up should be adopted by local health officials drawing upon relevant existing evidence-based guidelines and in consultation with experts in children's health and the environment. In the aftermath of a flood, particular attention should be paid to issues relating to water contamination and mold, in addition to common pediatric environmental concerns such as physical safety, lead, asbestos, and chemicals.*

10/7/2005

Page 1 of 3

<http://www.aap.org/new/returnofchildren.pdf>



# Resource: AAP Publications: Children, Terrorism and Disaster Toolkit

## Children, Terrorism & Disasters Toolkit


[www.aap.org/terrorism](http://www.aap.org/terrorism)

### Responding to Children's Emotional Needs During Times of Crisis: An Important Role for Pediatricians

Pediatricians are often the first responders for children and families suffering emotional and psychological reactions to terrorism and other disasters. As such, pediatricians have a unique opportunity to help parents and other caregivers communicate with children in ways that allow them to better understand and recover from traumatic events such as terrorist attacks or other disasters. Pediatricians also can help to facilitate timely referral to mental health services, as appropriate, for these children and their families.

Important tips for parents and other caregivers include:

- Take care of yourself first. Children depend on the adults around them to be and feel safe and secure. If you are very anxious or angry, children are likely to be more affected by your emotional state than by your words. Find someone you trust to help with your personal concerns.
- Watch for unusual behavior that may suggest your child is having difficulty dealing with disturbing events. Stress-related symptoms to be aware of include depressed or irritable moods; sleep disturbances, including increased sleeping, difficulty falling asleep, nightmares or nighttime waking; changes in appetite, either increased or decreased; social withdrawal; obsessive play, such as repetitively acting out the traumatic event, which interferes with normal activities; and hyperactivity that was not previously present.
- Talk about the event with your child. To not talk about it makes the event even more threatening in your child's mind. Silence suggests that what has occurred is too horrible to even speak of.
- Start by asking what your child has already heard about the events and what understanding he or she has reached. As your child explains, listen for misinformation, misconceptions, and underlying fears or concerns.
- Explain—as simply and directly as possible—the events that occurred. The amount of information that will be helpful to a child depends on his or her age. For example, older children generally want and will benefit from more detailed information than younger children. Because every child is different, take cues from your own child as to how much information to provide.
- Limit television viewing of terrorist events or other disasters, especially for younger children. When older children watch television, try to watch with them and use the opportunity to discuss what is being seen and how it makes you and your child feel.
- Encourage your child to ask questions, and answer those questions directly. Like adults, children are better able to cope with a crisis if they feel they understand it. Question-and-answer exchanges help to ensure ongoing support as your child begins to understand the crisis and the response to it.
- Don't force the issue with your child. Instead, extend multiple invitations for discussion and then provide an increased physical and emotional presence as you wait for him or her to be ready to accept those invitations.

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<http://www.aap.org/terrorism//topics/parents.pdf>

# Resource: AAP Publications: TIPP Four Steps to Prepare Your Family for Disasters



## Four Steps to Prepare Your Family for Disasters



### Four Steps to Prepare Your Family for Disasters

This guide will help you and your family prepare for a disaster. Keep this sheet in a special place so you will always know where to find it. Get the family together now to start following the 4 steps to safety readiness!

#### 1. Find out what the disaster risks are in your area.

Find out from your local emergency management office, health department, or American Red Cross chapter

- What types of disasters are likely to happen and how to prepare for each
- What your community's warning signals sound like and what to do if you hear them
- How to help the elderly and people with special needs

#### 2. Create a family disaster plan.

Hold a family meeting; keep it simple and work as a team.

##### Plan

Talk about the dangers of the disaster(s) with your family.

- Have a plan in case you are separated.
  - (A) Choose a place outside your neighborhood in case you cannot go home.
  - (B) Choose someone out of town to be your family contact. Each family member and any babysitter must know the address and phone number for A and B.
- Fill out the local emergency phone numbers and child identification cards. Fill out an Emergency Information Form (EIF) for each child with special health care needs. (See [www.aap.org/advocacy/emergprep.htm](http://www.aap.org/advocacy/emergprep.htm).)
- Become familiar with the specifics of your child's child care or school disaster plans as you could be separated from your child during a disaster.
- Plan what to do if you are asked to evacuate.
- Plan several escape routes.
- Plan how to take care of your pets.

##### What to Tell Children

It is important to educate children about disasters without overly alarming them. Use the following guidelines:

- Tell children that a disaster is something that could hurt people or cause damage. Explain

that nature sometimes provides "too much of a good thing"—fire, rain, and wind.

- Explain how important it is to make a family disaster plan.
- Teach children
  - How to call for help
  - When to call each emergency number
  - To call the family contact if separated
  - To keep personal identification information in their possession at all times

##### Evacuation

If you are told to evacuate, take these steps

- Leave right away if told to do so.
- Listen to your battery-powered radio for instructions from local officials.
- Wear protective clothing and shoes.
- Shut off water, gas, and electricity if told to do so.
- Leave a note telling when you left and where you are going.
- Call your family contact to tell him or her where you are going.
- Take your family emergency supplies (listed on the next 2 pages).
- Lock your home.
- Use routes suggested by officials.

#### 3. Complete this checklist.

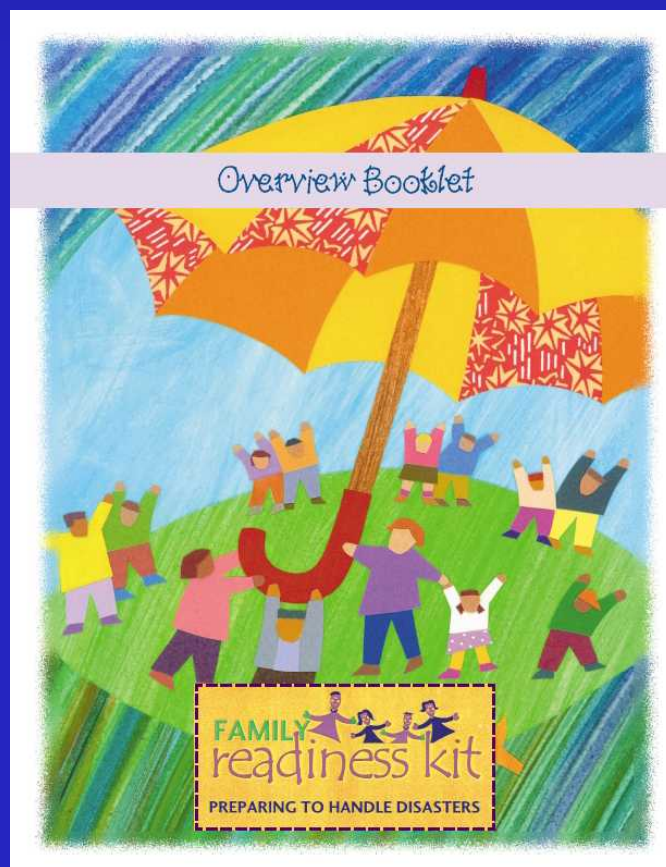
- Put emergency phone numbers by each phone.
- Show everyone how and when to turn off the utilities.
- Make sure you have enough insurance coverage (for example, flood, fire, earthquake, wind).
- Do a home hazard hunt for items that can move, fall, break, or cause a fire.
- Stock enough emergency supplies to last 7 days.
- Take a Red Cross first aid and CPR class.
- Plan home escape routes—2 from each room.
- Find safe places in your home for each type of disaster.
- Make 2 copies of important documents and keep the originals in a safe-deposit box. Keep 1 copy on hand and give the second to your out-of-town contact.

<http://www.aap.org/terrorism/index.html>



# Resource: AAP Products

## Family Readiness Kit



<http://www.aap.org/family/frk/frkit.htm>



# Resource: AAP Publications: Infant Nutrition During a Disaster

**INFANT NUTRITION DURING A DISASTER**  
**BREASTFEEDING AND OTHER OPTIONS**

**IN AN EMERGENCY**

- There may be no clean drinking water.
- There may be no sterile environment.
- It may be impossible to ensure cleaning and sterilization of feeding utensils.

**PEDIATRICIANS CAN TAKE ACTION TO SUPPORT BREASTFEEDING DURING A DISASTER**

1. Keep families together.
2. Create safe havens for pregnant and breastfeeding mothers. These havens should provide security, counseling, water, and food. Pediatricians can contribute using offices, hospitals, or other shelters.
3. Assure mothers that human milk can contribute significant nutrition in the absence of safe complementary foods for the first year of life and beyond.
4. Advocate for optimal feeding options for orphaned infants, including HIV-negative donor human milk.
5. Assist new mothers to initiate breastfeeding within 1 hour of birth, promote exclusive breastfeeding for 6 months\*, and encourage breastfeeding for at least 1 year or longer.
6. Provide support for breastfeeding through assessment of the infant's hydration and nutritional status.
7. In situations where human milk is not available, recommend ready-to-feed formula. Powdered formula is the last resort. Use concentrated or powdered formula only if bottled or boiled water is available.
8. Lactating women may be immunized as recommended for adults and adolescents to protect against measles, mumps, rubella, tetanus, diphtheria, pertussis, influenza, *Streptococcus pneumoniae*, *Neisseria meningitidis*, hepatitis A, hepatitis B, varicella, and inactivated polio.
9. Refer to [www.cdc.gov](http://www.cdc.gov) for further information about precautions for lactating women involving specific diseases and treatments.
10. Advocate for breastfeeding promotion, protection, and support with relief agencies and workers. Infant feeding practices and resources should be assessed, coordinated, and monitored throughout the disaster.



**THE CLEANEST, SAFEST FOOD FOR AN INFANT IS HUMAN MILK.**

- Human milk is nutritionally perfect.
- It is readily available without dependence on supplies.
- It is protective against infectious diseases, especially diarrhea and respiratory illnesses.
- It is the right temperature and helps to prevent hypothermia.
- The release of hormones during breastfeeding relieves maternal stress and anxiety.

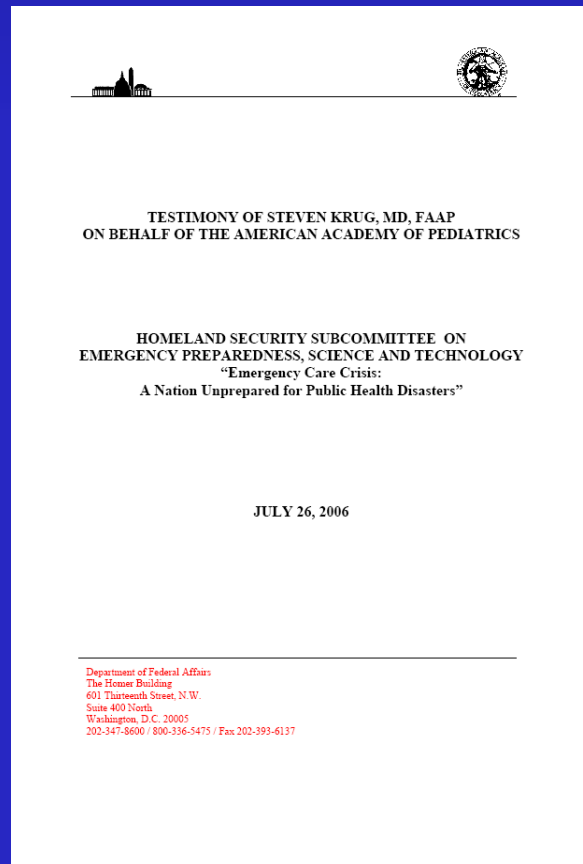
**DISADVANTAGES OF FORMULA USE DURING A DISASTER**

- It may not be available.
- It may become contaminated.
- Errors in formula preparation may occur.
- Water that is mixed with powdered or concentrated formula may be contaminated.
- There may be no method to sterilize the formula, bottles, or nipples.
- If there is no electricity, opened prepared formula cannot be preserved in the refrigerator.

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<http://www.aap.org/terrorism/index.html>

# Resource: AAP Testimony Children's Health Needs During a Disaster



<http://www.aap.org/terrorism/index.html>

# Resource: National Advisory Committee on Children and Terrorism

## Schools and Terrorism



### Schools and Terrorism

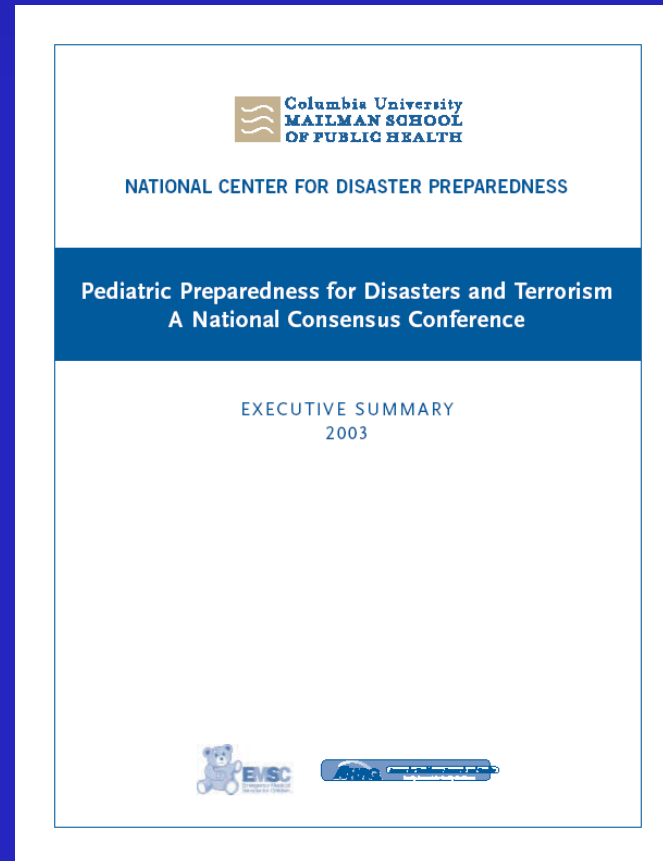


A Supplement to the  
National Advisory Committee on Children and Terrorism  
Recommendations to the Secretary

August 12, 2003

<http://www.bt.cdc.gov/children/recommend.asp>

# Conferences: Pediatric Preparedness for Disasters and Terrorism – A National Consensus Conference



<http://www.bt.cdc.gov/children/pdf/working/execsumm03.pdf>

# Resource: Consensus of Experts on Preparedness – National Guidelines



BIOSECURITY AND BIOTERRORISM: BIODEFENSE STRATEGY, PRACTICE, AND SCIENCE  
Volume 2, Number 4, 2004  
© Mary Ann Liebert, Inc.

## Pediatric Terrorism Preparedness National Guidelines and Recommendations: Findings of an Evidenced-based Consensus Process

DAVID MARKENSON and IRWIN REDLENER

### ABSTRACT

A cadre of experts and stakeholders from government agencies, professional organizations, emergency medicine and response, pediatrics, mental health, and disaster preparedness were gathered to review and summarize the existing data on the needs of children in the planning, preparation, and response to disasters or terrorism. This review was followed by development of evidence-based consensus guidelines and recommendations on the needs of children in disasters, including chemical, biological, and radiological terrorism. An evidence-based consensus process was used in conjunction with a modified Delphi approach for selection of topic areas and discussion points. These recommendations and guidelines represent the first national evidence-based standards for pediatric disaster and terrorism preparedness.

**T**he needs of children must be considered during planning and preparation for disasters and terrorist events. There are unique pediatric considerations that need to be addressed during this process:

- The developmental abilities and cognitive levels of children may impede their ability to escape danger.
- Children have unique psychological vulnerabilities, so special management plans are needed in the event of mass casualties and evacuation.
- Emergency medical service (EMS), medical, and hospital staff may not have pediatric training, equipment, or facilities available.

With respect to planning for and responding to terrorism events, children have unique vulnerabilities and require specific equipment and interventions that must be consid-

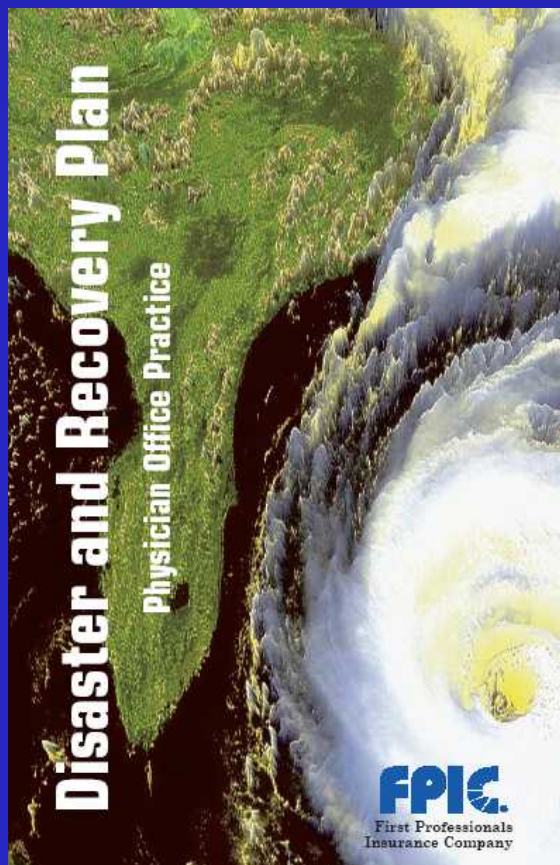
ered. In addition, emergency responders, medical professionals, and health-care institutions require special expertise and training to ensure optimal care of children who are exposed to biological, chemical, or nuclear agents. Examples of the considerations relevant to children include:

- Children cannot be decontaminated in adult decontamination units.
- Children are more vulnerable to chemical agents that are absorbed through the skin or are inhaled.
- Children have special susceptibilities to dehydration and shock from biological agents.
- Children require different dosages or different antibiotics and antidotes to many agents.
- Children are more susceptible to the effects of radiation exposure and require a more vigorous medical response than do adults.

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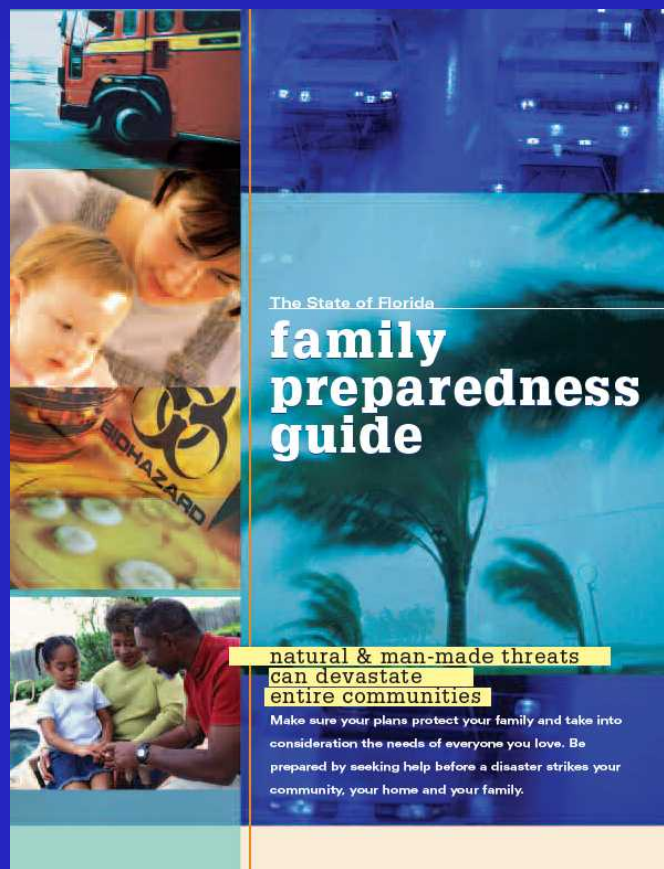
# Resource: Private Industry First Professional Insurance Company



[www.firstprofessionals.com/pdf/disaster\\_booklet\\_R06.pdf](http://www.firstprofessionals.com/pdf/disaster_booklet_R06.pdf)



# Resource: Florida



<http://www.nova.edu/allhazards/links.html>

# Resource: Homeland Security Ready Kids



<http://www.ready.gov/kids/home.html>

# Resource: Other State Plans and Evaluations



**A Makeshift Shelter from the Storm:**

**An Evaluation of Pediatric Disaster  
Preparedness in Texas**

by

Aleksandra Anna Gajdeczka, M.P.Aff.

The University of Texas at Austin, 2007



Prepared for the Children's Hospital Association  
of Texas (CHAT)

June, 2007

*Aleksandra Anna Gajdeczka, M.P.Aff. The University of Texas at Austin,  
2007*



# Resource: Institute of Medicine



<http://www.iom.edu/CMS/3809/16107/35002.aspx>



## Take Home Message

- ◆ Connect the haves with the have-nots
- ◆ Don't wait for the rescue
- ◆ Plan for and create the solution yourselves
- ◆ Insert your talents into the planning
- ◆ Search your region and outsource the missing talents
- ◆ Don't recreate the wheel
- ◆ Give those talents access to your community
- ◆ Let them do what they do
- ◆ Don't forget about the children



Don't forget about the Kids



?

# Resource: Other State Plans and Evaluations



NEW YORK UNIVERSITY

CENTER FOR CATASTROPHE PREPAREDNESS AND RESPONSE

## Emergency Medical Services: The Forgotten First Responder

— A report on the critical gaps in organization and deficits in resources for America's medical first responders

### Executive Summary

This report identifies critical deficits in the role and organization of Emergency Medical Services (EMS) in homeland security preparedness, and provides recommendations to improve the ability of EMS to respond to a terrorist attack.

In December 2004, New York University's Center for Catastrophe Preparedness and Response held a national roundtable that included experts from major organizations representing the EMS system. This report is a comprehensive review of participants' comments, as well as recent reports by federal agencies and independent organizations.

EMS providers, such as fire departments and hospital-based, commercial, and air ambulance services, ensure that patients receive the medical care they need during a terrorist attack. While EMS personnel, including Emergency Medical Technicians and paramedics, represent roughly one-third of traditional first responders (which also include law enforcement<sup>1</sup> and fire service personnel<sup>2</sup>), the EMS system receives only four percent of first responder funding.<sup>3</sup> If EMS personnel are not prepared for a terrorist attack, their ability to provide medical care and transport to victims of an attack will be compromised. There will be an inadequate medical first response.

This report's recommendation of enhanced funding for EMS should not be misconstrued as a recommendation for diverting resources away from other first responders.

**Critical Issues Facing EMS in Homeland Security Preparedness:**

More than three years after September 11, 2001, significant gaps remain within the homeland security preparedness capabilities of the EMS system:

- EMS-specific homeland security standards and guidelines do not exist to determine the necessary training and equipment for EMS personnel to effectively respond to a terrorist attack or disaster.
- EMS personnel lack vital response equipment, training and education.<sup>4</sup>
- EMS providers and state and local EMS directors are often excluded from critical emergency planning efforts.
- Many EMS systems, first responders, and emergency agencies cannot communicate with each other through interoperable data and voice communication systems.

**Key Recommendations to Improve the Role of EMS in Homeland Security Preparedness:**

- Congress should enact legislation to formally establish a Federal Interagency Committee on Emergency Medical Services, to improve the role of EMS in homeland security preparedness through more effective coordination of federal programs.
- The Department of Homeland Security, the Department of Health and Human Services and the Department of Transportation should establish EMS-specific terrorism preparedness standards and guidelines.
- The Federal government should increase homeland security funding for EMS and coordinate federal grant guidance and funding priorities to meet preparedness goals, such as improved communications between EMS and other emergency responders.
- The Federal government should facilitate a nation-wide needs assessment of the EMS system to identify the costs and methods of compliance with the national EMS preparedness standards and guidelines.

Center for Catastrophe Preparedness and Response.  
NYU



- ◆ Businesses don't search hard and long for good CEOs and they put them in the mail room
- ◆ Sports teams don't search hard and long for good quarterbacks and then make them centers
- ◆ Disaster planners should think long and hard about the team they put together to fight disasters



# Collaboration is Essential

- ◆ Local collaboration between private and public sector is difficult but essential
  - Disaster planners and everyone else
  - City, county, region and State
  - Medical communities locally and regionally
  - Media partners
- ◆ Experience helps – Katrina, & Rita versus Dean
  - Houston – Carla, Allison, Katrina, Rita, and Dean
  - Florida – etc, etc, etc
- ◆ We forced some hands – often a must!



# Talent Search

- ◆ How does the business find talent
  - Will pay top dollar for the best CEO
- ◆ Sporting world?
  - Will pay top dollar for the best quarterback
- ◆ Disaster world?
  - Will search high and low for the best volunteer in the room (often volunteering them)



# Regional Resource Utilization Basics

## Disaster Preparedness CEO

- ◆ Already over extended
- ◆ Never says no and often volunteers for more (in the beginning)
- ◆ Often volunteers (or is volunteered) for more than they can handle
- ◆ Usually very functional – gets a lot done
- ◆ Items that fit within their talents are done well
- ◆ Items that don't fit within their talents are ignored