AHRQ’s Objectives to Address Emergency Preparedness

Develop and Assess:

- Alternative approaches to ensuring health care surge capacity
- Models that address training and information needs
- Alternative uses of information technology and electronic communication networks
- Protocols and technologies to enhance interoperability among health care systems
Strategies and Tools for Meeting the Needs of Children

Wednesday, January 11, 2006, 1:00 – 2:30 p.m. Eastern Standard Time

Panelists:

Irwin Redlener, M.D., F.A.A.P.
- Director
- National Center for Disaster Preparedness
- Columbia University
- Mailman School of Public Health
- New York, NY

Michael Shannon, M.D., M.P.H.
- Director
- The Center for Biopreparedness
- Professor and Chair
- Division of Emergency Medicine
- Children's Hospital, Harvard Medical School
- Boston, MA

George L. Foltin, M.D., F.A.A.P., F.A.C.E.P.
- Director
- Center for Pediatric Emergency Medicine
- Bellevue Hospital
- New York, NY

David S. Markenson, M.D.
- Chief
- Pediatric Emergency Medicine
- Maria Fareri Children’s Hospital
- Westchester Medical Center
- Valhalla, NY

Moderator: Cindy DiBiasi
Decontamination Video

A clip from "The Decontamination of Children" can be found online at http://www.ahrq.gov/research/decontam.htm

A free, single copy of the video—available in DVD or VHS format—may be ordered by calling 1-800-358-9295 or by sending an E-mail to ahrqpubs@ahrq.gov.
For a selected list of resources and tools to help communities respond to bioterrorism or other public health emergencies, sponsored by the Agency for Healthcare Research and Quality under its Bioterrorism and Emergency Preparedness Program, go to:

http://www.ahrq.gov/path/biotrspn.htm
The mission of the Agency for Healthcare Research and Quality (AHRQ) is to improve the quality, safety, efficiency, and effectiveness of health care for all Americans.

The User Liaison and Research Translation Program (ULRT) attempts to accelerate the rate at which research and promising practices are incorporated into policy and practice by health system administrators, providers, corporate purchasers of health care, and State officials. ULRT does this through the use of web and audio conferences, workshops, technical assistance, and through the support of learning networks and communities of practice.
Public Health Emergency Preparedness

A Free Web Conference for Regional, State, and Local Health Care Decisionmakers

Sally Phillips, R.N., Ph.D.
Director, Bioterrorism Preparedness Research Program
Center for Primary Care, Prevention, and Clinical Partnerships
Agency for Healthcare Research and Quality
U.S. Department of Health and Human Services
E-Mail: sphillip@ahrq.gov
Surge Capacity: Education and Training for a Qualified Workforce—March 2, 2004

Surge Capacity: Facilities and Equipment—July 13, 2004

Addressing Surge Capacity in a Mass Casualty Event—October 26, 2004

Mass Casualty Care: Overlooked Community Resources—May 17, 2005

To view archives of these events, go to:

Strategies and Tools for Meeting the Needs of Children

Interested in free access to materials and products from this event?

On the Internet, visit the following Web site:

www.hsrnet.net/ahrq/care4kids
If you would like to receive information on future AHRQ-sponsored events, go to:

www.hsrnet.net/ahrq/surgecapacity
Public Health Emergency Preparedness and the Needs of Children

Irwin Redlener, M.D., F.A.A.P.
Professor of Clinical Public Health and Pediatrics
Director, The National Center for Disaster Preparedness
Columbia University Mailman School of Public Health
and
President, The Children’s Health Fund
Special Vulnerabilities of Children to Chemical, Biological, Radioactive, and Nuclear Agents (CBRNE)

Not just “little adults”

- Lower “breathing zones” and more rapid respiratory rates
- Greater skin surface and permeability
- Greater propensity to dehydration, shock
- Need special treatment, management protocols
- “Dependent”
- Suffer varying mental health effects
How Are Children Exposed to Chemical, Biological, Radioactive, and Nuclear Agents (CBRNE) Materials?

- **Unintentionally**
  - Industrial accidents (e.g., chemical leaks, nuclear reactor accidents)
  - Natural disasters
  - Airplane crashes

- **Inadvertently**
  - As collateral victims of terrorism (e.g. Oklahoma City, Madrid)

- **Indirectly**
  - Posttraumatic stress (PTSD) and other psychological effects
  - Through media (e.g., Oklahoma City, WTC)

- **Intentionally Targeted**
  - As victims of terrorist attacks (e.g., Ma’lot, Beslan)
Medical Care for Children

Beslan, 2004
Staff and Medical Equipment of Children’s Field Hospital

Specialists of Russian Center for Disaster Medicine and staff of Airmobile Hospital of Emergencies Ministry

Doctors & Nurses - 20
Technical staff - 16
How Can Parents and Professionals Speak to Children About Terrorism and the Potential for Major Disasters?

- Be available
- Give age-appropriate messages
- Encourage questions
- Seek professional assistance when stress symptoms increase
Caring for Children: Observations from Hurricane Katrina
Pediatric Terrorism and Disaster Preparedness Resource (PTDPR)

George L. Foltin, M.D., F.A.A.P., F.A.C.E.P.
Director
Center for Pediatric Emergency Medicine
NYU School of Medicine/Bellevue Hospital
New York City, NY
What Is the Pediatric Terrorism and Disaster Preparedness Resource (PTDPR)?

- American Academy of Pediatrics Project funded by AHRQ
- AAP in partnership with the Center for Pediatric Emergency Medicine at NYU School of Medicine
- Lead Editors: George Foltin, MD, David Schonfeld, MD and Michael Shannon, MD
- Delivered to AHRQ on November 30
- Plans for Distribution ongoing
What Is the Pediatric Terrorism and Disaster Preparedness Resource (PTDPR)?

- Comprehensive pediatric reference on preparedness for acts of terrorism: includes slides, handouts, and lecture outlines
- Content experts from around the country were recruited to develop training materials
- Covers clinical and policy issues
- Designed to allow access of critical and essential background information
- save time while facilitating planning efforts
Why Was the PTDPR Created?

- Lack of available pediatric-specific resources or clinical guidelines
- Unavailability of pediatric resources in the community or on the Internet
- Save time for those facilitating pediatric planning efforts
Pediatric Terrorism and Disaster Preparedness Resource (PTDPR)

Table of Contents

- How Children Are Different
- System Issues: Preparedness Primer For The Pediatrician
- Biological Terrorism
- Chemical Weapons & Terrorism
- Nuclear Terrorism
- Blast Terrorism
- Mental Health Issues
- Integrating This Resource Into Your Practice
Appendices

- Glossary: *definitions of key words*
- Formulary: *list of critical medications*
- Key points of each section
- Critical Web Links: *Web sites related to chapter/section*
- Illustrations and pictures
- Articles: *key references*
- AAP statements: full text or Web-linked
- Parent EMS handouts; home emergency prep plan or kit
- Materials for non pediatrician practitioners: tables covering vital signs, developmental differences, equipment differences
- TIPS: Algorithms, treatment/triage task analyses (based on critical chapter content)
- Hurricane Katrina: Lessons Learned
Figure 9. PTDPR Decon Shower- Child

Figure 10. PTDPR Decon Shower- Infant
Pediatric Disaster Tool Kit

NYC Department of Health and Mental Hygiene
HRSA Funding
Pediatric Disaster Advisory Group

Hospital Guidelines for
Pediatrics in Disasters
“Resources for General Hospitals”
Pediatric Disaster Tool Kit

Sections
- Introduction
- Security
- Dietary
- Space and Equipment
- Training
- Transportation
- Staffing
- Decontamination
- Pharmacy
- Psychosocial/Ethical
For Further Information

- Email George Foltin at gf16@nyu.edu
- Visit CPEM website at www.cpeem.org
- Visit AAP at www.aap.org
- Visit AHRQ at www.ahrq.gov
- Visit HRSA at www.hrsa.gov
Emergency Preparedness: Education and Training for Treating the Pediatric Population

Michael Shannon, M.D., M.P.H.
Director
The Center for Biopreparedness
Professor and Chair
Division of Emergency Medicine
Children's Hospital, Harvard Medical School
Boston, MA
Unmet Needs in Pediatric Emergency Preparedness

- Comprehensive, school-based emergency preparedness protocols
- Pediatric protocols in every hospital
- Pediatric surge capacity plans
- Education/training on unique issues
- Community involvement
- Identification and reunification of children and parents
Key Issues in Education & Training

- Many first responders remain inadequately trained in pediatric aspects of disaster response
- Training programs are failing to provide specific pediatric training
- There has been little development of DVDs/videos as training tools
Decontamination of Children: Preparedness and Response for Hospital Emergency Departments

- Video provides step-by-step demonstration of decontamination process in real time
- Training tool for emergency responders and hospital emergency department staff
Video-based Training Topics

- Responding to mental health needs of children after disaster
- Development of comprehensive, school-based disaster plan
- Specific to children:
  - Management of mass casualty incidents
  - Management of bioterrorism and other infectious emergencies
  - Management of radiologic emergencies
Identification and Reunification of Children After a Mass Casualty Incident

- Requires means of rapidly collecting information on arriving casualties (e.g., digital photos)
- Photo indexing
- Site where arriving parents can review photos
- System for presenting select photos
Considerations in Emergency Preparedness: A Two-track Conference

David Markenson, M.D.
Director, Center for Disaster Medicine
New York Medical College School of Public Health
Chief, Pediatric Emergency Medicine
Maria Fareri Children’s Hospital
Objectives of Conference

- Review new pediatric literature
- Update pediatric guidelines
- Expand guidelines in selected areas
- Review literature of persons with disabilities
- Draft guidelines on emergency preparedness for persons with disabilities
Changes in Terrorism Guidelines

- Role of fluoroquinolones
  - Role
  - Inclusion of ones other than ciprofloxacin

- Nerve agent auto-injector
  - Pediatric equivalent
  - Anticonvulsant

- Cidofavir
Added and Expanded Topics

- School Preparedness
- Child Congregate Facility Preparedness
- Sheltering Needs of Children
- Pediatric Needs for Public Health Emergency Preparedness
- Children with Special Health Care Needs and Technologically Assisted Children
- Decontamination of Children
- Biological Terrorism Prophylaxis and Treatment of Emerging Agents
- Family Centered Preparedness
Recommendations for Schools and Child Congregate Facilities

- Develop safety plans that identify unique threats or hazards that schools may face
- Share safety plans with community to ensure that all community resources will be utilized in emergencies
- Have schools practice fire and evacuation drills regularly, at least twice per academic year
- Have local plans reflect major role of schools in community planning and as emergency resources
Recommendations for Decontamination

- Decontamination of young children must be done with high-volume, low-pressure, heated water systems.
- Systems must be designed for decontamination of all ages and types of children.
- All protocols and guidance must address:
  - Water temperature and pressure
  - Nonambulatory child
  - Child with special health care needs
  - Clothing for after decontamination
Recommendations for Hospitals

- 72 hours of pediatric supplies and pharmaceuticals on hand for average daily census plus minimum surge of 5% adjusted for risk assessment
- Engage in specific pediatric disaster risk assessment with community to include school districts, emergency services, police dept., fire dept., child welfare, private practitioners, child care, public health, and mental health