

PEDIATRIC PREPAREDNESS IN 2004



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**Do we really need to worry about
mass exposure of children to
CBRNs?**



YES

How children get exposed to CBRN weapons/agents



- **Inadvertently**

- **Secondary victims in terrorist attack**

- **Catastrophic event at chemical/ nuclear plant**

- **Intentionally targeted**

Pediatric preparedness planning: What's involved?

**I. Medical concerns: anatomical,
physiological and clinical factors**

**II. Developmental and psychological
concerns (kids dependent upon – and
must be considered as within – the family
unit)**

III. System issues

I. UNIQUE VULNERABILITIES OF CHILDREN TO CBRN TERRORISM

- **Lower “breathing zones” and more rapid respiratory rates**
- **Greater skin surface and permeability**
- **Greater propensity to dehydration, shock**
- **Need special treatment, management protocols (much of which is not definitively known)**



II. Psychological Impact of Terrorism on Children and Families



- **Post-9/11 impact**
 - **“psychological ground zero”**
 - **Not “just” 9/11**
- **Understanding crisis behavior and planning implications**

The CHF/ Marist Institute Surveys



■ EARLY OCTOBER '01

- 52 % of children,
city-wide express
concerns about
safety and safety of
family members**

■ EARLY NOVEMBER

- Grows to 60%
following anthrax
scare**

CHF/ Marist Surveys

August, 2002 (“one year”), NYC and national data

- 69% of NYC parents, 42% nationally state children continue to show symptoms related to 9/11**
- 45% of NYC parents, 21% of U.S. parents continue to express concern about their safety &/or safety of family members**

...and in August 2003

- **21% of children (39% in NYC) fear further terror attacks (unchanged from '02)**
- **49% of parents (70% in NYC) concerned about personal and family safety**
- **10% of parents (23% in NYC) report that their children are experiencing 4 or more behavioral concerns since 9/11**

III. The “Big System” Issues



- **Are hospitals, PH agencies and community pediatric assets coordinated?**
- **Have state and local plans covered needs of children (and families)?**
- **Does SNS fully accommodate peds needs?**
- **What are the roles of pediatric organizations and academic centers?**

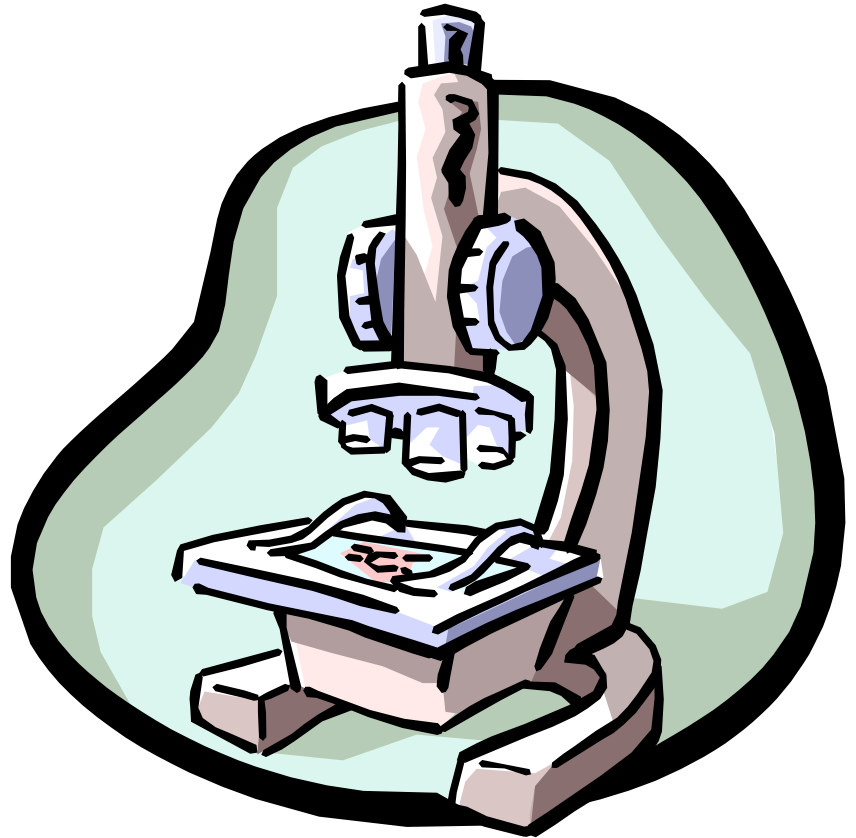
Preparing Hospitals to Deal with Mass Pediatric Casualties



- **Regional planning**
- **Pediatric surge capacity**
- **Surveillance**
- **Triage capabilities**
- **Emergency stockpiling**
- **Pediatric-specific equipment, supplies (e.g., decontamination units, Mark I kits, etc.)**
- **Readiness drills and training**

Academic Pediatrics & Terrorism Preparedness

- Substantial research needed (vaccines, resistance, antidotes, pediatric dosing recommendations, development of resilience, etc.)
- Consider new curricula in relevant areas



Unfamiliar terrain



Chemical Agents

- **Nerve agents:
Sarin & Tabun gas**
- **Blister agents:
Mustard gas &
Lewisite**
- **Hydrogen Cyanide**

Biological weapons

- **Anthrax**
- **Smallpox**
- **Botulism**
- **Ebola**
- **Plague**
- **Tularemia**
- **West Nile**

...and more



- **Nuclear weapons**

- **“dirty bombs”**

- **Nuclear power plant
catastrophes**

Other Concerns



What about schools?

What do parents need?

Terrorism & The Schools

- Preparedness planning
- Coping and resiliency issues for teachers and students
- Special issues: KI, what to stockpile, syndromic surveillance
- Communications with parents



Challenges for parents

- **Acceptance of new vulnerabilities**
- **Minimization of impact on usual and customary activities and attitudes**
- **What's "rational preparedness"?**
- **Developing resiliency**

In conclusion...

- 1. Children may well be victims of terrorism and exposure to WMD**
- 2. General planning is “incomplete” and pediatric preparedness planning is very far behind**
- 3. Direct application of generic protocols and general planning will not meet needs of children & families**
- 4. Lack of planning for children can undermine overall readiness efforts**

Getting Information



- Publications: Red Book, Published articles, books (e.g., When Every Moment Counts)
- Organizations: CDC, FEMA, Red Cross, AAP, etc.
- Web sites:

www.aap.org/terrorism

End



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