Pediatric Disaster Management and the School System

Greg Pereira, MBA, RN, CPEN
Director of Trauma And Transport
Children’s Healthcare of Atlanta

Objectives

• Discuss relationship between Emergency Preparedness and the Community in relation to Regional Coordinating Hospitals
• Discuss the need for pediatric disaster management and the Specialty Coordinating Hospital
• Discuss how the school nurse can become an integral part of the Healthcare Coalitions

Regional Coordinating Hospital

Background
• 1999 Hurricane Floyd – Savannah evacuation prompted the model
• Originally 5 RCHs
• Assist with the coordination and planning efforts in the event of a regional disaster

Now
• 14 Regional Coordinating Hospitals in the state
• 1 Specialty Coordinating Hospital (CHOA – pediatrics)
Recent Efforts

- 2012 alignment of PHEP and HPP grants
  - 8 shared capabilities
  - Coalitions
- Funding from Health and Human Services (HHS) Assistant Secretary of Preparedness and Response (ASPR)
- Georgia Department of Public Health
  - Division of Health Protection
    - Healthcare Preparedness Program
- Georgia Hospital Association

The Capabilities

- Healthcare System Preparedness
- Healthcare System Recovery
- Emergency Operations Coordination
- Fatality Management
- Information Sharing
- **Medical Surge**
- Responder Safety and

Health
- Volunteer Management
“The integration fostered by aligning these programs is important in streamlining and strengthening the day-to-day relationships and cross-sector cooperation needed to mitigate health risks from disasters. In fact, an integrated approach is critical to achieving a resilient health system ready to face any health hazard and capable of providing the affordable, high-quality daily care that all Americans deserve.”

Taylor, Shanno, ASPR Blog, 07/30/2012

Purpose

To provide integration, coordination, and organization for the purpose of regional healthcare preparedness activities and response – for any event that impacts the normal healthcare delivery

Region D Healthcare Coalition

- 23 Acute Care Hospitals
- Specialty Care Hospitals
- 58 Nursing homes
- Fire Departments
- EMS agencies
- Local Emergency Management Agencies
- GEMA
- 4th Civil Support Team,

Dobbins
Amateur radio operators
Surgery Centers
Dialysis centers
Home Health
Hospice
Public Health
Purpose of the RCH

• Works with local Public Health partners
• Communication
• Healthcare community preparedness coordination
• Serves as a facilitator and advocate for healthcare organizations affected by an emergency
• Liaison with GHA and DPH

Real World Events
How this Coalition Works

• McNair Elementary
• Snowmaggedon 2014 – Blood shortage
• 11 hostages
• Georgia Gwinnett College explosion
• Ebola
• DeKalb water main break
• Mass Casualty planning

RELATIONSHIPS

Full Scale Exercise

• Funded by DPH
• Designed by UGA Institute for Disaster Management
• Test of the MCI patient distribution plan
• Test plans not people
• 600 volunteers were mobilized via ServeGA and Health Occupation Students of America (HOSA)
Scenario
• Bomb detonation at SunTrust park parking deck
• Active shooters
• 600+ injured
• Each hospital received the number of patients indicated on MCI distribution tool
• Added some walking wounded

Findings
• Artificiality makes assessment difficult
• Hospitals managed the victims
• Communication – good, but some unnecessary
• EMS transport times

RELATIONSHIPS
Pediatric disaster management

• Are kids involved in disasters?
• Are kids just small adults?
• Can adult centers handle pediatric patients?

Case Study - Columbine, April 20, 1999

• School shooting at Columbine High School
• 24 wounded
• 15 killed
  – Including 2 gunmen
• Two suspects had planned incident for over a year

Columbine - April 20, 1999

• Failed bombing targeting entire school
• Would have killed thousands if successful
Columbine - April 20, 1999

- Primary planner was sociopath
- Fantasized about killing thousands in his journal
- Wrote in his journal "I feel like God and I wish I was, having everyone being OFFICIALLY lower than me"

- Propane bombs planted in cafeteria
- Walked outside, armed with shotguns to shoot those that escaped explosion
- When bomb failed to detonate, walked in and began shooting at 11:19

- Police officer arrived within 5 minutes of first shots, 2 minutes after initial call
- At 12:08, both perpetrators committed suicide
Columbine - April 20, 1999

• In 2002, FBI report on school shooter profile released
  – Not impulsive acts
  – Others know about plan prior to attack
  – Targets not directly threatened prior to attack
  – No attacker “profile”

Columbine - April 20, 1999

• Most shooters had previous “cry for help”
• Many feel bullied
• Most had access to guns prior to attack
• Other students were involved in most cases
• Despite law enforcement response, most are stopped by other methods

Columbine - April 20, 1999

• Largest school massacre in history at that point
• At least 2 school shootings since that time, perpetrators mentioned Columbine
Columbine - April 20, 1999

- Emergency Preparedness is extremely important
- Includes Preparedness, Response, Recovery and Mitigation

“Surviving” Columbine

Pediatric Issues

- 89% of pediatric patients are treated at non-children’s facilities
- 27% are treated at rural or local community ED’s
- 50% of ED’s see less than 10 pediatric patients per day
Pediatrics

- Georgia ranks 8th in pediatric population
- 25.4% of population of Georgia is < 18 y/o
- 6 Children’s Hospitals
- Region D, F, G, J (Region I is adding pediatric
- CHOA typically runs at 90% capacity
- Med-Surg saturation common

Recommendation- Displaced Children

- Develop plans for communication, health care delivery, contacting and reuniting displaced children and their families in communities, local school districts, and child care facilities. **Integrate these plans into state, regional, and local disaster plans.**
- Facilitate prompt communication among family members in community disaster plans.
- Develop evacuation plans that allow for contacting and reuniting children with their families.

Case Study- Carbon Monoxide Poisoning

- Finch Elementary School
- 43 students transported to Hughes Spalding Hospital
- Transported via bus
- Triage set up outside ED
- All students stable
- Treated and released
**Specialty Coordinating Hospital**

- Children’s is SCH for state of Georgia
- Requirements of role
  - Statewide coordination of pediatric patients during incident
  - Participation in all regional coalition
  - ESF-8 meetings
  - RCH meetings
  - Development of Pediatric Disaster Course

**Pediatric Healthcare Improvement Committee**

- SCH version of a coalition
- Participation from number of pediatric stakeholders across GA
  - Pediatric Emergency Medicine physicians
  - Community Pediatricians
  - Pediatric Surgeon
  - Pediatric Anesthesiologist
  - Pediatric Administrators
  - School Nurse- Lynne Meadows

**Case Study- Newton, December 14, 2012**

- 26 victims
  - 20 children
  - All died on scene
Special Project 2015

- Excess funds for special project provided by DPH through GHA
- Region D and Region N combined funds
- $88,000

School Resource Officer Training

- 356 School Resource Officers in the 12 counties
- GEMA School Safety Coordinator
- B Con
- Combat Application Tourniquets (CAT)
- Atlanta City Schools school nurses
- Continued opportunity for training through Stop the Bleed! Through funding from The Georgia Trauma Care Network Commission
- ACS looking to GA as model

School Nurses

- RELATIONSHIPS!!!
- Contact your Regional Coordinating Hospital
- Join the Coalition
- Get training on Stop the Bleed if not already completed
- Reunification
- Know your resources
  - RCH, SCH, Behavioral Health