

**driving readiness in
dynamic times**
Disaster Planning for
California Hospitals

California's Neonatal, Pediatric and Perinatal Disaster Preparedness in Action

Patricia Frost, RN, MS, PNP (moderator) Emergency Medical Services Director, Contra Costa Health Services	Cynthia Frankel, RN, MN Prehospital, Emergency Medical Services for Children & HPP Coordinator, Alameda County Emergency Medical Services
Kay Daniels, MD Clinical Professor, Obstetrics & Gynecology, Stanford University School of Medicine	Jason Silvas, RN Pediatric Program Coordinator San Joaquin Community Hospital
	Bridget Berg, MPH, FACHE Manager, Pediatric Disaster Resource & Training Center, Children's Hospital Los Angeles



Raising the Bar


California's Neonatal, Pediatric and Perinatal Disaster Preparedness In Action!

Moderator: Patricia Frost RN, MS, PNP
EMS Director Contra Costa Health Services
Founder & Co-Chair California Neonatal, Pediatric & Perinatal Disaster Coalition
Vice Chair National Pediatric Disaster Coalition




Objectives

- Identify current local, regional, state and national resources and efforts supporting disaster preparedness for infants and children
- Describe why a statewide CONOPs for infants and children is essential to California's Med/Health Preparedness
- List three resources you can use to improve your local capabilities for infants, children and pregnant women



National Survey

The Public Expects Children First



5



PAHPRA Reauthorization Act 2013

Legal requirement to include children in all disaster planning

Pediatric Preparedness for Healthcare Coalitions
Capability #1 and #10



Requires Children Have A Seat at the Table

6



2010 National Commission for Children and Disaster



2010 National Commission for Children and Disasters (NACCD)



New Committee will Advise HHS on Children's Health in Disasters

Learn More ►

<http://cybercemetery.unt.edu/archive/nccd/20110426214402/http://www.acf.hhs.gov/ohsepr/nccdreport/nccdreport.pdf>

7



Institute of Medicine: June 2013



FORUM ON MEDICAL AND PUBLIC HEALTH PREPAREDNESS FOR CATASTROPHIC EVENTS

Preparedness, Response, and Recovery Considerations for Children and Families

Workshop Summary

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

8





It Does NOT Have to Be Scary!



11



It Starts with Learning about the Children in Your Community

Who?
What?
Where?
When?
Why?
How?





Pediatric Disaster Preparedness

DID YOU KNOW?

13



Improves Personal and Family Readiness



14



How Well a Community Recovers Measured by What Happens to the Children



15



ASPR: 30% Surge Within 4 Hours New Model Came Out of Pediatrics

System Decompression

CATEGORY 1

Pediatric Tertiary Care
Centers in and around
region (PICU and/or NICU)
(includes PCCC hospitals)

CATEGORY 2

Community hospitals with
some pediatric services
(includes EDAP hospitals)
Accepts 0–12 year olds

CATEGORY 3

Community hospitals with
no pediatric or neonatal
(i.e. SEDP hospitals)
Accepts > 12 year old

CATEGORY 4

Community hospitals with
Level I, II or II-E nurseries
Accepts 0–1 year old

16



The Focus on Children has Strengthened Disaster Mental Health for All



17



Reunification and Patient Tracking



Hurricane Katrina separated families,
**leading to 5,000 reports
of missing children.**

👤 👤 👤 👤

 **7 months**
The time it took to reunite the
last child with her parents.*



Schools: Practice with Them

EASY AS ABC

THREE STEPS TO PROTECT YOUR CHILD DURING EMERGENCIES IN THE SCHOOLS DAY

- A** **ASK** how you would be reunited with your child in an emergency or evacuation
- B** **BRING** extra medications, special food, or supplies your child would need if you were separated overnight
- C** **COMPLETE** a backpack card and tuck one in your child's backpack and your wallet

BACKPACK EMERGENCY CARD

A **ASK** how you would be reunited with your child in an emergency or evacuation

How would you find your child in an emergency happened during the school day?

If a family had to evacuate, where should parents go to pick up?

How would the authorities find you in the event of an emergency?

19

California Child Care Disaster Plan

An Annex to the State Emergency Plan

<http://cchp.ucsf.edu/content/disaster-preparedness>

20

The Good News



Pediatrics Creates REAL Engagement

21

2015 – Our Annual Disaster Report Card

This year, we find 32 states now require minimum emergency planning standards at schools and child care. But a decade after Hurricane Katrina, 18 states and D.C. still fall short.

2008

Only four states met four minimum emergency planning standards for child care and schools later recommended by the National Commission on Children and Disasters.



22



Our Outstanding Panelists

<p>Kay Daniels, MD Clinical Professor, Obstetrics & Gynecology, Stanford University School of Medicine, and Co-Director of Disaster Planning, Johnson Center</p>	<p>Jason Silvas, RN Pediatric Program Coordinator San Joaquin Community Hospital</p>
<p>Cynthia Frankel, RN, MN Prehospital, Emergency Medical Services for Children & HPP Coordinator, Alameda County Emergency Medical Services</p>	<p>Bridget Berg, MPH, FACHE Manager, Pediatric Disaster Resource & Training Center, Children's Hospital Los Angeles</p>

A group of approximately ten diverse children of various ages, all smiling and raising their arms in a celebratory gesture. They are wearing colorful clothing, including red, yellow, green, and blue shirts.

Earthquakes and fires and floods ... OH MY !! Disaster Preparedness for OB Units

Kay Daniels, MD
Clinical Professor
Obstetrics & Gynecology
Stanford University
School of Medicine



If there is an OB Unit in your hospital

The American College of Obstetricians and
Gynecologists note:

“Providers of obstetric care and
facilities that provide maternity services,
offer services to a population that has
many unique features warranting
additional consideration”

Why Moms and their Babies are at Risk in Disasters?

- >97% of all births in the U.S. occur in a hospital or clinical setting ... which may not be accessible or may be severely damaged during a disaster event
- Mom and babies are physically more vulnerable to disaster-related toxins

27

Why Moms and their Babies are at Risk in Disasters? (cont.)

- Pregnant women are subject to the usual risks of injury at a disaster, but with more complicated care



28

Keeping mom and baby together ...

- In the days after Hurricane Katrina struck Louisiana, 125 critically ill newborn babies and 154 pregnant women were evacuated to Woman's Hospital in Baton Rouge
- *It was at least 10 days before some of the infants and mothers were reunited*



Washington Post 2006

29

Hospital disaster planning : OB is Unique

One size \neq all in a disaster setting for OB

Within the same footprint of any OB unit there exists a large variety of patient acuity and needs

- Healthy postpartum patients with their newborns
- Laboring women
- Intra-op and post-operative patients



30

Why is OB unique?

We always have 2 patients

- Ante partum (AP) = mom and fetus
- Postpartum = mom and newborn



31


Disaster Planning for OB: A Triage Algorithm

OB TRAIN* =
***T**riage by **R**esource **A**llocation
for **I**N patient*

*Based on the triage system created by Dr. Ron Cohen for the NICU at Lucile Packard Children's Hospital

32

OB TRAIN for AP + L&D



OB TRAIN for AP & LD

<i>Transport</i>	CAR (Discharge)	BLS	ALS	SPC	SHELTER IN PLACE
Labor Status	None	Early	Active	At risk for En route delivery	If delivery is imminent, 'Shelter in Place' and TRAIN after delivery
Mobility	Ambulatory*	Ambulatory or Non-ambulatory	Non-ambulatory	Non-ambulatory	
Epidural Status	None	Placement > 1 hour**	Placement < 1 hour**	N/A	
Maternal or Fetal Risk	Low	Low/Moderate	Moderate/High	High	

(SPC) Specialized = must be accompanied by MD or Transport RN
 * Modified Bromage Score 6 = Patient is able to perform a partial knee bend from standing
 ** Epidural catheter capped off

(S) Specialized = must be accompanied by MD or Transport RN
 * MBS 6 = Patient is able to perform a partial knee bend from standing
 ** Epidural catheter capped off

33

Basis of Triage System for OB TRAIN

- Labor status
- Mobility
- Anesthesia status
- Maternal risk factors/fetal risk factors

34

OB TRAIN Triage Example

26yrs @ 40 weeks

- Early labor: 4cm
- Can ambulate
- No epidural
- Cat 1 FHR
- No significant maternal or fetal risk factors

Transport	CAR (Discharge)	BLS	ALS	SPC	
Labor Status	None	Early	Active	At risk for En route delivery	If delivery imminent: Shelter in place and TRAIN after delivery
Mobility	Ambulatory*	Ambulatory or Non-ambulatory	Non-ambulatory	Non-ambulatory	
Epidural Status	None	Placement > 1 hour**	Placement < 1 hour**	N/A	
Maternal or Fetal Risk	Low	Low/Moderate	Moderate/High	High	

OB TRAIN Triage Example #2

32 yrs @ 31 weeks with severe preeclampsia undergoing induction of labor

- Early labor: 2 cm
- Nonambulatory
- Epidural in place < 1 hr
- Cat 1 FHR
- Intermittent IV labetalol for BP control
- On 2 g IV magnesium sulfate

Transport	CAR (Discharge)	BLS	ALS	SPC	
Labor Status	None	Early	Active	At risk for En route delivery	If delivery imminent: Shelter in place and TRAIN after delivery
Mobility	Ambulatory*	Ambulatory or Non-ambulatory	Non-ambulatory	Non-ambulatory	
Epidural Status	None	Placement > 1 hour**	Placement < 1 hour**	N/A	
Maternal or Fetal Risk	Low	Low/Moderate	Moderate/High	High	

Specialized



37

Levels of Maternity Care ACOG Consensus Feb. 2015

SENDING THE RIGHT PATIENT TO THE RIGHT HOSPITAL

1. Levels

- Birthing Centers
- Basic Care (Level I)
- Specialty Care (Level II)
- Subspecialty Care (Level III)
- Regional Perinatal Health Care Centers (Level IV)

2. Capabilities

3. Types of providers

38

Being prepared to evacuate L&D



39

WE'VE GOT TO GO!!



40

L&D Disaster Plan: Evacuation



Grab and GO "Off Site Delivery Kit"		
ITEM:	LOCATION:	QUANTITIES/DETAILS:
Sterile single gloves	2	5-10 gloves
Exam gel	2	5-10 packets
Bulb Syringe	3	x1
Unbilical cord clamp	3	x3
Sutures	3	Monocryl 2-0 x1 Monocryl 3-0 x1 Vicryl 3-0 x1
Sterile gloves	4	Size 6-3 x1, Size 8 x1
L&D Instrument Set	5	Mayo Scissors Mayo Clamp Needle Driver
Delivery Pack	5	Underbuttocks drape Sterile gown Sterile towel Needle count box Table cover Sponges Cord clamp x1
Red bag	5	x2
Peripad	6	x2
Large non-sterile gloves	Wall above sink	One box (50 gloves)
Hand Sanitizer	LDR room	
Chux	LDR closet	One chux
Ambu-bag self-inflating (neonatal)	PANDA	
Neonatal stethoscope	PANDA	
Baby blanket	Warmer	
Baby hat	Warmer	
Fetal Doppler	Disaster Box or lock drawer by clerk	
Space Blanket	Disaster Box	
Sharps Box	Disaster Box	
Paper & Pen	Front Desk	
Oxytocin 20U IM + needle/syringe	Pyxis	
Methergine 0.2mg IM + needle/syringe	Pyxis	
Misoprostol 1000mcg buccal/rectal	Pyxis	
Lidocaine 1% 30ml + needle/syringe	Pyxis	
Labor Module		Delivery Module
Medication Module		Neonatal/Postpartum Module

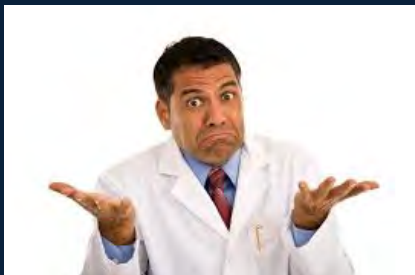
COMMUNICATION: Peds ↔ OB

How will peds know where OB is evacuating to?

- Is there a system in place for notification?

Who from peds has been designated to go with OB ?

- To care for 'shelter in place' in deliveries



Coordination of OB and Pediatrics

Ideas to insure that mom and baby are not separated



- On baby's transfer forms – mom's information
- On mom's transfer form – baby's info
 - Newborn screening # or other unique identifier
- Record where both baby and mom are being transferred to in multiple sites
- Arm bands with matching information

43

Next steps: Collaborative network on a regional, statewide and national level



44

In summary: to accomplish a comprehensive obstetric disaster plan there needs to be:

1. Adoption of an obstetric-specific triage system like OB TRAIN to allow a universal language for evacuation and surge processes
2. A system in place to transfer OB patients to the appropriate hospital (the right patient to the right hospital)

45

In summary (cont.)

3. An comprehensive *shelter in place* plan for laboring patients that includes:
 - Grab and go bags/equipment
 - Communication with peds
4. Postpartum plan that takes into consideration transport of mom and baby
 - Avoid maternal-neonatal separation when possible
 - Accurately track location if separated
5. Create a regional and ultimately national collaborative network of maternity hospitals

46

Online access to disaster tools

Stanford Disaster OB Planning “Tool kit”

<http://obgyn.stanford.edu/community/disaster-planning.html>

Kay Daniels

k.daniels@stanford.edu

47

THANK YOU FOR YOUR ATTENTION



Stanford University

48

LEVERAGING SUSTAINABLE PEDIATRIC/NEONATAL
CAPABILITY & READINESS UNDER ALL CONDITIONS

**CALIFORNIA CHILDREN'S MEDICAL
SURGE CONCEPT OF OPERATIONS**
ALAMEDA COUNTY DISASTER PREPAREDNESS IN ACTION




CYNTHIA FRANKEL, RN, MN
CO-CHAIR, CALIFORNIA NEONATAL/PEDIATRIC DISASTER COALITION
ALAMEDA COUNTY EMERGENCY MEDICAL SERVICES

**CALIFORNIA NEONATAL/PEDIATRIC
DISASTER COALITION**

**TRANSLATING EFFECTIVE
GUIDANCE INTO ACTION**



- **GOAL:** To **strengthen** statewide & local children's **medical surge capability & readiness**
- **MISSION:** Campaign to **inspire & build** statewide & local emergency preparedness, **RESPONSE** capability & plan implementation throughout California

50




GOALS

DRIVING READINESS & ACTION IN DYNAMIC TIMES




- Provide **strategies & benchmarks** to support **disaster-resilient health care systems**
- Share projects — **to reframe inclusive & effective pediatric medical surge readiness** & enable health care system surge response
- Facilitating **transformative & sustainable medical surge readiness**

51



“PEDIATRIC NEAR MISS”

SURGE CAPACITY & CAPABILITY CHALLENGES




LESSONS LEARNED

- **H1N1 (2009) ***
- Mehserle Verdict (2009–10)
- San Bruno pipeline explosion (2010)
- **Occupy Oakland/civil unrest (2012)**
- Hurricane Sandy (2012)
- **Asiana Accident (2013)**
- **Napa Earthquake (2014)**
- Valley Fire & Calistoga Shelter (2015)
- **Train Derailment (2016) ***

POTENTIAL RISK – ALAMEDA COUNTY

- Hospital medical surge impact
- Limited PICUs, EDs & beds (**ONLY 33 PICU BEDS**)
- Earthquakes & pandemic flu



52



ANTICIPATE EARTHQUAKE OF M6.8 OR GREATER ON HAYWARD FAULT

- **13 hospitals within 1 mile of Hayward Fault**
- Last major earthquake on Hayward Fault — 1868 (over 140 years ago)
- Research by U.S. Geological Survey (USGS)



53



DISASTER — SURGE PEDIATRIC PREPAREDNESS VISION

WELL-PREPARED PEDIATRIC DISASTER HEALTH
CARE SYSTEM:

- **Plans** for healthcare consequences of pediatric disasters
- **Responds** quickly & with agility to harness all vital resources
- **Functions** under adverse circumstances
 - An immediate & prolonged surge of pediatric patients in need of acute critical care
 - Disruption of incident management chains of command
 - A contaminated or contagious environment
 - Loss of infrastructure
 - Poor situational awareness



REQUIRES CONOPS

54




CALIFORNIA CHILDREN'S MEDICAL SURGE CONCEPT OF OPERATIONS (CONOPS)

CURRENT INITIATIVE:

- Strategic Plan Priority CA EMSC Technical Advisory Committee, Annex to CA EOP - ESF 8




55



CONOPS Envisioned

High reliability, highly collaborative, cross-sector

- Strengthen:** To strengthen California's ability to care for children during medical surge event & leverage medical system partners
- Seamless:** To provide incident response strategy for "seamless" medical **response** operations
- Resiliency:** To promote pediatric health care system emergency readiness solutions, response resiliency strategies, & evidence-based tools



56



CONOPS Envisioned (cont.)

High reliability, highly collaborative, cross-sector

- **Rapidly expand capacity:** To provide guidance on how to rapidly expand capacity of existing health care system at multiple levels
- **Align, scalable, coordinated, & Integrated:** To ensure integrated children's medical emergency management response system — consistent with California Medical/Health **EOM**, state EMSC benchmarks & existing surge plans



57




CALIFORNIA CHILDREN'S MEDICAL SURGE CONOPS PROJECT REQUIREMENTS

- **High-level overarching framework** with state coordinated pediatric medical surge procedures
- **Customized to divergent regions & operational**
- Sections of other plans integrated in CONOPS
- **High-level synthesis of many existing plans**
- Institutionalize our vision



58



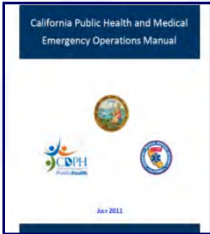
CALIFORNIA CHILDREN'S MEDICAL SURGE CONOPS PROJECT MISSION

FRAMEWORK


- **Bed expansion/decompression: Flex Models ****
- Pediatric expert focal points: Effective decisions
- **Resources:** Links resources & map assets
- **Management responsibilities: Role clarity**
- Coordination: Pediatric surge & patient transfers

PRIORITY

- Leverage **EXISTING** regional/OA Pediatric Surge Plans
- Supplement CA Med/Health EOM



59




EMSA/CDPH PEDIATRIC SURGE NEW FOCUS — PLANNING MEETING 4/28/16


GOAL: Develop State CONOPs & function-specific chapter California Public Health/Medical EOM

— Built on capacity model —

- Establish **catchment areas** around **regional hospital**
- Create **tiered hospital structure** around **levels of care**
- Expectations for **pediatric readiness**
- Connectivity via MHOAC / RDMHS program
- “Day-to-day” pediatric assets
(i.e., neonatal transport network)



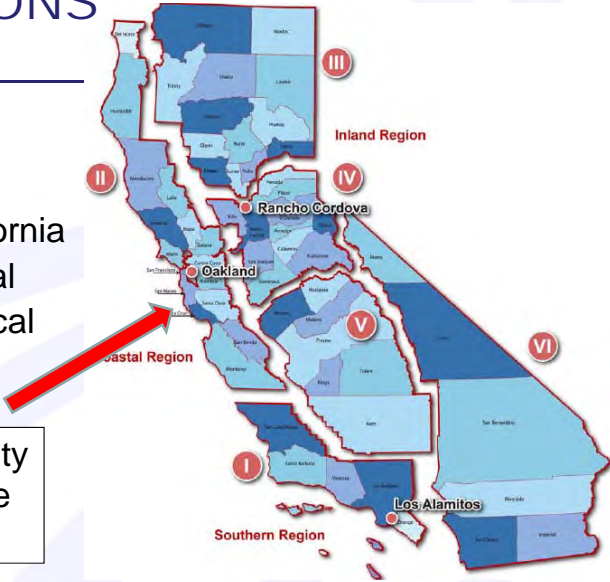
60




REGIONS

GOAL:
Leverage & integrate California state & regional pediatric medical surge plans


Alameda County Medical Surge Planning



61



ALAMEDA COUNTY MEDICAL SURGE PANDEMIC EXPANSION MODELS — OPTIONS



1. Hospitals increase pediatric beds by **5%** above total licensed beds
2. Hospitals with ICU & PICU **double** numbers of staffed beds
3. Hospitals take **5 additional patients** in their ICU & PICU
4. Hospitals increase bed capacity by **10% above licensed beds**

62



ALAMEDA COUNTY PEDIATRIC READINESS "DAY TO DAY" & SURGE

What's sustainable? Leveraging & Energizing Partners

- Priority Pediatrics Benchmarks
2014 to 11/17/16 Exercises
- HPP 2014-17 Pediatric medical surge deliverables – CONOPS
- Pediatric Readiness Project & Champion Recognition



UCSF Benioff Children's Hospital
Oakland



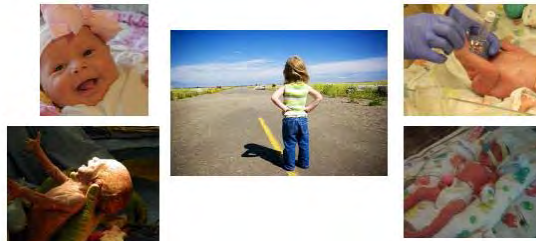
63




ALAMEDA COUNTY CHILDREN'S DISASTER CONOPS ANNEX TO COUNTY EMERGENCY OPERATIONS PLAN

Current initiative:

- Strategic Plan Priority Annex to OA EOP - ESF 6 & 8
- Includes **High Level EOC Coordination** for Children
- Focus Medical & Care & Shelter (Multi-Agency Approach)
- Currently at Emergency Operations Council for Board Approval
- Potential for adapting model to other OAs & New State CONOPs




64




ALAMEDA COUNTY CHILDREN'S MEDICAL SURGE PROJECT REQUIREMENTS

- Define Strategic Approach
- Define Support Structure
- Delineate Key Roles and Responsibilities




65



ALAMEDA COUNTY EMERGENCY OPERATIONS CENTER (EOC) ACTIVATION

Children's Technical
Expert / SMES –
Coordination Group –
Effective Decisions





COLLABORATION ACTION OPPORTUNITY

“FUTURE ROAD MAP—BREAKING NEW GROUND”



Fuel Statewide Partnerships & Mobilize Champions

- **Short & long term project ***
CA Children's Medical Surge CONOPS Project
- **“Robust” collaboration team** - Reinvigorate partner support
- Align & promote Pediatric Readiness Project
- Plan & conduct medical surge pediatric **exercises**
- Annual state EMSA/CDPH & CHA conferences – pediatric tracks

67



DRIVING PEDIATRIC READINESS MOMENTUM & ACTION

CYNTHIA FRANKEL, RN, MN

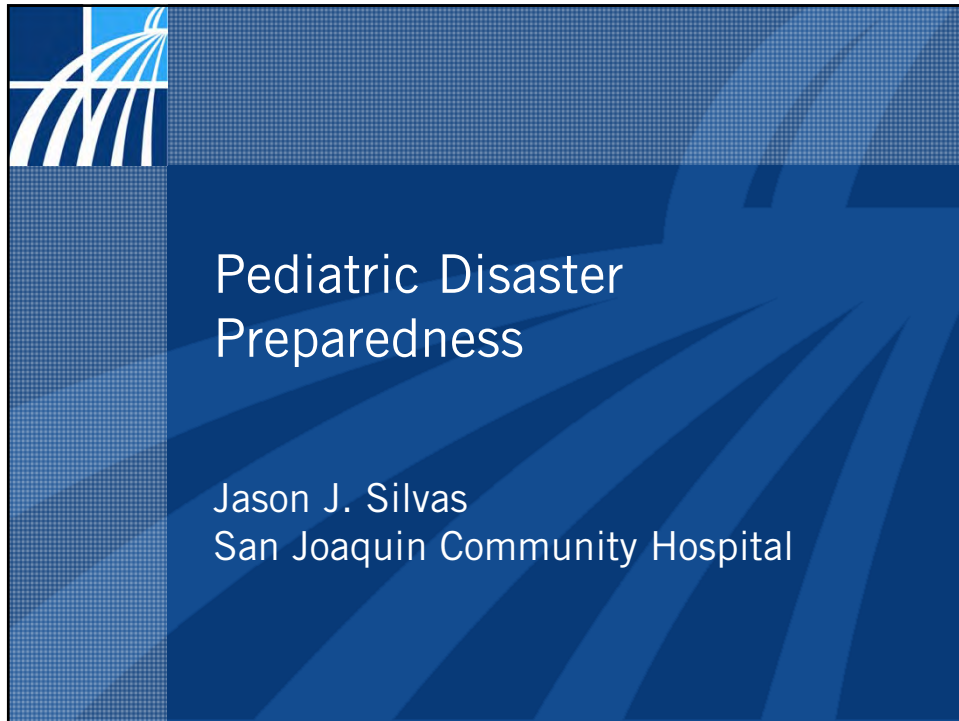
Co-Chair, California Neonatal/Pediatric Disaster Coalition
(510) 618-2031 (office) | (925) 285-2403 (cell)
Cynthia.Frankel@acgov.org

Neonatal/Pediatric Disaster Preparedness Information:

<http://www.acphd.org/emsc.aspx>

<https://sites.google.com/site/pedineonetwork/>



This slide has a dark blue header with a white logo on the left. The title 'Pediatrics and Emergency Rooms' is in white. The main content area has a light blue background with diagonal stripes. It contains the question 'Are You Pediatric Ready, Today?' followed by a bulleted list. The first bullet is 'Just the stats', which includes two sub-points: '20% of all ER visits are children' and '90% of those visits occur in a local, general hospital setting'. The second bullet is 'Emergency Room defined', which includes one sub-point: 'Hospital room or area staffed & equipped for treatment of persons needing immediate medical care'. The number '70' is in the bottom right corner.

Pediatrics and Emergency Rooms

Are You Pediatric Ready, Today?

- Just the stats
 - 20% of all ER visits are children
 - 90% of those visits occur in a local, general hospital setting
- Emergency Room defined
 - Hospital room or area staffed & equipped for treatment of persons needing immediate medical care

70



Preparing for Pediatric Disasters

Collaboration is Key

- Recent local accomplishments
 - 2014 – Central Valley Regional Pediatric Disaster Surge Framework adopted (by 10 counties)
 - 2015 – Kern County Pediatric Receiving Center Designation Policy adopted
 - 2016 – Kern County Pediatric Advisory Committee established
 - Local services now include PICU, Trauma Center and Burn Center

71



Preparing for Pediatric Disasters

Preparing for pediatric disasters means ...

- Being prepared for pediatric patients
 - Policies, procedures and protocols
 - Quality improvement process in place
 - Equipment, supplies and medications
 - Staffing
 - Education (this is a must!)

Preparing for pediatric disasters does NOT mean ...

- Large expenditures

72



Preparing for Pediatric Disasters

Reinvent the wheel? Why?

- National Pediatric Readiness Project
 - Peds Ready Assessment



2015-16 Quality Improvement Emergency Department Assessment

Hospital Name: San Joaquin Community Hospital
Hospital Volume: High: $\geq 10,000$ pediatric patients (average of 27 or more a day)

Respondent Name: Jason Silvas, Pediatric Program Coordinator, RN

Respondent Contact Info: (661) 319-2823, silvasjj@ah.org

Report Date: 11/2/2015 10:36:18 AM



73



Preparing for Pediatric Disasters

San Joaquin Community Hospital

- 2 year progress report

YOUR SCORE AND COMPARATIVE SCORES:

92

YOUR 2015-16
HOSPITAL SCORE
OUT OF 100

53

2013-14 SCORE FOR
YOUR HOSPITAL

84

2013-14 AVERAGE SCORE
OF SIMILAR PEDIATRIC ED
VOLUME HOSPITALS

69

2013-14 AVERAGE SCORE
OF ALL PARTICIPATING
HOSPITALS

74



Preparing for Pediatric Disasters

Peds Ready Project: The Assessment

- Provided immediate gap analysis report

Physicians, Nurses, and Other Health
Care Providers Who Staff the ED

YOUR SCORE:
5.0 out of 10

- You indicated that specific pediatric competency evaluations ARE NOT required of physicians staffing the ED.

IMPORTANCE: Competency evaluations, such as for sedation and analgesia, ensure that physicians have the knowledge and skills to provide optimal clinical care for children. Such competency evaluations may be required by accreditation organizations such as the Joint Commission or required by local hospital credentialing.

RESOURCES FOR IMPROVEMENT: For additional resources regarding the staffing of the ED refer to the Guidelines for Care of Children in the Emergency Department or visit the resources available about this section found at www.pediatricreadiness.org under *Readiness Toolkit > Physicians, Nurses, and Other ED Staff*.

75



Preparing for Pediatric Disasters

Current Kern County initiatives and goals

- Pediatric-specific bioorganic response
 - Hospital- and field-based drill
 - Pediatric-specific decontamination considerations
 - Reunification planning
- Active shooter preparedness
- Open a pediatric-specific ER
 - Planned opening by end of 2016

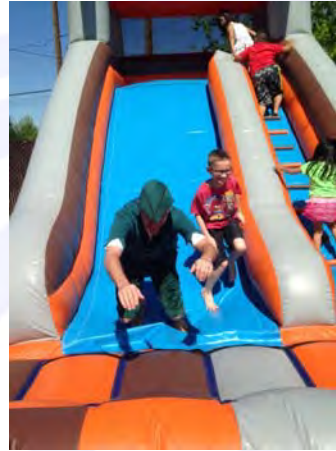
76



Preparing for Pediatric Disasters

So ... Are You Pediatric Ready, **Today?**

Because just another
normal day ...



77



Preparing for Pediatric Disasters

Could change in an instant AND...



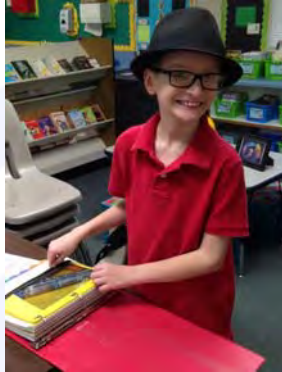
78



Preparing for Pediatric Disasters

If You **ARE** Pediatric Ready, **Today**

- Outcomes **WILL** improve!



Coleman Silvas

79



Preparing for Pediatric Disasters

Thank you,

Jason J. Silvas

Pediatric Program Coordinator
San Joaquin Community Hospital

Office: (661) 637-8830

Email: silvasjj@ah.org

80



Preparing hospitals for pediatric surge Los Angeles County

Bridget Berg, MPH, FACHE
Manager, Disaster Resource Center
Children's Hospital Los Angeles



Topics

- Los Angeles County Hospital Preparedness Program (HPP) – Pediatrics
- Pediatric Surge Plan
- Tools of the trade
 - Training resources
 - Support for Children with Access and Functional Needs
 - Guidance

LAC HPP - Efforts to Date

- Los Angeles County Pediatric Surge Plan 2011-2015
- SurgeWorld - web-based training tool – JumpSTART and START triage – 2015
- Improving Preparedness for Children with Special Needs (Access and Functional Needs) – 2015
- Incident Command – app-based tool to support leadership engagement in emergency management and areas of concern related to children – 2015-2016



83

LA County Existing Systems and Resources

- 100 Acute Care Hospitals
- 81 HPP Partners
- 14 Trauma Centers
- 13 Disaster Resource Centers (DRCs)
- Los Angeles County Emergency Medical Services Agency — Medical Alert Center (MAC)

LAC EMS Agency – Medical Alert Center and Hub and spoke concept

84

LOS ANGELES COUNTY PEDIATRIC SURGE PLAN

85

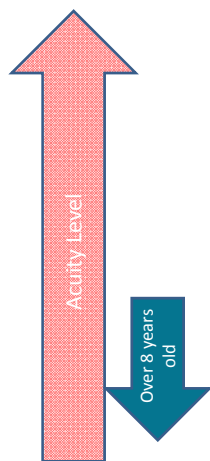
Phase 3 — Plan Evaluation — Exercises April 20, 2015 and June 11, 2015



Children's Hospital Los Angeles –Susan Goldman

86

Pediatric Surge Plan – 2016



HOSPITAL TIER	TIER DESCRIPTION
Tier 1	Pediatric Centers (PTC/PMC)
Tier 2*	Pediatric Medical Centers (PMC)
Tier 3	Adult Trauma Centers
Tier 4	Pediatric Acute Beds
Tier 5	Emergency Departments Approved for Pediatrics (EDAP)
Tier 6	No Pediatric Services
Tier 7	No Emergency Services/ Specialty Centers

* Note: In a pediatric trauma surge event, patients would go to Tier 3 before Tier 2

87



TOOLS OF THE TRADE

88

Surge World

TRIAGE

Disaster Triage

- START
- JumpSTART

Player

- Selects who to triage
- Learns algorithm

LOGISTICS

Surge Logistics

- Staff
- Space
- Stuff

Player

- Manages patient surge by allocating resources

89



Incident Command

- Leadership
- Communication
- Decisionmaking
- Teamwork

90

Pediatric Surge Quad Fold

Includes:

- Pediatric risks during disasters
- Pediatric Assessment Triangle
- Pediatric signs of respiratory distress and respiratory failure
- JumpSTART triage
- Daily maintenance fluid and electrolyte requirements
- Nutrition
- Dehydration
- Normal development
- Equipment sizes
- Shock
- Fluid resuscitation
- Burn treatment – fluid resuscitation

91



Elements of Pediatric Preparedness for Health Care Facilities

- Awareness and acknowledgement
- Leadership
 - Identify a pediatric champion (MD and non-MD)
- Plan
 - Understand your risks
 - Family Reunification
- Decontamination Nuances
 - Keep parents/babies together, baby baths, warmers
- Pharmaceuticals
 - A method for dosing

92

Elements of Pediatric Preparedness for Health Care Facilities (cont.)

- Safety & Security
- Staff
 - Pre-identified
- Supplies
 - Basic supplies (diapers, nutrition, activities & distraction)
 - Medical supplies (e.g., smaller items - ETT, IVs)
- Transportation
- Triage
 - JumpSTART reference tools
- Training
 - Advanced training
 - Just-in-time training

93

IMPROVING PREPAREDNESS FOR CHILDREN WITH ACCESS AND FUNCTIONAL NEEDS

94

Defining At-Risk Individuals

- Before, during, and after an incident, members of at-risk populations may have additional needs in one or more of the following functional areas:
 - Maintaining independence
 - Communication
 - Transportation
 - Supervision
 - Medical care
- Examples: children, senior citizens, pregnant women ... individuals who have disabilities; live in institutionalized settings; are from diverse cultures; have limited English proficiency or are non-English speaking; are transportation disadvantaged; have chronic medical disorders; and have pharmacological dependency.

Source: Pandemic and All-Hazards Preparedness Act (PAHPA), Progress report Aug. 2008

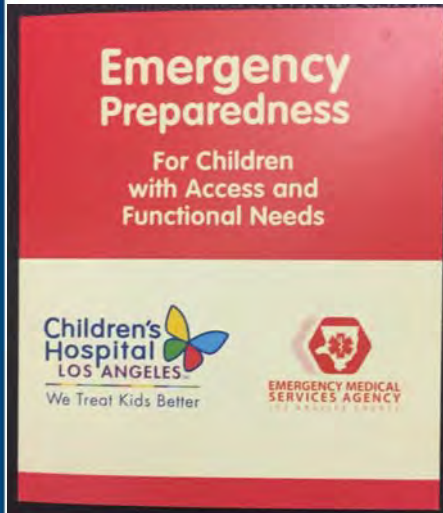
95

Themes

- Parents typically did not feel prepared, but wanted to be prepared
- Managing child's everyday needs was a factor in delaying preparedness efforts
- Concerns: transportation, evacuation, medication, food and technological dependency
- Clinicians didn't have specific plans but were interested

96

Resources Developed/Translated



1. Trifold for parents/caregivers
2. AAP Emergency Information Form
 - Translated to Armenian (Spanish existing)
2. Univ. of Washington – Disaster checklist for children with special nutritional needs
3. Division of Industry and Consumer Education – FDA Preparing for Power Outage for Medical Devices

97

www.CHLA.org/DisasterCenter



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Trauma Surge Coordinator

Katie Meyer, RN, BSN
House Supervisor

QUESTIONS?

99





Most Children Get Care in Their Own Communities



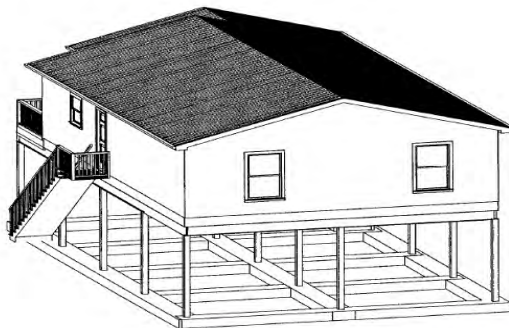
Nationally 80% of all children are seen in
“non-pediatric” Emergency Departments

101



Relies on a Foundation of Day-to-Day Pediatric Readiness

A ‘Blueprint’ for Disaster Readiness



All-hazard
mass casualty
event readiness

Day-to-day
emergency
readiness

“The Elevated Hurricane Zone Housing Solution”

Slide from Steven Krug chair AAP disaster preparedness advisory council presentation...March 2010

102



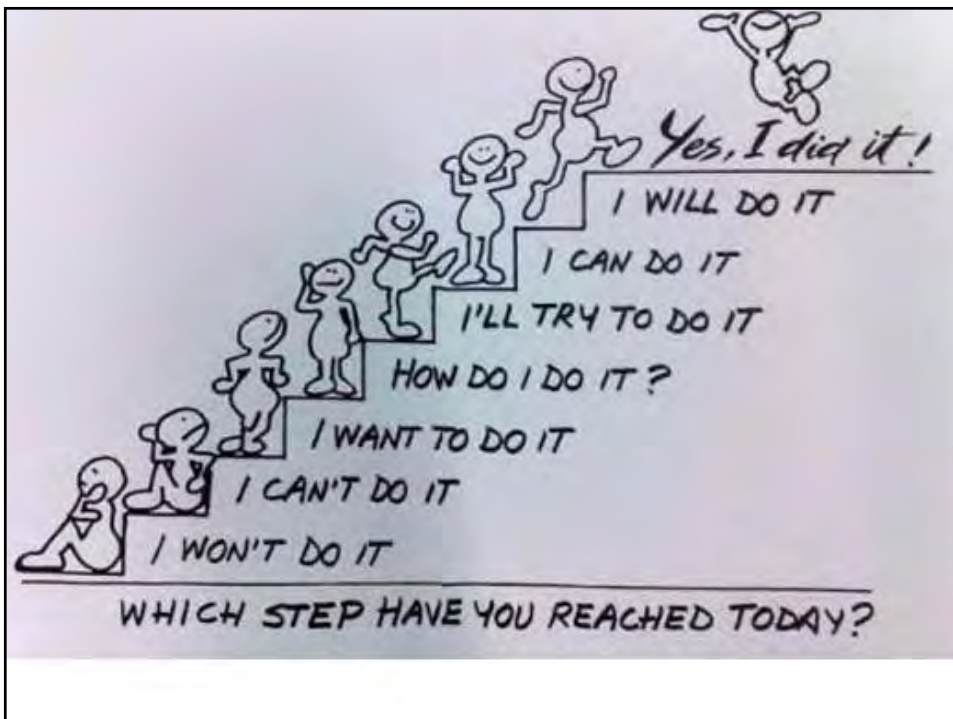
Getting Started...



**“All emergency
planning is
local”**

Dr. Jeffrey Upperman
Children's Hospital Los Angeles
National Disaster Center
National Advisory Committee for
Children and Disasters

103





American Academy of Pediatrics

“WINGING IT” IS NOT AN EMERGENCY PLAN

Make a disaster plan with your kids.

105



Guidance is Overflowing!







The
National
Curriculum
is Here!

TRIAK A&M ENGINEERING
FEV
EXTENDING CHOICES

NATIONAL EMERGENCY
RESPONSE AND RESCUE
TRAINING CENTER

**PEDIATRIC DISASTER RESPONSE
AND EMERGENCY PREPAREDNESS**

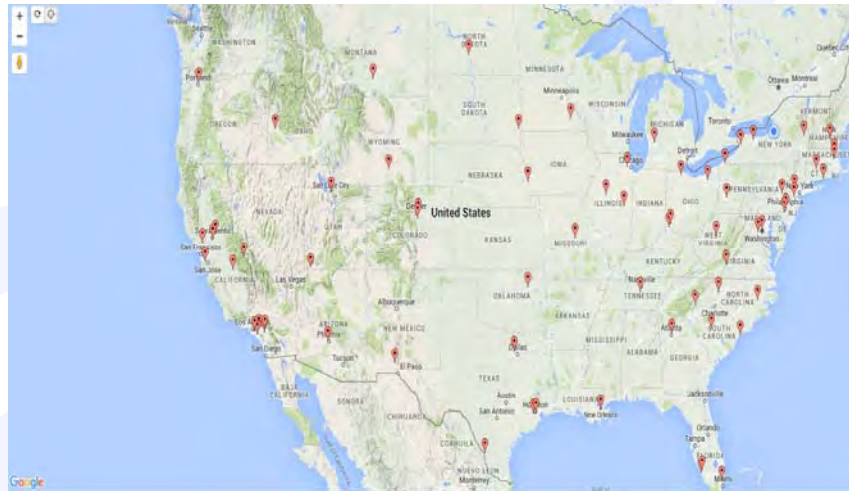
MGT-439

DHS/FEMA-funded course

 **FEMA**



First Year: Over 50 Deliveries



109



Functional and Access Needs

Universal Design: Accessibility for All





Behavioral Health Tools





111



National Pediatric Disaster Coalition

<http://www.npdcoalition.org/>




112



NPDC: Highly Networked State and Federal Engagement

CAL OES

EMSA

CDPH

CDHS

UASI

CHA

CAN

CCHA



Everyone's Talking Disaster & Kids

FEMA

ASPR

DHHS

AHA

NACHRI

EMSC

Pregnant Women Too!

113



New Partners Coming on Board Everyday





Community Health Resilience Initiative National Toolset



Community Health Resilience Initiative
A National Initiative and Toolset

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Pediatric Tabletop Exercise Toolkit for Hospitals
Pediatric Disaster Hospital Tabletop Exercise Toolkit
EMSC Pediatric Disaster Preparedness Guidelines: Hospitals
Children's Hospital Los Angeles
Pediatric Disaster Preparedness Resources

<http://communityhealthresilience.anl.gov/pls/apex/f?p=101:1>

115




TRACIE
HEALTHCARE EMERGENCY PREPAREDNESS
INFORMATION GATEWAY



TECHNICAL RESOURCES

<https://asprtracie.hhs.gov/technical-resources>



ASSISTANCE CENTER

1-844-5-TRACIE or askasprtracie@hhs.gov



INFORMATION EXCHANGE


<https://asprtracie.hhs.gov/information-exchange>

116



American Academy of Pediatrics

Children & Disasters



Disaster preparedness to meet children's needs

<http://www.aap.org/disasters/peds.cfm>

117



Help Find the Free Stuff
It's not about cost it's about focus




[http://hsc.unm.edu/emered/
PED/education/onlineEd.shtml](http://hsc.unm.edu/emered/PED/education/onlineEd.shtml)

OPEN PEDIATRICS™



Boston Children's Hospital
Until every child is well

118

EMSC IIC

Emergency Medical Services
for Children

Innovation &
Improvement Center

HOMEABOUTNEWSRESOURCESPROJECTS




Welcome To


The EIIC





EMERGENCY MEDICAL SERVICES FOR CHILDREN
INNOVATION AND IMPROVEMENT CENTER





July 2016 - The Web resources of the EMSC National Resource Center (NRC) are moving to the new Center Website. During our transition, contact EIIC Coordinator Krisanne Graves, Ph.D., R.N. (kxgraves@texaschildrens.org; 832-824-1301) if you are in urgent need of information.

The future of Emergency Medical Services for Children









120



Looking Ahead



Every Drill Integrate Children
Children should represent 25%





Flexing Regional Pediatric Capacity within Local Resources



Small But Mighty Successes Matter





Make it Routine and Normal



Include Family and Community





Building Relationships: Listening and Learning



The Tools and Talent Exist





A slide with a dark blue header and a light blue background with diagonal stripes. The header contains a logo and the text 'For More Information'. The main body contains contact information for Patricia Frost and the National Pediatric Disaster Coalition website. The bottom right corner has the number 132.

For More Information

Patricia Frost RN, MS, PNP
Contra Costa County EMS Director
Patricia.Frost@hsd.cccounty.us

National Pediatric Disaster Coalition Site
www.npdcoalition.org/

132





Thank You!

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