Introduction

This course is intended to start a conversation about pediatric surge preparedness at your agency/facility or in your region.

Intended Audience: Health care professionals: Nurses, physicians, nurse practitioners, physician assistants, respiratory therapists. Emergency Medical Service Professions: Paramedics, EMTs, and other first responders. Emergency Preparedness Specialists: Hospital/county/city emergency managers, coalition leaders etc.

Length: 19 Slides; 60-90 minute workshop and discussion.

Preliminary Work (Pre-Workshop)

This slide set is intended for hospitals and health care coalitions to start a conversation about pediatric surge preparedness. It is important to include executive level personnel in addition to clinical and emergency preparedness staff in these conversations.

You can choose to have the discussion as one group or broken into smaller groups with a group report depending on the size of your team. You may find it useful for each group to take notes so any strengths or weaknesses discussed are adequately captured.

As you discuss the following scenario, remember you can connect with colleagues at other facilities, health care coalitions or regions to discuss your solutions and learn from each other. We are grateful for your involvement in the care of children in the State of Minnesota, and your willingness to prepare for scenarios that perhaps have not occurred in your community before.

For more materials on Pediatric Surge Preparedness visit the Minnesota Department of Health website at: http://www.health.state.mn.us/communities/ep/surge/pediatric/index.html.
Presentation Notes

Slide 1

*Title Slide. Enter your Name, Job title and any appropriate facility logos.*

Welcome to the Pediatric Surge Preparedness workshop. I am *(insert name)* and I will be facilitating today. For the last two years, the Minnesota Department of Health along with pediatric medicine and surgical specialist and health care professionals have developed a Pediatric Surge Toolkit. This presentation will help us assess how prepared we are as an organization when it comes to a pediatric surge event.

Slide 2

*Modify as necessary or create more as needed.*

The objectives for today are as follows. Individuals will:

1. Be able to evaluate their facility’s disaster plan’s capability to handle a surge of pediatric victims.

2. Understand the impact of a surge of pediatric victims on their staff and facility.

3. Understand the unique aspects of a surge of pediatric victims and,

4. Know how to access help from other facilities during a disaster with many pediatric victims.
Slide 3
Let’s quickly review why planning for children is so important. Children—defined as ages birth-18 years old—make up 25% of the population. This means they are involved in most disasters as victims. Therefore, if buildings, vehicles, or groups are selectively affected children can make up the majority of victims.

Additionally, children require specialized medical equipment and resources for treatment. In a surge event, would we have enough to go around? So how prepared are we? Let’s examine this through a scenario.

Slide 4
It’s early February and a blizzard is approaching. The prediction is for rapidly dropping temperatures, wind gusts up to 30 mph and 12-18 inches of snow starting at noon.

The school systems have decided to release children early and the hospital is closing clinics early to let employees go home before the weather gets worse.
Slide 5

So how would this scenario impact hospital operations?

*This is a great point to allow your audience to come up with some answers before moving ahead with the below topics. If you’d wish to turn this into more activity based workshop, have the audience break into small groups and then report their ideas to the larger group. Another option is to write down on large posters or a sticky wall each idea thrown out and you can start to categorize them into the below topics.*

*If the audience needs prompting, then give them the below categories to think about before answering.*

We have to consider all aspects for our facility. So what about the following areas?

**Staff:** With schools out, staff may have to go home, some staff may be stuck at the hospital, others may not be able to make it in

**Supplies:** Vendor service interruption – usual supplies, O2, food affected? Fuel? Blood?

**Patient care:** Cannot d/c patients since they can’t get home, family members may be stuck at hospital

**Environment of care:** If power lost, back-up power always a concern, what will work and what won’t – check fuel and generators, make sure critical equipment is on generator plugs, locate flashlights, etc.

**Special:** Messaging to staff – staff should bring extra personal medications, toiletries, etc. to work, may need help finding rides, consider alternate transport (snowmobiles, 4x4, etc.), communications to patients/families about visiting.
Slide 6

So now, EMS notifies us a school bus carrying children has been hit by a tractor trailer. They have just arrived to assess the situation but believe that there are many injuries and at least one death.

Mutual aid ambulances are on scene and they do not know how many they will be sending you yet. Private vehicles with some of the victims are already on their way to us.

Slide 7

Let’s discuss how the school bus crash with multiple victims of varying degrees might impact EMS operations in our area.

*Again, use the below questions to prompt the discussion as needed.*

**Transport:** How many ambulances would be available? Will they need to double up patients in an ambulance? How can we enlist mutual aid? Can we organize a bus following a snow plow to get to the scene? What other options do we have? (another bus would be ideal, other public safety vehicles – state patrol, snow plows, etc.)

**Pre-hospital treatment:** How much pre-hospital treatment are they likely to get? By standers with capable vehicles may “scoop and go” some of the lesser injured victims and take them to the hospital. (This has happened during other disaster with transportation of victims via private vehicles. In this situation, no or minimal treatment would take place for those victims.)

**Safety:** What are some safety considerations? (proper restraints for kids vs. keeping at scene)

**Environment:** Prevention of hypothermia for both the victims and the EMS.
Slide 8
Okay, so now let’s say because of worsening weather and roads, transportation to a pediatric trauma facility is dangerous and all the patients from the accident are coming to us until the conditions improve. The weather prediction is at least 12 hours of blizzard conditions.

Slide 9
Now what? Do we activate our disaster plan?

Do not make assumptions, have a thoughtful conversation. You can give them leading questions to probe better discussion like the following:

▪ How is our plan activated? Or do we have a plan?
▪ Should we stand up incident command?

Do we have enough resources for 27 pediatric potential patients? What pediatric-specific resources we can draw on?

▪ School counselors, social workers, community pediatricians, teachers, etc. all could be huge help in a pediatric mass casualty incident.

What resources do we need? And what resources can we get?

▪ Do you have pediatric specific equipment that you can draw on? Are there pediatric clinics nearby that could have supplies?
Slide 10

Patients are arriving in via EMS (multiple victims/rig), state patrol (3 patients in backseat) and family trucks without warning.

- If you didn’t decide to initially activate incident command/plans, would you do so now?

If we were to activate incident command, who would be our Medical branch director?

- This person should not do patient care but should have a good knowledge of the ED and knows the capabilities of the staff.

The Medical branch director would:

1. Assign who will do Triage
   - Can EMS help with triage? Consider using JumpSTART triage or SALT.
2. Divide up the ED/clinic into zones of acuity and assign health care providers to the zones.
   - Red for the acutely injured, Yellow for the moderately injured and Green for those minimally injured or unharmed. You will also need a Black zone for the deceased.

Where will we place those who are not injured? Do we have a designated space we would use?
Slide 11
We receive information the adult Bus Driver has died, all 27 children alive.
3 are severely injured and need attention right away. The Medical Branch Director has assigned them to the Emergency physicians, physician assistants and surgeons.
The 6 non-life threatening injuries are in an open ward and being comforted by nursing assistants.
The 10 with minor injuries and the 8 uninjured and being taken care of in (enter designated space previously discussed).

Slide 12
Let’s discuss other issues that may arise.
Space: We only have 2 resuscitation areas/beds in the ED – can we fit a few more in that area? Is there a procedure area nearby that we could use? How many carts do you have? Can you get more? Where is the ED overflow and who will monitor it?
Supplies: What supplies will we need and where can you get more?
Staff: How much staff can we draw in to help? How many of them have pediatric experience?
Special Considerations: What will we do about family reunification? How about non-verbal children without identification? How do you keep the minimal and non-injured children from wandering away and occupied? What about food?
Slide 13
Roads will not open for 12-24 hours. Transfers cannot get out and parents cannot get in.

Slide 14
Wishing you could send them to a children’s hospital or trauma center... and that it was a sunny day with no snow?

Slide 15
But the roads are closed and it’s bad everywhere, so we are going to have to handle this on our own.

If you haven’t already discussed touch on the following topics. Keep in mind, anything that is discussed in this workshop as a feasible/workable option should make it into an EOP or pediatric surge plan.

- How about telemedicine? Phone a friend, internet connections.
- What community support do you have? Near-by clinics? Providers who live nearby or that you can send out a snow plow/snowmobile/ATV to bring them in?

What if our power goes out? Then what? Let’s think outside the box.
Slide 16

Ok, now that we’ve worked through all of that, let’s make plans for when the blizzard stops. We know we need to get some of these children to a pediatric trauma center.

Who would we want to send out first? And how would we send them?

- By Air or by Land? Do you have car seats or booster seats?
- Perhaps, the rotor-wing or transport ambulance can bring supplies or a provider to help until transfer of the most severe patients is done.

When will we be able to move patients out? How long will you need to keep them?

- You will need to feed them, bed them and keep them occupied until they leave.

Where will we send them?

- Discuss the situation with receiving facilities. How do you get mutual aid in the area for transfers?

Slide 17

Planning is key in preparedness and especially important when dealing with the pediatric population.

If we don’t know our resources, we cannot effectively use them, which is critical in planning for any incident and especially important with children. We’ve discussed some important points today.

Summarize next steps for your organization.
Slide 18

Answer any questions the audience/participants may have.

Slide 19

Insert your contact information.
Thank you for taking the time to join me today.
## Sign in Sheet

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