NCR Plan for Management of Pediatric Patients in an Emergency

PURPOSE: This plan for the National Capital Region provides guidance to healthcare system personnel responding to an incident in which the number and severity of pediatric injured patients in the Washington NCR area has severely challenged area EMS and/or hospital resources.

This tool is intended to provide guidance and does not substitute for the experience of the personnel responsible for making decisions at the time of the incident. This plan will be revised as additional experience is obtained from exercising and real world emergency response.

Plan and Considerations

The need to care for large numbers of pediatric patients related to potential "all-hazards" is a consequence facing the three healthcare coalitions (District of Columbia, Maryland and Virginia) in the National Capital Region (NCR) specifically to the limited pediatric specialty centers. These resources will be rapidly challenged in a mass casualty scenario. Note that any large scale mass casualty incident will involve adult patients.

To successfully manage a regional pediatric incident the following will be required: 1) situation and resource-related information processing and sharing within and across state lines 2) assisting with patient and resource tracking, 3) disseminating treatment protocols to non-pediatric centers, and 4) facilitating communication and agreements between facilities currently treating pediatric patients and various specialty receiving facilities and collaborating with ESF 8/regional coordination centers (CNC-DC, EMRC-MD & RHCC-VA). Communications centers will coordinate patient movement with first responders and hospitals in specific regions. Section: System Description explains coordination centers.

Affective Planning:

- Existing pediatric beds in the NCR are limited and have a restricted ability to surge at any given point. Non-Pediatric and Non-Critical Care Hospitals will need to support any surge within the NCR in supporting care of pediatric patients.
- Various hazard etiologies are possible that could simultaneously generate a large number of pediatric victims in the NCR.¹

¹ This plan notes "all-hazards" that could be faced in the NCR. Though not specifically written for radiation or chemical pediatrics, elements of this plan could be applied to these etiologies provided adequate decontamination and elimination of hazards has been addressed for these patients.

- Local Fire/EMS will communicate and coordinate through regional coordination centers, and/or designated receiving hospitals regarding patient transports and any specific information related to the event involving, "all-hazards" which include chemical, biologic, radiologic, nuclear or explosive agents.
- Victims of these incidents may sustain multiple injuries or illness to exposure of chemicals, biologic (infectious diseases),
 radiologic or nuclear agents and require extensive treatment and care.
- Local First Responders and Hospitals will implement triage protocols based on the event and utilize personal protective equipment in caring for the patients.
- When the surge capacity of the pediatric centers in NCR is exceeded, it is expected that non-pediatric centers may need to
 provide care over a period of time until specialty centers can receive the patient(s). Resource assistance may be provided by the
 specialty pediatric centers in the NCR to support the non-pediatric centers with guidance on assessment, treatment and life
 support care.
- The plan denotes children under age 8 should be the first priority for referral to a specialty center with PICU capabilities.
- Based on historical evidence from other pediatric disasters, many patients cared for at non-pediatric centers may be directly discharged from these facilities after initial treatment is completed.
- The optimal final disposition for critically ill or injured pediatric patients is to transfer to a specialty pediatric center for treatment.
- Regional transfers of pediatric patients from non-pediatric centers to pediatric centers will have to be coordinated at the
 jurisdictional and regional level to prevent duplication of effort, and to maximize efficiency of the process. This is in distinction to
 the everyday process in which individual facilities arrange transfer of patients in a non-centralized fashion.
- State-based/consortium pediatric coordination centers may play an invaluable role in locating extra regional pediatric center beds.
- Federal resources, though typically available to assist, will take time to mobilize and deploy and may take up to 72 hours.
- Local Fire/EMS as well as healthcare facilities may find themselves responding to a pediatric disaster while still having to manage other day-to-day emergencies.

- A regional response with pediatrics will ultimately affect an increase of adult patients during a response
- The success in executing any response plan is dependent upon regular examination, revision and training of the plan. This will
 include not only the NCR Pediatric Specialty Centers pediatrics, but patients being cared for at non-pediatric hospitals and
 support of families during the disaster.

Key definitions

- **Pediatric mass casualty incident**: Any incident generating pediatric patients that severely challenges or exceeds the current capabilities of the adult and/or pediatric centers in the NCR.
- **Pediatric Patient**. Pediatrics will be defined as those patients from 0 to 18 years of age. Patients under 8 years of age will be prioritized to a specialty care children's facility. This due to the anatomy and physiology of young children that require specialized equipment and clinicians providing care. Overwhelming of resources will define placement of older pediatric patients into adult care units.
- Mass pediatric casualty incident response level: Used to convey the severity of a mass casualty incident involving pediatric patients and used by Pediatric Centers and other non-pediatric centers to facilitate the healthcare system response. The three (3) designated levels are:
 - Level 1: Any incident that can be managed utilizing pediatric beds and resources within the NCR
 - Level 2: Any incident that requires more pediatric beds and resources than are available in the NCR but that can be managed utilizing regional assistance.
 - Level 3: Any incident where a request for Federal Coordination to assist in pediatric patient care is indicated (e.g. activation of the NDMS system, DMAT deployment).
 - o Initial determination and on-going determination will be made by the Emergency Medical Service (EMS) on scene, or local incident management system. Decisions should be communicated to NCR communication/coordination centers.
- Hospital tiers: Hospitals designated to receive pediatric casualties based on acuity when pediatric victim counts exceed
 pediatric surge capacity of designated pediatric centers. Annex NCR Hospital Capabilities(future annex to add) Appendix 1 page
 11-13.

- o A: Designated pediatric Specialty Hospital Center with PICU
- o B: Designated Hospital with pediatric in-patient, no PICU
- o C: Acute care Hospital with no pediatric amenities
- D: Free Standing ED/minor care clinics for (walking wounded/minor ailments)

The initial and on-going determination of the appropriate Tier for medical care will be made by the local Emergency Medical Service (EMS) Incident Commander on scene, or coordination center based on circumstances elated to the "all-hazards" no notice event. Initial scene treatment and transport will not be delayed while awaiting direction from the hospital coordinating center. This is specific to an "all-hazards" event that occurs and overwhelms the NCR without any notice or delayed response.

System Description

EMS: Public safety agencies in the NCR will maintain primary responsibility for scene transports and, if resources allow, assist with inter-facility transports. JUMP START/START PLUS may be used to assist in determining the criticality of the patients being clinically managed. Private sector NCR EMS agencies may primarily be used to conduct inter-facility transfers although they could be used to provide scene transports if requested by the respective primary EMS agency.

Pediatric Specialty Center: NCR Pediatric Specialty Center Appendix.... is a hospital that provides medical care from birth through adolescents. The hospital has a pediatric intensive care unit (PICU) with the hospital specializing in the care of critically ill patients. A PICU is directed by a pediatric intensivist and staffed by trained clinicians. Pediatric Specialty Center shall include in their planning assumptions for increased surge capacity.

Acute care facilities: All facilities - may have pediatric patients transported to them and have to provide medical care for up to 72 hours; JUMP START/ START PLUS may be used to assist in determining the criticality of the patients being clinically managed. Planning may address staffing needs and equipment and supply requirements for caring for patients for up to 72 hours.

Mental Health Services: Each hospital and local/state jurisdiction may activate their response plans to provide inpatient and outpatient mental health support to pediatric victims and their families.

The Office of the Chief Medical Examiner (OCME), Virginia Medical Examiners' Office (VAME) and Maryland Medical Examiners' Office (MD OCME): Medical Examiners will be responsible for coordinating the management of all incident related deaths in their respective jurisdictions. Medical Examiners will conduct death investigations working as appropriate with the FBI, local law enforcement and other law enforcement agencies. They will work with the healthcare facilities to provide special decedent management instructions and arrange for pick-up of the deceased when appropriate.

Hospital Regional Coordination Centers (HRCCs)

These facilities include the Coalition Notification Center, DC (CNC), Virginia Regional Healthcare Coordination Center (RHCC), and HC Standard in Maryland.

HRCCs may provide support to a mass casualty pediatric response by following their respective response plan(s) and /or the NCR Information Sharing Procedure. These steps may include but are not limited to:

- Provide initial notification of an actual or potential mass casualty pediatric incident to member organizations and the jurisdiction
- Provide on-going notifications regarding any change in the incident status (including hosting situation update teleconferences as per their Base Plan).
- Collect data from the receiving facilities regarding the numbers of patients received and severity of pediatrics
- Interface with other HRCCs to collect data regarding available resources in those jurisdictions. This task may be conducted when appropriate and in coordination with actions of local/state health authorities.
- Facilitate dissemination of treatment guidelines to non-pediatric centers CHCs and PPOs.
- Facilitate accumulation of resource needs from all healthcare organizations in their area /region and work to address these needs through implementation of mutual aid or through support from the jurisdiction (including hosting resource sharing teleconferences).
- Support the process of identifying pediatric center beds for patients out of the immediate NCR (pending Concept of Operations).

Coalition Notification Center (CNC): Coordinating center for the hospitals and skilled nursing facilities operating in the District of Columbia. The DC-CNC operates on a rotating basis by the communications centers of Children's National Medical Center, MedStar Washington Hospital Center and Providence Hospital.

Regional Hospital Coordination Center (RHCC): Coordination center for the Northern Virginia Hospitals (covers hospitals as falling within the geographic area from Caroline County to Loudoun County, and as far west as Fauquier County up to DC. The RHCC is operated by the Northern Virginia Hospital Alliance (NVHA) and is located in Herndon and supported by Physicians Transport Service communication officers 24/7/365,

Emergency Medical Resource Center (EMRC): Coordination and notification center for communication among hospitals and EMS agencies in the State of Maryland.

ESF -8 Health and Medical: The incident jurisdiction may activate their Emergency Operations Center (EOC) to assist in community support to the response community. If activated, ESF 8 will operate per their respective response plans and may

be capable of supporting information and resource needs of the HCFs within their jurisdiction. Other jurisdictions may activate their EOC to provide incident management assistance if needed.

NCR Pediatric Task Force: A response collaboration made up of representatives from the NCR Coalitions representing INOVA Fairfax Children's Hospital, Children's National Medical Center and MedStar Georgetown Hospital Pediatric Specialists assembled usually virtually and as needed during response. Additional support may be made available through the Northern Virginia Regional Triage Officer using Telemedicine to support Northern Virginia Hospitals and NCR Partners. The primary purpose of the NCR Pediatric Task Force is to examine pediatric patient data from the NCR Pediatric Centers and acute care facilities and to prioritize and allocate available beds identified through NCR Coalition Centers or Health Emergency Preparedness Response Administrations. The NCR Pediatric Task Force can also assist with decisions related to the incident such as prioritization of transportation assets.

The NCR Pediatric Task Force has responsibility for the prioritization of patients and pediatric beds outside of the region or other critical resource allocation.

Concept of Operations

- EMS Triage and Transportation Decision Making
 - EMS personnel will follow their day-to-day use of the American Academy Pediatrics criteria to determine what patients will be taken to the regional pediatric center(s) in the NCR. JUMP START/START PLUS may be used to assist in determining the criticality of the patients being clinically managed.
 - The HRCC will in turn make notification to the hospitals in their jurisdiction and notify the other two notification centers per the NCR Information Sharing Response Plan.
 - EMS transport personnel shall follow their local /mutual aid protocol for ground and air asset utilization, and presenting patient reports to receiving facilities.
 - Private sector EMS agencies shall be used per the Fire Department/community surge plan.
- Initial Destination Facilities
 - Critical pediatric patients, and patients under 8 years of age will be prioritized to the specialty pediatric centers in the NCR for available care and bed placement.
 - When the surge capacity of the specialty pediatric centers in the NCR has been reached the Pediatric Center will notify the Hospital/Healthcare Regional Coordination Center (HRCC) in their respective area
 - The incident jurisdiction Hospital Regional Coordination Center (HRCC) shall immediately notify the other HRCCs of the situation; Instructions should be relayed to EMS command to next take critical pediatric patients to the next available

hospital within the tier system; depending on the situation this may result in transport being done by ground or air units to hospitals out of the incident jurisdiction/state.

- If the need still exists for hospital care of additional victims beyond what the NCR specialty pediatric centers can manage then pediatric patients next should be sent to the closest acute care facility with a Pediatric Intensive Care Unit.
- The specialty pediatric centers and NCR Health Emergency Coordination Center (HECC) shall regularly communicate with the Hospital/Healthcare Coordination Centers (HRCC) by radio or phone to assist with initial destination hospital routing decisions.

Pediatric Center Consultation

1. Resource sharing with Non-Pediatric Centers

To assist Specialty Children Centers, Trauma Centers and the acute care facilities to care for pediatric patients during the initial stages of an incident the following may be used when available.

2. Use of teleconferences to provide assistance

At various points during the NCR response to a mass pediatric casualty incident the Pediatric Center Directors, and /or Regional Pediatric Task Force may decide to conduct teleconferences involving incident command and clinical staff from each facility. The teleconference will be used to discuss the evolving situation, clinical management issues and transfer procedures. Announcements about the teleconference(s) will be made using NCR HIS, RHCC -WEB EOC, EMRC – HC Standard.

3. Telemedicine

Available telemedicine consultation may be employed to provide clinical consultation by Pediatric Center physicians to Trauma Centers and /or non-pediatric specialty center facilities that are caring for pediatric victims. Arrangements for the consultation will be made directly between the involved facility command centers.

- Inter-facility Transfer Determination and Prioritization
 - Reporting transfer requests during activation of this plan.....
 - Hospitals with critical pediatric patients that they cannot definitively manage shall contact the NCR Pediatric Task Force shall notify their HRCC for instructions.
 - The Patient Transfer Request Form (Appendix....shall be completed by the requesting (sending facility) and faxed or emailed to an address provided by the NCR Regional Pediatric Task Force.
 - Information on phone numbers/fax machines/or emails will be included once determined

• The Triage Decision Table (Attachment XXX) will be used by the NCR Regional Pediatric Task Force for decision-making regarding which patient hospitals request transfer (Using Appendix...) to a Pediatric Center, Trauma Center or other appropriate Acute Care Center for definitive care and their new transfer priority.

Regional Transfers

- The Pediatric Task Force will regularly review the Patient Transfer Request Form data to analyze the evolving pediatric patient census information collected from the NCR Pediatric Task Force.
- The Pediatric Task Force will .
 - When time and opportunity permit discuss the patient history with the sending/receiving facility.
- The receiving facility shall notify the sending facility/ Pediatric Task Force when the transfer patient arrives at their facility.
- Transfers throughout the NCR
 - For critical responses Trauma Centers and acute care facilities in NCR will be used as needed.
 - The NCR Pediatric Task Force will coordinate transfers working in conjunction with local/state ESF 8 efforts
- The recipient facility shall notify the appropriate HRCC in their region when the transfer patient arrives at their facility.

Out-of-the-region Transfers

- Pediatric Specialty Centers
 - The Pediatric Centers and /or the HRCC shall request the assistance from state ESF 8 if needed for of out-of-NCR transfers to designated pediatric facilities along the US Interstate-95 corridor or within Maryland and Virginia.
 - Information will be shared via phone, teleconferences or via intranet databases.
 - Required information will be completed and submitted in a timely manner by the NCR HRCCs.
 - When time and opportunity permits the sending facility shall present a patient report to the recipient facility.
- Assistance from EMAC and/or the Office of the Assistant Secretary for Preparedness and Response (ASPR)
 - The NCR HRCC and or state ESF 8 may seek mutual aid assistance (through EMAC) and /or also consult with the ASPR/ HHS to seek assistance in managing the situation. Depending on nature of the incident and Executive Branch declaration(s) this assistance may include:
 - o Working with Consortiums to identify additional pediatric/trauma center beds in the United States.
 - Securing transportation assistance for local, regional or nationwide transfers resulting from a Stafford Act Declaration
 - o Acquiring needed equipment and supplies.
 - o Specialty related clinical management guidance.
 - o Providing pediatric trained specialists if needed and available

- o Coordinating DOD assistance with pediatric beds and or transportation assistance.
- The HRCCs shall keep healthcare facilities appraised of the results of their interaction with state/ federal authorities via teleconference, email or fax.
- Assistance from DOD

DOD assistance may be sought through state emergency management and or HHS. Requested assistance may include pediatric/trauma beds, equipment/supplies/medications or transportation.

When appropriate pediatric patients who are military dependents that may be transferred to a DOD or federal facility for acute care and/or rehabilitation.

- Inter-facility Transportation Assistance
 - Hospitals needing to transfer patients to a Pediatric or Trauma
 Center shall employ their normal private sector EMS transport contracts.
 - Hospitals shall contact their local Health Department -ESF 8/ HRCC when transportation assistance is needed.
 - ESF 8 /HRCCs using their internal policies, will contact private sector EMS, and public safety FEMS for immediate help;
 - Additional assistance shall be sought when needed by seeking assistance from Fire/EMS agencies and private sector EMS agencies in the rest of the NCR.
 - Whenever possible a Pediatric Advanced Life Support(ALS) /critical care capable vehicle shall be used to transport a critical pediatric patient.
 - ESF 8 shall notify the requesting facility of what transportation arrangements have been made.
 - Aeromedical transports shall be used when available and weather permits.
 - An individual facility may make arrangements directly or request assistance from the ESF 8/RHCC.
 - Assisting aeromedical programs may include the following:
 - US Park Police
 - MedStar Health
 - STAT Medevac/Children's National
 - Maryland State Police
 - Fairfax County Police
 - PHI/AIRCARE

- Allocation of Scarce Resources
 - Hospitals encountering a need for pediatric care resources shall attempt to acquire the needed item(s) using their normal/emergency procurement methods
 - When unmet needs exist the hospital shall notify their jurisdiction's ESF 8.
 - ESF 8 shall initiate efforts to obtain needed item(s) by contact with healthcare facilities in their jurisdiction/region/state and facilitate arrangements to have available resource sent to the requesting facility.
 - Prioritization recommendations may be established by each healthcare facility and/or local health officials and shared with hospitals via email/fax.

If local, regional and state efforts to provide needed assistance are lagging or insufficient the NCR Pediatric Task force will meet to discuss available options and establish recommended practice policy. These meetings may include inviting representatives from the three state governments DOD and the general community when appropriate to assist the NCR Pediatric Task Force

- Rehabilitation Services
 - Initial response planning efforts by the NCR Pediatric Task Force will take into account the need for inpatient and outpatient rehabilitation services for the pediatric patient.
 - Available hospital and non-hospital base rehabilitation resources will be identified and considered in patient inter-facility transport decisions.
- Role of Community Health Centers, Urgent Care Centers and Private MD Care
 - Minor pediatrics injuries or illnesses may be able to be managed by clinics and physician offices based on standard clinical management practices or instructions published by the regional pediatric centers.
 - This care may include initial and/or follow up care
- Mass Fatality Management
 - The deceased from a Pediatric MCI will be handled per local /state practice in collaboration with that jurisdictions Medical Examiner's Office.
 - Depending on the cause of the pediatric MCI, law enforcement may ask EMS and /or the hospitals for the personal effects and other materials associated with a pediatric related death.

- Family Reunification
 - Local protocols will be followed when attempting to provide family reunification assistance.
 - Healthcare facilities may be asked to provide special assistance to law enforcement, mass care authorities and/or the Red Cross.
- Patient Care Documentation

Hospitals will utilize their normal medical records to document the patient assessment and medical care given to pediatric victims.

Termination of Response Activities and Recovery

Each healthcare facility will use their own criteria to determine when they can return to normal operations; consideration will include what other healthcare facilities are doing and recommendations from the HRCCs.

The HECC /HCRT/NCR Regional Pediatric Task Force shall continuously monitor the healthcare systems response to the incident. Particular attention will be paid to surveillance of the following:

- number of new incident victims being seen in Emergency Departments, Urgent Care Centers and Clinics
- admissions to Pediatric/Trauma Centers/acute care facilities
- status of getting critical Pediatric patients to Pediatric Centers (in NCR or elsewhere in US)
- availability of needed equipment, supplies and medications
- Based on the collaborative situation assessment the NCR Regional Pediatric Task Force will determine when they can terminate their respective efforts. This decision will be announced via the HIS/EMRC/RHCC.

Following the termination of system wide response after action activities will be initiated by NCR Regional Pediatric Task Force.

- These activities will include conducting debriefings and "hot wash" discussions and writing an After Action Report on the healthcare systems response to the incident.
- Analysis and archiving of incident management documentation will also be completed.

Reimbursement

 Hospitals/Healthcare Facilities will work with their finance departments and local/regional health officials to optimize cost recovery for patient care services provided during the incident

- Depending on the cause of the mass pediatric casualty incident hospitals may be eligible for federal reimbursement for their facilities response and /or direct patient care costs. The NCR Regional Pediatric Task Force will work with state health and emergency management officials to determine federal funding eligibility and submission instructions. This information shall be conveyed by email, HIS/WEB EOC/FRED and /or teleconference.
- EMS agencies and hospitals may be asked to submit details about non- reimbursed response cost to their DOH and /or EMA. This information may be used to advocate for federal reimbursement rule changes.

Appendix 1

NCR Pediatric Project Information Table

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DC Region Hospitals Hospitals	Pediatric ED	Pediatric In- Patient Medical/Surgical	PICU	NICU	Pediatric Trauma	Pediatric Burns	Surge Resource capabilities
MedStar Washington Hospital Ctr	200	200	no	Voc	soo 1 Avrs I		limited NICU surge
Wedstar Washington Hospital Cti	no	no	no	yes	see 14yrs +	no	<5pts
MNRH	no	no	no	no	no	no	none
George Washington University	no	no	no	yes	no	no	school age-teenagers
MedStar Georgetown University	no	yes	yes	yes	no	no	
Childrens National Medical Ctr	yes	yes	yes	no	yes	yes	
Providence Hospital							
Howard University Hospital							
Sibley Hospital							
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MD Region Hospitals	Hospitals	Pediatric ED	Pediatric In- Patient Medical/Surgical	PICU	NICU	Pediatric Trauma Trauma	Pediatric Burns	Surge Resource capabilities
		no/sees	Wicalcal/ Sargical			Trauma	Darris	
Doctors Community		peds	no	no	no	no	no	some supplies
Shady Grove Adventist		Yes/18 Beds	no	no	yes/Level 3	no	no	
MedStar Southern Maryland		no/sees peds	no	no	yes	no	no	
Suburban Hospital		yes/3 beds	yes/4 beds	no	no	yes/15 yrs&>	no	some supplies
Washington Adventist		no/sees peds	no	no	no	no	no	burn kit supplies
Holy Cross Hospital- Germantown		no/sees peds	yes	no	level 2-8 beds	no	no	some supplies
Holy Cross Hospital Silver Spring		yes/9 beds	yes 26 beds	no	level 3-46 beds	no	no	some supplies
Laurel Hospital		no/sees peds	no	no	yes	no	no	
Prince George's		no/sees peds	no	no	no	no	no	
Medstar Southern Maryland								
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VA Region Hospitals	Hospitals	Pediatric ED	Pediatric In- Patient Medical/Surgical	PICU	NICU	Pediatric Trauma Trauma	Pediatric Burns	Surge Resource capabilities
Fauquier Hospital		no/sees peds	no	no	no	no	no	limited surge supplies
Novant Haymarket		no/sees peds		no		no	no	Just open 3/26
Novant Prince William		yes	yes	no		no	no	surge supplies
Reston Hospital Cnter		yes		no		no	no	limited surge supplies
Inova Loudoun		yes	yes	no	yes	no	no	surge supplies
Inova Fair Oaks		no/sees peds	yes	no	yes	no	no	
Inova Fairfax		yes	yes	yes	yes	yes	no	surge supplies
Inova Mount Vernon		no/sees peds	no	no	no	no	no	limited surge supplies
Inova Alexandria		no/seesped		no	yes	no	no	
Virginia Hospital Center		no/sees peds	low acuity	no	yes	no	no	
Sentara N VA Medical	<u> </u>	no/sees peds		no	yes	no	no	
Fort Belvoir		no/sees peds	yes	no	no	no	no	limited surge supplies
Stafford Hospital		no/sees peds	no	no	no	no	no	

Stone Springs Medical Center	no/sees peds	yes					
Mary Washington	no/sees peds		no	vos	yes/LV 2	100	surge supplies
	no/see	yes	no	yes		no	surge supplies
Spotsylvania Regional	peds		no		no		
Inova Healthplex Springfield	no/see ped						
Inova Ashburn	no/see ped						
Inova Healthplex Lorton	no/see ped						
IECC Fairfax	no/see ped						
IECC Reston	no/see ped						
IECC Cornwall	no/see ped						
MWH Free Standing	no/see ped						
Sentara Lake Ridge	no/see ped						