

Metropolitan Washington Council of Governments
NCR Surge Planning Task Force

Discussion Draft
April 1-29, 2005

National Capital Region
Surge Capacity Concept of
Operations Plan

Dedication

This document represents the collected knowledge, skills and experience but most of all, the dedication of many committee members, private sector partners, appointed and elected officials combined with subject matter experts over the past 5 years. The publishing of this document will make another step on the continuum of the “ladder to medical readiness”.

The first document entitled a “Planning Guidance for the Health System Response in the event of a Biological Attack” was published on September 6, 2002 by the Bioterrorism Task Force. The Task Force represented a cross-disciplinary, regional team convened to address biological and chemical terrorism preparedness and response. Many hours of individual work and collective committee review resulted in our first guidance document.

This was followed by a detailed plan entitled Regional Support ESF #8, which began defining in greater detail, the protective system being assembled by medical leadership in the NCR. A detailed plan for Syndromic Surveillance was completed, describing the unique NCR-Enhanced Surveillance System, designed by members of the Health Officials committee and their State partners with Johns Hopkins University Applied Physics Laboratory.

As the formal structure of the National Capital Region was put in place, the NCR senior policy group requested a task force be created to articulate the Medical Surge capability and capacities within the region. This document builds on the extraordinary work that has done by the District of Columbia, the State of Maryland and the Commonwealth of Virginia, along with member of the local jurisdictions. As we move forward in our medical preparedness, we salute the contribution of the past that enabled us to move to a new level and await the future additional refinements, as we begin to measure our preparedness into the next phase of our work.

Executive Summary

This plan has been developed to coordinate the emergency response activities of the health care systems within the various federal, state, and local jurisdictions which make up the greater National Capital Region (NCR) during a natural or man-made catastrophic event, such as an earthquake or terrorist attack. It is not meant to replace, supersede or dictate the response of sovereign jurisdictions but to pull them together and facilitate communication and coordination. In this document, the term *state* shall apply to the District of Columbia, the State of Maryland and the Commonwealth of Virginia. At the request of the jurisdictions, MWCOG serves as the facilitator for the jurisdictions of the region.

In the belief that a strong management system is crucial to a successful outcome, the plan has adopted the concept of six management tiers described in the Department of Health and Human Services' *Medical Surge Capacity and Capability* handbook and has adapted them to fit the unique conditions in the NCR. The management tiers are:

- Management of Individual Healthcare Assets—focusing on local events
- Management of a Healthcare Coalition—when an event affects more than one jurisdiction
- Jurisdictional Incident Management
- Management of State Response
- Interstate Regional Management Coordination—when the entire region is affected
- Federal Support to State and Jurisdiction Management—in a national emergency

Despite the inclusion of three “states,” multiple counties, assorted cities and the seat of the Federal government, as well as independent medical practitioners and health care facilities, the NCR health and medical community has sought to craft a system that allows the region to function as an intra-state entity. In case of a large scale emergency, coordination will be achieved through the National Capital Region Health Information Group, supported by memoranda of understanding and established working relationships among the leaders.

The components of the health care community are many and varied. They include

- Health care facilities: private medical practitioners, hospitals, hospice, and other community services. This is where most direct health care occurs. Although these practitioners and institutions operate independently, they are also willing partners with the public health departments and are often the first to report an emerging disease or problem. A major concern in the hospital sector is surge capacity and capability, i.e., having sufficient additional staffed beds, equipment, supplies, medications, space and staff and having the ability to meet additional specialized needs.
- Public health departments—a government function in every jurisdiction to provide and, where appropriate, coordinate planning, assessment, direct medical care where none other exists, and assurance that appropriate health care services are being provided. Operating in concert with other state and federal agencies, and through a collection of local departments, the Chief State Health Officer directs the response to public health emergencies. Surge Capacity in this arena is the ability of the public health system to increase capacity not only for patient care, but also for epidemiologic investigation, risk communication, mass prophylaxis or vaccination, mass fatality management, and other activities. However, public

health departments are woefully understaffed at the local, state and federal levels and UASI funds cannot be used to strengthen the system by the employment of public health professionals.

- Emergency Medical Services (EMS): primarily responsible for scene triage, treatment and transportation and, when possible, inter-facility transport assistance. EMS staff are responsible for scene management, certain patient care supplies, coordination of definitive care resources, support of the health care system and documentation of patient care records.
- Behavioral health services to address the acute and long-term behavioral health needs of the victims, their families, the response community and the general community. Best practices have been incorporated in local, state and regional plans to both treat persons suffering from terrorism and also to strengthen the community.
- Medical examiners to identify, examine, and provide other needed services for the dead and their families. Each state will follow its own mass fatality plan and memoranda of understanding will be developed among jurisdictions.

This plan is closely integrated with a number of other response plans at the Federal and State levels. The Federal government has developed several tools including NIMS, NRP, and 15 threat scenarios that have informed this planning process. As additional tools, standards and guides become available, the NCR will make use of them as well.

Contributing Organizations and Agencies

The MWCOG Senior Policy Group appointed state representatives to a committee and charged them with creating a medical surge plan. That group—the Medical Surge Planning Team, invited representatives from a variety of disciplines to join them as members of the surge team. The team then solicited input from a broader array of colleagues. This list includes the main groups represented. All ESF committees were also invited to have input.

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District of Columbia Health and Medical Services Organizations

District of Columbia Department of Health
Medical Society of the District of Columbia
DC Hospital Association

Maryland Health and Medical Services Organizations

Maryland Department of Health and Mental Hygiene
Maryland Institute for Emergency Medical Services Systems
Prince George’s County Health Department
Med-Chi of Maryland
Montgomery and Prince George’s Hospital Collaborative

Virginia Health and Medical Services Organizations

Virginia Department of Health
Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services
Northern Virginia EMS Council
Northern Virginia Hospital Alliance

Federal Government Health and Medical Services Organizations

Department of Health and Human Services
Department of Homeland Security
US Army
Federal Emergency Management Agency

Private Sector Health and Medical Services Providers

Capital Hospice
Medstar
Kaiser Foundation Health Plan
Inova Health System
Prince George’s Hospital Center

MAP of the National Capital Region



The Federal definition of the National Capitol Region includes Maryland, Virginia, the District of Columbia, and the counties of Montgomery, Prince George's, Arlington, Fairfax, Loudoun and Prince William and the City of Alexandria. This is different from the MWCOG region of the District of Columbia, the counties of the NCR plus Frederick County, and 11 cities. In the homeland security arena, Frederick County participates fully in the COG planning process; however, they are excluded from the UASI funding stream for the NCR. COG has requested a change in the Federal definition to include Frederick County; this request is supported by the Health Officials Committee. For purposes of this plan, COG, Virginia and Maryland have taken leadership roles along with the District of Columbia. In this document, "NCR" and "MWCOG" both include Frederick County except when referring to UASI funding. **At the request of the jurisdictions, MWCOG serves as facilitator for this project.**

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1 Introduction

The events of 9/11 in the United States in the fall of 2001, some of which played out in the Washington D.C. area, resulted in additional, though limited, demands being placed on the health care systems—public and private—to respond to a large number of casualties. These events did, however, demonstrate the critical need for coordination among agencies—local, regional, state and federal—to respond to a large surge in demand for health care services. This plan is a response to that need in the National Capital region.

In this document, the term *state* shall apply to the District of Columbia, the State of Maryland and the Commonwealth of Virginia.

This document is not meant to replace, supersede, or dictate the state or local response plans of the District of Columbia, Maryland, or Virginia. Rather it recognizes the sovereignty of those political entities and the roles of the states' elected officials, Chief Medical Officers, and health care providers in responding to an emergency in a manner deemed most appropriate to protect the citizens of that jurisdiction. In fact, this document relies on the states' developing essential response procedures, including interstate coordination and communication.

The role of this plan is to enhance inter-agency and inter-jurisdictional response coordination and communication during a naturally occurring or man-made event that results in large numbers of casualties requiring acute inpatient care, home care, quarantine and isolation, or behavioral health care, or causing large numbers of deaths.

This Concept of Operations (ConOps) paper has been developed by the Medical Surge Team, a team appointed by Chief Administrative Officers' group of the NCR. The plan is intended to provide guidance to the members of the healthcare and public safety communities in case of a large-scale event with mass casualties in the National Capital Region. Such an event will require extensive coordination among the District of Columbia, the Commonwealth of Virginia and the State of Maryland, each of which will follow its own set of plans and procedures.

The intent of this document is to pull together existing plans at multiple levels into a coherent whole. It is not our purpose to dictate or interpret the planning needs for a particular locality or state. Rather, this document seeks to identify and link those common regional planning steps with applicable local response activities and provide a platform for sharing regional information and resources and for making joint decisions on a regional basis.

1.1 Statement of Purpose

This NCR Surge plan has been developed to coordinate the emergency response activities of the health care systems within the various federal, state, and local jurisdictions which make up the National Capital Region.

1.2 Mission Statement

The mission of the COG-facilitated surge planning team is to establish a collaborative process and complete Edition I of a Concepts of Operations (ConOps) document that will serve as the collaborative platform for Medical Surge Capacity and Capability within the NCR by

- Providing support to the Council of Government's Board and Senior Policy Group
- Communicating medical surge needs consistent with the National Incident Management System (NIMS) guidance and UASI grant requirements
- Establishing an integration process to ensure consistency within the coordinating command structure.
- Publishing a Concept of Operations (ConOps) that addresses medical surge capacity and capability across all health and medical functions. This plan is considered a constant work in progress, which will be amended as best practices and new threats emerge.
- Establishing methodologies for incorporation of ConOps best practices by involving subject matter experts and requesting appropriate State and local representative participation. These requests may be made by the committee chair.

Details of the specific state and local plans are contained in the appendices or, in the case of restricted documents, are shared via the Health and Public Safety Officials on a need-to-know basis. This document describes an overview of how it will work. It would be naive to say that the plan covers all aspects of medical surge. Rather, the relationships developed and the ongoing refinement of the system are considered the key strengths of the plan. As new information or new standards emerge, the team will continue to improve this document to meet the health and medical needs of the NCR.

1.3 Planning Assumptions

It is anticipated in the design of this plan that many response tasks—such as the specific steps for activating an emergency shelter—will be defined in local emergency plans. Therefore, only general reference will be made regarding these steps and the reader will be referred to the local and state procedures for details. Most important, it is critical for the reader to ensure that these basic procedures are developed immediately if they do not currently exist in the local emergency plan.

In developing plans for the NCR, it is important to assume that the region will have to be self sufficient for up to 72 hours before Federal resources are available and in use.

Without dictating specifics, it is essential for each locality to ensure that planning measures have been developed to

- Alert and activate essential response personnel
- Designate trained on-call personnel to lead and participate in the community response and to request state and federal assistance
- Activate community response necessary to protect and support vital healthcare facilities
- Provide for the acute and long term care of all those who become ill or injured regardless of age and including those with behavioral health and other specialty care needs

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- Receive, store, secure and distribute immunization, prophylaxis and other supplies.
- Identify, equip, supply and staff prophylaxis distribution or medical care (i.e. existing medical facilities or designated Neighborhood Emergency Help Centers (NEHC) with attention to patient access, site security, staffing, indemnification of facility owners and medical staff).
- Establish crisis management systems
- Identify non-health tasks related to surge including transportation, law enforcement, etc.

Comprehensive emergency planning assumes a basic command structure allowing for the efficient and effective deployment of resources. This response plan conforms to the National Incident Management System (NIMS).

However, a command structure in the public health arena differs significantly from that used in fire services and law enforcement. This is because the practice of medicine is highly individual, based on standards of care that may be modified on the basis of circumstances and because most medical care is practiced in private settings, such as hospitals, clinics and physicians' offices, that are not under the direction of public health officials. Instead of exercising *control* over medical facilities and practitioners, public health officials rely on their highly developed networks of people and organizations mutually dedicated to providing the highest possible level of care.

It is the role of public health to assure that needed medical services are provided—not to provide the services but to facilitate provision of services by others. Public health practitioners may specialize in

- Preventive care, such as immunizations, patient and community assessments, development and implementation of health interventions and education programs.
- Environmental programs involving clean water, food and air.
- Regulatory services including inspection of facilities and development of standards targeting local community threats.
- Disease control activities including epidemiology, investigation and containment of infectious disease
- Chronic disease focusing on awareness, community intervention and specialized activities targeted to epidemiological evidence.

The strong partnership with the entire community including hospitals, nursing homes, assisted living facilities, HMOs and private clinicians constitutes the “the public health system” of a community. Each component of the system contributes to the health of the community.

While public health seeks to assure and facilitate the provision of medical services, it is the role of private providers to deliver care. It is the role of EMS to assess the scene, triage patients, provide medical stabilization and transport to designated hospitals.

The response to any sudden onset or slow onset mass casualty event must be managed *in addition to* the delivery of basic services that are provided as a part of daily routine healthcare delivery (i.e. cardiac care, labor and delivery, trauma care, dialysis, etc.)

Conditions in the National Capital Region (and areas contiguous to this geographical region), including density of the population, significant road congestion, and limited healthcare facility reserve capacity will impair the likelihood of successful implementation of the forward movement of patients out of this region. This would be especially true in the context of a contagious infectious agent, where the movement of potentially exposed patients to an area as yet unaffected by contagion would likely be discouraged. The successful use of air evacuation of patients while potentially do-able, is fraught with limitations. Rotor wing assets, while available from civilian, municipal and military sources, are only capable of moving small numbers of patients at a time. Fixed wing assets are particularly scarce, especially given the current commitment of DOD air assets to the West Asia theater of operations.

State and Federal assets may not be immediately available to healthcare facilities in the National Capital Region, and may take as long as 48 hours for delivery to individual healthcare facilities. In certain circumstances, the total number of available goods may not meet the sudden rise in patient demand. For example, the Strategic National Stockpile currently has 3000 Eagle UniVent ventilators in total, with a plan to add an additional 2000 more by the end of 2005. These are divided amongst the 12 SNS stockpiles across the United States. A single catastrophic attack in any city in the United States could easily require the use of this entire stockpile, in one city, leaving other areas vulnerable to the interruption of critical medical intervention.

Hospitals operate on a routine basis with available resources matching demand as closely as possible. They are required to have in place (and in fact do have) plans to respond immediately to large increases in demand due to natural or other disasters resulting in a large number of injured or ill persons.

1.3.1 Regional Issues

Coordinated planning is particularly challenging in the metropolitan Washington area. For that reason and others, **the jurisdictions of the region have requested that MWCOG serve as facilitator.**

Most of these jurisdictions have developed their own general emergency response plans of varying complexity. Some have also developed local bioterrorism response annexes to their general plans. These plans have been reviewed by the State and are in concert with the Concept of Operations management system. In addition, we recognize that the Federal role in the NCR is significant and continues to evolve.

The Office of the NCR Director, appointed by the Department of Homeland Security, established a "Senior Policy Group" which proposes policies associated with the NCR as it relates to Maryland, Virginia and the District of Columbia. The Chief Administrative Officers of the COG region interact with the Senior Policy Group to assure local concurrence on suggested policy, or recommend policies and procedures to the NCR group. The collaborative processes in place serve to reconcile any unique cross-jurisdictional issues.

Consequently, this document is intended to provide a **platform of consistency** during an event, so that every locality across the region recognizes the need for the same appropriate response

activities for all stages of a situation. Furthermore, it is the intent of this document to **encourage the establishment of appropriate and effective lines of communication** for all of the various planning and response partners. Only with timely exchange of information may an effective regional response effort be implemented.

Maryland and Virginia have established State plans that incorporate their unique jurisdictional plans. DC serves as a jurisdiction and a state for the purpose of this effort. The process established by COG several years ago is organized to continually review and update the Concept of Operations (ConOps).

UASI requirements include a plan for tactical interoperability by October 31, 2005. The plans for this have not been completed, but it is likely that the region will not have one physical command center, but will stand up a virtual Joint Operations Center (JOC) based on established and future MOUs, mutual aid agreements, and communication systems that include the NCR jurisdictions, the states, and the city of DC supported by advanced communication systems. This paper posits, as well, a virtual *Health Information Group (HIG)*.

The other critical component of this plan is the region's unique relationship with the federal government and the quasi-federal status of the District of Columbia. Federal agencies play an important local role here as major employers and residents of the region. An important partner here is the Office of the Capitol Hill Physician, who provides medical care to members of Congress and other key Federal officials.

In recognition of the difficulty of coordinating the numerous local, state, and federal resources, and based on past experience, the federal agencies will play a strong role throughout an event, and may appoint a Federal Response Plan health sector coordinator representative who will join the Health Information Group (HIG) early in the course of a major incident.

However, the glue that will hold the region together in a large-scale emergency is the collaborative network among the jurisdictions—a network formed over time and based on mutual trust and understanding.

1.3.2 Surge Capacity and Capability

Basic to this plan are the joint concepts of medical surge capacity and capability. It is important to distinguish between the two: *surge capacity* is the ability to respond to a markedly increased number of patients; *surge capability* is the ability to address unusual or very specialized medical needs. The increased demand could be the result of a natural disaster, terrorism event or other public health emergency or could result from collapse of a critical system element. For example, if a higher volume of critically wounded people are presenting at the hospitals and there are insufficient beds and staff to care for them, the question is one of capacity. On the other hand, the issue of capability arises when a high volume of patients appear over time with symptoms of an emerging disease such as SARS or when a large number of patients appear with very specialized needs, such as children with extensive burns. In that case, the Public Health community (public safety providers, clinicians, acute care facilities, clinics, public health

agencies) must deal with a highly specialized problem involving both staff and patient protection.

In the context of this plan, **healthcare surge capacity** is defined as the ability of a healthcare system to expand capabilities beyond normal services to meet sudden and/or sustained increased demand for medical care and public health resources. The expanded capacity must not only be able to accommodate an immediate short term surge, but must also be able to sustain response effort for an extended period (e.g., four to six weeks).

Although capacity and capability are important, a strong and well coordinated management system is at least equally important.

2 Management Tiers

Early in its planning, the COG team developed plans using four activation levels, with trigger events moving an incident from one level to the next. However, in September, 2004, the U.S. Department of Homeland Security released a planning publication called *Medical Surge Capacity and Capability*. That publication describes a management system with coordination and integration across six tiers of response. The COG committee has therefore sought to integrate the two planning models into its thinking. This outline is intended to provide an understanding of how the various components of the “public health system” work together at various stages of surge--from a local outbreak through a national event. Depending on many factors, the tiers may be modified to provide the very best medical care for the residents of the NCR.

Tier 1—Local Event

Management of Individual Healthcare Assets: A well-defined Incident Management System (IMS) to collect and process information is in place in each NCR jurisdiction. Each healthcare asset has an information management process, as required by their credentialing system, to enable integration among health care facilities (HCFs) and higher management tiers.

Example: Local physicians have reported three patients with severe gastro intentional disease probably a Salmonella bacterium. The Local Health Department receives the report and begins the epidemiological investigations by interviewing the patients involved to determine a common source. Based on food and water history, and period of incubation, a hypothesis is formulated. The state is usually notified; however this is considering a local event. An intervention is developed to stop the spread of the disease. Patients are instructed on personal hygiene, if a food facility is involved scatterings inspect and take appropriate action, if a food item is though to be contained appropriate action is taken.

Health officials regularly keep their NCR colleagues informed of events that have potential impact on other jurisdictions, even if the impact may be limited to media interest.

Depending on the extent of the outbreak, the Incident Command System (ICS) may be employed to manage a jurisdiction-specific event. The states will support the local process, and monitor

the extent and nature of the incident. The state health officials jointly analyze the need to establish an NCR Health Information Group (HIG).

In a mass casualty or complex incident, the vast majority of medical care is provided at the local level in community hospitals, clinics, and private physician offices. In the NCR, each of the Health Care Facilities (HCFs) has adopted a plan in concert with the local and State Health Officials. These plans call for the establishment of a Hospital Incident Command (HIC) management system that has been exercised routinely and modified as appropriate to reflect best practices; such plans are required by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). The Hospital, in concert with the Local Health Officials, will operate under internal procedures, using all unoccupied beds and services. They will increase staffing levels, initiate expedited discharge to open acute care beds and services, and cancel or postpone elective procedures. This is expected to free up about 30% of the beds for incoming surge patients.

In the event that the individual system is near capacity, the Local Health Official in concert with local and State or District Emergency Management systems, will coordinate a system for patient rerouting and management.

Tier 2—Manageable Event Affecting More Than One Jurisdiction

Management of a Healthcare Coalition: *Coordination among local healthcare assets is critical to provide adequate and consistent care across an affected jurisdiction. This tier would assume spread of disease across jurisdictions, or mass casualties affecting more than one jurisdiction. The local health officials in concert with their State Health Officials will coordinate as often as needed to integrate information sharing and management coordination among healthcare assets, and also establish an effective and balanced approach to integrating medical assets into the jurisdiction's Emergency Operations Center (EOC). Local officials will consider via conference call system (RICCS) establishing Emergency Operations Centers.*

Example: the state epidemiologist, in reviewing state reports on increasing incidence of salmonella-like organisms, notices that a neighboring county or city also has a significant increase in such cases and forms an hypothesis that the two outbreaks make be linked. Once clinical specimens are furthered studied and determined to be the same causative organism, or absent laboratory confirmation, it is determined that the cases are epidemiologically linked. The outbreak is at this time isolated to only one state. However the state epidemiologists are determining the need for enhanced communication by opening the HIG. Disease trends are being traced through ESSENCE along with the development of “line lists” of confirmed and suspect cases meeting the case definition.

Judgment is exercised at the elected level as to the need to open an emergency operations center, in which case the local health official will report through the local EMC and to the State Department of Health

In a major incident, HCFs may lack the necessary resources and /or information to individually provide all the necessary services. The Health Information Group (HIG) coordinates activities among all medical and health assets in the jurisdiction. **This tier emphasizes coordination and**

cooperative planning rather than truly unified management of all public and private medical and health assets.

Tier 2 includes

- A clearinghouse function, ensuring that all HCFs have the information they need to adequately prepare for and respond to major events
- Reliance on NCR-Enhanced Surveillance system Physician reporting and other indicators to monitor extent of the event, along with other indicators
- Medical mutual aid—the redistribution of personnel, facilities, equipment, or supplies to HCFs in need during a crisis

Tier 3—Regional Event

Jurisdictional Incident Management: *Despite the unique characteristics of the region, the jurisdictions of the NCR have crafted a system that allows the region to function as an intra-state region in spite of the cross-border issues. A jurisdiction's EOC integrates healthcare assets with other response disciplines to provide structure and support. The local Health Officials in partnership with the State Health Officials may convene the virtual Health Information Group (HIG). Depending on the nature of the event, the NCR may have established the NCR-JOC, in which case the HIG will designate a liaison. The HIG will discuss medication protocols and modification of standards of care as needed to address the nature of the event. The primary focus will be the establishment of a realizable medical information system. One medical coordinator will be appointed to coordinate with the NCR JOC. Staffing this position may rotate among jurisdictions.*

Example: Cases are now detected in other jurisdictions outside the original state. The HIG is activated by the three state designees along with the local health officials. Agreement is reached on the case definition, the rule-out methodology, the frequency of reporting, and the need for community NCR interventions. In the event an NCR Joint Operation Center is activated, the HIG will appoint a senior medical official to be the liaison to the HIG.

In certain events, the jurisdictional IMS promotes a unified incident management approach that allows multiple response entities, including health and medicine, to assume significant management responsibility. The HIG will discuss deploying medication protocols as needed to address the nature of the event.

The NCR regional director will determine the extent of federal aid available to support the region. As the National Response Plan unfolds, other non-NCR regional assets may be deployed. The working assumption requires the health system to be self-sufficient for 72 hours after the event.

Tier 4—State Response

Management of State Response: *State Government participates in medical incident response across a range of capacities, depending on the specific event. The State may be the lead incident management authority, it may primarily provide support to incidents managed at the jurisdictional (tier 3) levels, or it may coordinate multi-jurisdictional incident response through the use of the State Emergency Operations Center. Plans exist at the NCR State level that*

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delineate numerous functions, roles and responsibilities, ensuring that the full range of State health and medical resources can be brought to bear. These plans and systems have been fully exercised by all the NCR participants.

Example: The extent of the outbreak is judged by the States to require the use of the State Emergency Operations Center (EOC). The state EOCs coordinate with the other states and the locals, consideration is given to request aide from neighboring states.

Tier 5—When the Entire NCR is Affected

Interstate Regional Management Coordination: *Effective mechanisms have been established via the Health Information Center (HIC) to promote incident management coordination among affected NCR States. This medical management system will be established by the state senior health officials in concert with the local health officials. The incident command model will be deployed; jurisdictions will execute their specific plans in concert with health system partners. Depending on circumstances, the HIG may become part of a larger overall JOC, in which case the designated Medical Coordinator will become part of the larger system, and a medical incident commander will manage the Health Information Center (HIC) to promote incident management coordination among affected States. This mechanism will ensure consistency in regional response through coordinated incident planning, enhanced information exchange among interstate jurisdictions, and will maximize the overall planning system through interstate mutual aid and other support. Tier 5 incorporates existing instruments, such as the Emergency Management Assistance Compact (EMAC), and describes established incident management and mutual aid concepts to address these critical needs.*

Tier 6—National Emergency

Federal Support to State and Jurisdiction Management: *Effective management processes at the State (tier 4) and jurisdiction (tier 3) levels facilitate the request, receipt, and integration of Federal health and medical resources. In the event that senior officials determine that weapons of mass destruction have been deployed, Presidential Decision Directive-62(PDD-62) will be invoked. The specific command structure can be referenced in Presidential decision directive 39(PDD-39).*

By adopting this six tier approach, the COG region expects to be more readily compliant with the National Incident Management System (NIMS). NIMS compliance is required of all Federal departments and agencies, as well as State and jurisdictional organizations that seek Federal preparedness assistance in the form of grants and contracts.

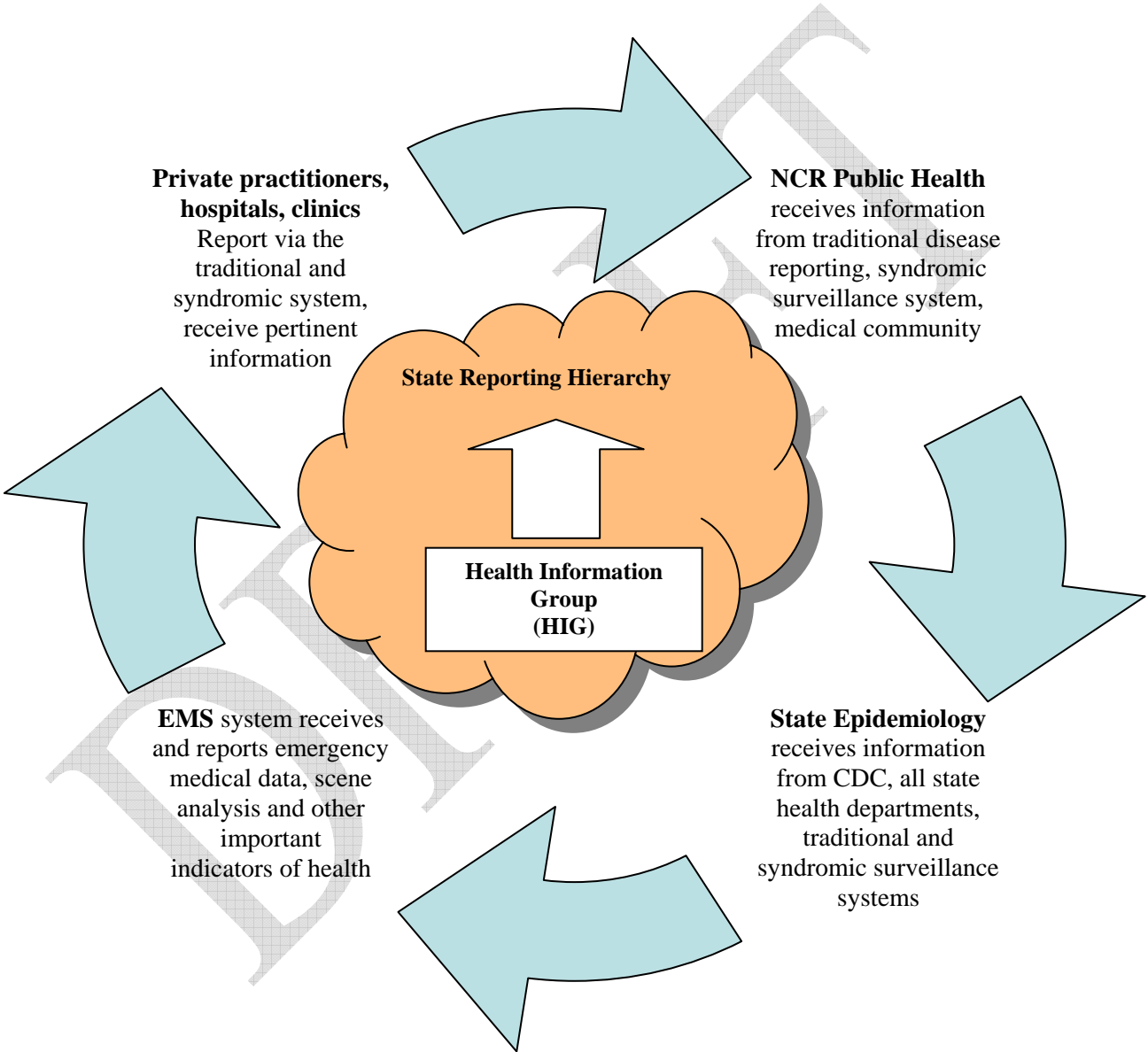
3 Unified Operations Structure

The following organization chart is an attempt to depict the process which takes place among senior health officials at the local and state levels. It is difficult to reduce the scientific and intuitive process of medical decision-making into a flow diagram. Senior state and local officials may use a different structure depending on the nature of the event. The Health Information Center (HIC) may be convened by Health Officials or by the NCR JOC. This virtual structure is one way of viewing a medical assessment process in an emerging or confirmed medical event.

It is a means of assessing potential cases, establishing a case definition or discussing the medical management and medication options. It provides a platform for reviewing surveillance criteria, including updating the number of suspect and confirmed cases, creating modifications to the specificity or sensitivity of NCR-Enhanced Surveillance System.

DRAFT

**National Capital Region Health Information Group
Conceptual Diagram**



Each step—analysis, hypothesis generation, case definition—is developed collaboratively. Trend analysis and treatment protocols continue in a collaborative mode.

4 Components of the Health Care Community

The health care community is varied and diverse. Broadly speaking, it includes private physicians, hospitals and community clinics, public health officials, behavioral health professionals, emergency medical services, hospices, and medical examiners. Each group brings to the crisis situation its own strengths and skills, professional training, priorities, functions and concerns.

4.1 Private Practitioners

The private medical community has been a very willing and engaged partner throughout the NCR. In fact, an astute clinician is the most likely person to notify public health of an unusual occurrence. For the purpose of this paper, it is assumed that nurses (e.g., RNs, LPNs, etc.) and physician assistants (i.e., PAs) are working under the direction of a physician, a clinic, a public health department or a hospital; policies developed by such organizations will apply to their practice at this time. However, the essence of this section also applies to advanced practice nurses (e.g., nurse-midwives, etc.) who are in more independent practice.

Routine Public Health Reporting

State law mandates that communicable disease be reported to the Health Department. This system has been in effect for over 100 years and has served to alert the public health system of new threats. The first alert for a biological attack will most likely come from an astute clinician reporting via the public health system. ("Hospital Credentialing & Privileging")

Hospitals

In order to practice in a particular hospital, physicians must be granted privileges to perform designated procedures or clinical activities within the hospital. Hospital by-laws require that medical staff participate in education, emergency drills, and peer review activities. All of the NCR hospitals have developed specific plans for methods of communication and roles and responsibilities associated with emergency situations.

Although the entire medical staff is required to engage in continuing education and is subject to peer review, a relatively small percentage of the body actually participates in "disaster drills" or disaster training. In general, hospital-based physicians such as emergency physicians, specialists in intensive care, trauma surgeons, anesthesiologists and pathologists, radiologists, pulmonologists and infectious disease specialists participate at a higher rate than non-hospital based physicians due to conflicting hours and patient demands. According to the Joint Commission on Hospital Accreditation (JCAHO), medical staffs are now required to have processes for disaster credentialing/privileging of non-medical staff physicians; however these plans have not been fully tested in many hospitals.

Most community hospitals do not employ their medical staffs, and few of the employed physician leaders have either true authority over their peers or training in incident command. So hospital command and control clinical responsibility issues remain, especially regarding

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obligations to treat infected, contaminated or criminal/terrorist-suspect patients. Educating community-based clinicians about hospital disaster plans, (e.g. decontamination, lock-down, quarantine procedures) also remains as an ongoing area of concern.

Safe and Rapid Discharge

The most important role that private medical practitioners can play during a surge event is the discharge of patients who are not critically ill. Such discharges will not only free up potentially needed bed space, but may ultimately free up nurses and allied health professionals to respond to disaster care demands.

Medical Societies

Many physicians are members of their local medical society. Public health representatives have made presentations both at the State and local societies to assure understanding of the local plans. These societies have helped public health departments develop methods of communicating with the private medical community, such as a “blast fax” system, a pager system and a call system.

Direct Mail

Many physicians have been reached by direct mail to assure that they are familiar with mechanisms of communication and the system’s expectations. However, we still face a challenge in reaching many physicians in a timely manner, depending on the jurisdiction where they work/live and whether they have signed on to notification systems. Also, public health officials throughout the region have introduced communication plans that are still in various stages of development.

HMOs/Clinics

Although large well-organized HMOs have developed and exercised plans with their clinicians, smaller, poorly funded clinics targeted to our most vulnerable population lack the resources, funding and time to develop or exercise emergency plans. A great deal of work is needed to reach this segment of our medical community.

Other Policy Needs

There is a significant need to establish a “NCR-specific policy” on the following issues associated with the private practice of medicine:

- Liability: malpractice, out-patient injury (e.g., vaccine), liability, physician and staff injury/disability compensation (for volunteers vs. employees and for those at a government site vs. those serving in a clinic/office/hospital)
- Credentialing and privileging: allowing practitioners to practice in
 - Other healthcare facilities within the same jurisdiction
 - An entire state
 - The entire NCR
- Disaster compensation: for services and supplies, damage to office or clinic facilities (FEMA vs. local/state public health department)

- Roles of, and command/organization structure for Medical Reserve Corps vs. spontaneous physician volunteers (reporting relationships between physicians and nurses, and other allied health and public health professionals)
- Relationships between physicians and community partners (e.g., Red Cross, CERT, etc.)

4.2 Health Care Facilities

4.2.1 Hospitals

In a major event, the vast majority of patients are treated in the hospital setting. The main priorities of the hospitals, in this situation, are to

- Ensure security of the hospital and protection of the healthcare facility, personnel and existing patient population from the effects of the incident and recognize the potential for a secondary incident.
- Provide an adequate level of needed Personal Protective Equipment (PPE) to ensure the safety of health care workers and hospital staff.
- Expand triage and inpatient surge capability.
- Provide the highest level of healthcare commensurate with saving the maximum number of lives while protecting the health and safety of the public, disaster responders, and recovery workers.
- Protect valuable resources while maintaining the hospital critical infrastructure.
- Ensure the proper tracking and identification of patients during initial treatment, hospitalization, inter-facility transfer and/or final disposition.
- Contain or control the spread of illness and contamination through prophylaxis and isolation capability
- Coordinate with governmental agencies for information and preservation of evidence.
- Facilitate recovery of individuals, families, staff and the functional integrity of the hospital.

Services to Be Provided

Each hospital is planning to accommodate at least minimal numbers of all types of patients. One NCR estimate is that of 100 patients, 60 will be minimally afflicted, 30 will be moderately to severely afflicted and 10 will be seriously afflicted. It is difficult to predict exactly which type of mass casualty incident might occur in the NCR. It is predicted that the most probable event would include a massive explosion. However, biological, chemical and radioactive events are considered in hospital surge planning. Also, hospitals that normally do not accommodate burn or severe trauma patients have considered that they may have to keep these patients for longer than desired due to the queuing of patients for burn or trauma centers. Hospital types in the NCR range from general acute care, Level 1 trauma centers, psychiatric, rehabilitation, and burn centers. All types of hospital services may be required in a crisis, regardless of a hospital's main workload. Therefore, hospitals are planning to stock surge capacity to the degrees described above.

4.2.2 Hospice

Hospice staff and volunteers can provide much-needed services to patients and their families in a major emergency. Their specialty is palliative care, in addition to grief and counseling in a variety of settings. Their services in the case of medical surge can include

- Palliative medical and nursing care to hospital and homebound patients in end stage disease (especially important if the hospitals are overwhelmed, if there are large numbers of patients that cannot be saved, or if a quarantine is instituted)
- Telephone consultation and advice
- Grief counseling to families and others directly affected by the event (for each injured or dead person, it is estimated that 2.9 family members will need services)

The Hospice model for surge demand planning is being developed and will be articulated further in the 2006 plan, possibly including pre-event training.

4.2.3 Community Services

The **community** must also expect to provide support and augment the local healthcare system for a minimum of 72 hours following an event. Community support will include but not be limited to volunteer corps, auxiliary facilities for the provision of shelter and health care, transportation, security, food, water, electricity, supplemental supplies and equipment prior to the arrival of federal resources. Each local social service agency and/or public health department has assessed the community's support capabilities and will serve to coordinate community capacity as the incident progresses.

4.2.4 Surge Capacity

A major concern for health care facilities is the issue of **surge capacity and capability**. Planning for a sudden increase in demand for in-patient care is based upon the Health Resources Service Administration (HRSA) established guideline for any given region to be prepared to accommodate *500 acutely ill or injured patients per million population*. For the NCR, this means more than 2,500 beds.

Provision of specialty care (i.e. trauma, burn, pediatric, geriatric) must be considered in the context of an all-hazards approach to disaster response. Therefore, surge capacity must be accompanied by surge capability, ensuring the appropriate management of all variety of patient needs.

Surge Beds

Beds are defined in various ways, according to whether they are licensed, staffed, fully equipped, etc. In some parts of the region, hospitals routinely operate above licensed capacity, while in other parts they operate below licensed capacity. Therefore, for practical purposes, the term **operational bed** is used in this document, meaning a bed that is staffed, equipped and fully functional. The NCR has nearly 8,000 operational beds.

Jurisdiction	Number of Operational Beds
Maryland—Montgomery and Prince George’s Counties	2,226
Washington, DC	2,904
Virginia—Arlington, Fairfax, Loudoun, Prince William Counties	2,700
TOTAL*	7,830

* based on 2004 use of facilities

The definition of surge beds is problematic, in that hospital capabilities may vary from med-surge to psychiatric and rehabilitation to burn care. Thus, not all hospitals have the same patient care capability or number of beds. For example, in the plans for adding surge beds under the Urban Area Security Initiative (UASI), about \$6,000 was allotted for each surge bed to be added with the minimum definition of a bed being a cot with an IV stand and fluids and with an equipment list provided to the hospitals so they can select the appropriate equipment items for augmenting their beds according to their individual hospital’s specific needs. Using this definition, the funding from the UASI grant will provide 444 surge beds in the region by May 31, 2005.

The Federal definition of surge beds is beds available above and beyond those normally used; Federal requirements call for 500 surge beds per million population. For planning purposes, the region’s total population, including visitors, is approximately 4.5 million, necessitating at least 2,500 surge beds. Using this definition, the NCR will have only 444 surge beds plus a triage capability of 1,500 (500 per tent per 24 hours for 3 tents) in DC.

We estimate that the NCR could probably surge to an additional 2,349 beds (i.e., 30% of the normal operational beds.) by taking such measures as discharging patients early, canceling elective surgery and increasing staffing levels.

In addition, the District of Columbia has 3 temporary tent facilities for triage. They are fully equipped with litter stands, heat, etc. and can provide triage for 500 patients per day.

After careful analysis we have not included military beds within the NCR. In the event of an emergency situation the military bases would be closed to outside access, and military personnel may be deployed to support other needs both in and out of the NCR region.

The medical community will strive to expand operating beds by 30%, depending on the nature of the incident. **However, freeing up actual beds is only the beginning— specialty beds, especially ICU beds, have been identified as a serious deficit. More challenging are the pharmaceuticals, medical supplies, equipment and staff to support the general and specific beds.**

In the case of the spread of a communicable disease, measures will be taken to isolate the ill and quarantine the exposed. In some events, hospitals will institute pre-admissions processes as a way of disease control. All NCR hospitals have disease control plans in place and well exercised as recently as the emergence of SARS within the United States.

In case of a chemical attack, the public safety community has established decontamination processes both in the field and at the Emergency Departments, to limit “off-gassing” exposures to populations at risk. (Off-gassing refers to the gas that is given off via the clothing and skin of someone who is contaminated; this gas can affect others nearby.)

In case of massive injury, each hospital, in coordination with the jurisdictional EMS system (public safety and private sector), has developed detailed protocols for **Planned Systematic Modification of Patient Care Standards**. The College of Emergency Medicine Physicians has thoroughly researched the concept of standard practice modification associated with an event and has developed emergency standards of care appropriate to the type of event and the number of affected people. This function is directed via the Emergency Physicians in concert with the EMS system.

The basic outline of the plan is as follows:

- Surge bed identification matrix
 - 10% of staffed beds from expedited discharge
 - 10% of staffed beds from cancellation of elective surgeries and other elective admissions
 - 10% of licensed beds available by identification of available “flat-space” treatment area (either licensed beds not currently staffed, or other unlicensed treatment areas within the hospital)
- Surge demand support requirements
 - Medical equipment needs
 - Medical supply needs
 - Pharmaceutical support needs
- Surge staffing resources
 - Use of existing staff, altering shift lengths and patient care ratios
 - Mobilization of regional staff based on existing MOU
 - Mobilization of Medical Reserve Corps (MRC) staff
 - Integration of federally deployed medical teams

The NCR will have to

- 1) agree on definition of surge bed or bed types
- 2) inventory current capacity
- 3) apply current best practices to estimate need
- 4) perform a gap analysis and
- 5) plan for narrowing the gap

4.2.5 Surge Capability

Surge capability is the ability of the healthcare system to respond to very unusual or specialized medical needs. Surge capability requirements include both

- Specialized medical and health services not normally available at the particular location, such as a heavy influx of burn patients or pediatric patients, and
- Patient problems, such as symptoms of SARS that require special intervention to protect medical providers, other patients and the integrity of the medical care facility.

Addressing capability issues requires extensive coordination among public and private health, emergency management and others. Each jurisdiction has a standing committee or coordinating council that coordinates when difficult issues arise. Each health department, in partnership with its medical communities, has identified specialists to be deployed. These specialists include clinicians specializing in emergency medicine, infectious disease, pulmonary medicine, psychiatry, pathology, microbiology, trauma surgery, general, orthopedics, barometrics and other specialties. Smallpox teams have been established in all the local health departments in conjunction with their medical partners.

Critical specialists in laboratory medicine, infection control and respiratory therapy have been trained and are on call to respond to events. Behavioral health specialists have been enlisted, including social workers, crisis counselors, physiotherapists, hospice and members of the faith community.

4.3 Public Health

Public health is a government function, operating in every jurisdiction, to provide planning, assessment, direct medical care where none other exists, and assurance that appropriate health care services are being provided.

4.3.1 Public Health Departments

Departments are staffed to respond to a relatively constant volume of public health needs with seasonal or demographic variations causing short term spikes in service demand. Local and state public health services are limited in their ability to expand to massive surge demands anticipated by a large biological incident. The plan provides structure and systems to unify nine local health departments, three state health departments and the office of the Capitol Hill physician within the NCR. There exist very well-defined local plans, which have been incorporated into the State plans (which are in turn approved by the Centers for Disease Control and Prevention) and reviewed by the NCR senior policy group. Roles and responsibilities have been articulated and tested and are incorporated into a constant improvement process via the COG Health Officials' committee's subcommittee of Bio-Emergency planners. The local plans are tied to the jurisdictions' hospital plans which in turn are tied to the public safety plans for the specific jurisdiction. Each Department of Health has developed a detailed plan for the deployment of volunteers. In some cases the State has assumed the management, organization, and training of a state volunteer organization.

4.3.2 Public Health Priorities

In a major event, public health response priorities are five-fold:

- To protect hospitals and all types of responders
- To protect the community
- To ensure the best possible level of care, saving as many lives as possible while using a systematic modification of care approach
- To contain or control illness that is causing problems through
 - Prophylaxis
 - Isolation of the ill
 - Quarantine of exposed community members
- To ensure the highest level of mental health by maintaining order and avoiding panic through use of
 - Pre-messaging
 - Prepared statements
 - Role clarification
 - Call-in centers
 - Walk-in centers, if needed
 - Virtual joint information centers
 - Coordination and training of volunteers
 - Adoption of shelter-in-place concepts
 - Encouraging self sufficiency of a well prepared populous

4.3.3 Public Health System Response

The Governors of Maryland and Virginia, and the Mayor of the City of Washington, are the **Emergency Response Managers** for their jurisdictions.

The investigation and control of communicable disease outbreaks, whether natural or man-made, are assigned by statute to the State Health Commissioner (in Maryland and Virginia) and the Director of Public Health (Washington, D.C.). Operating in concert with other state and federal agencies, and through a collection of local health departments overseen by local health directors (in Maryland and Virginia), the **State Health Director** directs the response to public health emergencies.

It is anticipated that health response coordination with federal agencies and others will take place through the State Emergency Management Agencies, in accordance with the Federal Emergency Management Agency's emergency operations plans and their established linkages with various levels of government. If the initial assessment suggests **an intrastate event**, the initiating Health Official will use the **State EOC** (Emergency Operations Center) to communicate with other appropriate officials; these communications will follow preset policy and procedure. The Chairperson of the COG Health Officials committee will use the RICCS communication system, to convene an emergency conference with the committee roster. Management of the incident will remain with the State, without coordinated activities across the region. However, the rest of the region should be notified.

Once **interstate disease** develops, state and local health officers will make a joint determination about when the larger response community should be notified. This will ensure that all the Health Officers are fully aware and knowledgeable. Notification will take place as early as possible so that responses can be coordinated before the media take control of the message. Each State Health Director or his/her designee will assign a senior health official to the NCR HIG. Once established, the HIG will create a Unified Management team (see Tier 3, 4-8). The HIC will use the jurisdictional management architecture specific to the particular medical incident. The HIG will coordinate activities and share vital information across the region. The HIG will be notified when State and local public health plans will be deployed to assure harmony of response through the effected region.

4.3.4 Public Health Capacity

The broad definition of public health includes the traditional, legally mandated public health system that includes licensing, regulation, provision of services, epidemiology, health planning, maternal child health, environmental health, wells and septic, rodent control, prevention, and advocacy.

However, the community is a key component of the community health system. Partnerships among legally mandated public health agencies, private providers, and health care facilities are the heart of the public health system. Local and state agencies are joined together via a public health network at the Federal level by the Centers for Disease Control and Prevention, and various bureaus of the Department of Health and Human Services, such as Maternal Child Health, Community Action grants, etc.

Public Health surge capacity is defined as “the overall capacity of the public health system to increase capacity not only for patient care, but for epidemiologic investigation, risk communication, mass prophylaxis or vaccination, mass fatality management, and other activities”.

Public Health Departments are woefully understaffed at the local, state and federal levels. In a landmark publication by the Institute of Medicine, entitled the “Future of Public Health,” a lack of funding was clearly identified as the major cause of the crisis in Public Health. In order to protect the public health, the scope along with the roles and responsibilities were changed. Delivery of direct medical services by public health agencies was replaced with *assurance* of medical services. Public health department clinics were closed, roles and responsibilities were significantly changed, and focus shifted to a “community wide” practice rather than the individual practice of medicine. Combined with the significant nursing shortage, clinical practice became focused on prevention, education, case management, assessment, and the formation of health coalitions that were devoted to improving the health of the whole community.

Most health departments maintained clinical capability and capacity in immunization, sexually transmitted disease, tuberculosis control and disease control. The expertise of public health professionals remains in epidemiology, investigation, regulation, collaboration, planning, education and communicable disease and preventive medicine. Roles and responsibilities have been defined by the National Association of City/County Health Officials and the Association of

State and Territorial Health Directors. Core competencies have been developed by academic institutions such as Columbia University and others, and training programs are in place throughout the region. Health Departments with “represented employees” have modified labor contracts to accommodate newly defined emergency duties. There is a great need to strengthen the capacity of the public health system through:

- Training via computer and video or live broadcast methodologies
- Automated systems of tracking patients in a case management system
- Automated call-in centers
- Emergency vehicles integrated into the IMS
- NCR small-scale table-top training
- Recruitment and retention strategies for public health professionals
- Recruitment of epidemiologists, sanitarians, nurses, laboratory scientists, case managers, support staff, administrators, and physicians

One of the major barriers to increased capacity and capabilities is the requirement in NCR UASI grants that funds cannot be used to strengthen the system by the employment of public health professionals. While other critical responders can use funds to cover “call-back and overtime”, the public health system is not a 24-hour staffed system like law enforcement and Fire/Rescue. There is, in fact, no depth to call upon. Until funds are made available to strengthen public health departments, the capabilities and capacities will be limited to those activities described in this document.

Public health departments use the following strategies to assure emergency preparedness:

- STD , HIV, TB clinics are postponed
- Food services establishments are not inspected
- Nursing homes and assisted living facilities are not inspected
- Case management of pregnant women and children is placed on hold
- Assessment , intake, and management of vulnerable adults , children, and special needs population are postponed
- Planning is refocused
- Environmental monitoring of air, water, lead, etc. is refocused
- Epidemiology is focused on emergency trends only
- Routine activities associated with coalition building and community strengthening are postponed
- School health practices such as pregnancy prevention, immunization, assessment, asthma monitors , clinical management of special needs children, medication management and family interventions are postponed or limited
- Administrative function such as fiscal management, budget development, grant writing, and Medicaid billing are placed on hold

Health departments are asked to quantify what the outcome of reprioritizing traditional public health activities will do to a community. It is impossible to state the consequences beforehand, for they will become apparent only over time.

4.4 Emergency Medical Services (EMS)

Each local jurisdiction is responsible for the dispatch of appropriate EMS units to the scene of incidents. Mutual aid agreements exist between jurisdictions for response across boundaries to assist a jurisdiction affected by a mass casualty incident. The National Incident Management System (NIMS) is the model by which command of those units is structured. As dictated by the size of the incident and the number of patients involved, the mutual aid could be in the form of individual units, a single resource or in task forces or strike teams.

4.4.1 Scene Management

Assessment

Upon arrival on the scene, the first units will establish a command structure then assess the scene for safety and the following.

- Type of incident (i.e. Explosion, Chemical, Radiological etc)
- Involvement of contaminants
- Number of patients involved
- Potential for walk-ins

Communication and alerting of hospitals

Notification of the incident and the information listed above, is communicated to the potentially affected hospitals as soon as possible. This may be in the form of a call through the dispatch center to one of the NCR hospital communication/coordination centers listed below to provide the early notification.

- District Of Columbia – Emergency Communication and Information Center (ECIC) at Children’s National Medical Center -
- Maryland – Emergency Medical Resource Center (EMRC) at the Maryland Institute for Emergency Medical Services Systems
- Northern Virginia - RHCC (MEDCOMM)

These communication/coordination centers will notify the areas hospitals of the incident and begin to assess the availability of beds/resources. As per IMS practices, a Medical Communication Coordinator may be designated to coordinate ongoing communication with hospitals.

Triage and Flow of Patients

Patients are triaged as close to the scene as possible and are categorized into 4 categories

- Red (Priority 1) – Immediate
- Yellow (Priority 2) – Delayed
- Green (Priority 3) – Minor
- Black (Priority 4) Deceased or Impending

The patients are tagged with colored ribbons and the Washington Metro Area COG Disaster Tag (triage tag) then removed from the incident site. Immediate treatment is provided and patients are prepared for transport. Patients are then loaded into a transport vehicle and transported to hospitals as assigned by the Treatment Dispatch Manager. (*Note: Washington DC currently uses the categorizations of “Major” and “Minor” when counting available*

Emergency department capacity. All others categorize ED availability consistent with the categories listed above.)

Decontamination

All contaminated patients encountered by EMS will be decontaminated prior to transport. Local and mutual aid Haz-Mat teams will coordinate the decontamination process

4.4.2 Patient Care Supplies

- **Mass Casualty Stocks & Vehicles**
Each Jurisdiction in the NCR has vehicles stocked with additional supplies for response to mass casualty events. They are categorized by the estimated number of patients they are equipped to supply. A resource inventory is required to determine the adequacy of those resources.
- **Ambulance Busses**
It is estimated that there are inadequate traditional ambulances to transport a sudden surge of patients. Alternative means such as public mass transit and school busses are utilized to transport multiple ambulatory patients, but vehicles configured to transport multiple non-ambulatory patients are not immediately available in all areas of the region. Military resources are in the region but are not available for immediate response. An assessment of these resources and their adequacy is required.
- **Pharmaceutical Stockpiles**
Many jurisdictions have caches of medications for the immediate treatment of patients and prophylaxis of their personnel and families. Other resources such as Metro Medical Response Systems (MMRS) and the CDC Chempack and Strategic National Stockpile are available. These resources need to be cataloged and assessed for adequacy and response times.

4.4.3 Coordination of Definitive Care Resources

Patient care protocols throughout the region require that individual patients are transported to the closest appropriate hospital. More specifics as to the definition for “appropriate” can be found in those protocols and are dictated by the respective Medical Directors. Questions on individual patients are directed to on-line medical direction.

- **Routine Hospital Status Board Use**
Availability of resources to treat patients plays a role in the definition of “appropriate”. Hospital diversion policies assist with the assessment of availability. Each state maintains the availability of resources and communicates that to the EMS providers through several means. These “Status Boards” also provide a means to assess the seasonal surge and assist in the surveillance for unexpected trends. The Coordination of the 3 state status boards will be accomplished through the impending development and implementation of the UASI NCR Mass Casualty Surge Initiative. Information from the status board will be made available to approved members of the NCR healthcare and public safety communities.

- **Alert, Notification, And Assessment of Available Beds/Resources.**

In the event of an incident or unusual occurrence, the hospital communication/coordination centers assist the pre-hospital and public health providers by notifying hospitals and assessing resources in their respective jurisdictions. In the event of a region-wide or multiple local incidents, the potential to coordinate resource availability exist, but requires definition through standard procedures and exercising. Data tools are used by each center and need to be interfaced to facilitate sharing.

- **Coordination of Transports**

The intended destination of patients from a mass casualty incident is usually determined at the scene by the treatment dispatch manager with input from the hospitals via the Medical Communication Coordinator and a physician Medical Director. For regionwide or multiple local incidents that destination determination may need to be moved to one or more of the hospital communication/coordination centers to provide for a more global distribution of patients.

4.4.4 Alternative Definitive Care Resources

This plan suggests that non-traditional healthcare facilities may be accessed to provide care for affected patients. Medical Directors, in collaboration with senior EMS officials and public health official, can direct patients be transported from the scene of an incident to those non-traditional facilities as they become available.

4.4.5 Support of Health Care System

In the case of regional biological outbreaks or other incidents in which the patients are not presenting for treatment at a specific site, EMS may be called upon to assist in the response. Public safety based and Commercial EMS resources may be asked to transfer patients between facilities, transport the routine patients to non-traditional care facilities, assist in the homecare of isolated or quarantined patients, or transport supplies or other resources to facilities in need. Any action outside of current protocol, policy or standard procedure would be at the request of the public health officials and agreed upon by local senior EMS officials, medical directors and certifying/licensing agencies.

4.4.6 Documentation

The care of individual patients is documented on their patient care record approved by the state EMS agencies. Copies of the reports are provided to the hospitals when patient care is transferred. The records are maintained at each jurisdiction with at least aggregate information being provided to the state lead EMS agencies. The aggregate records provide a resource for planning, protocol development, and disease surveillance.

During mass casualty events such in-depth documentation may become obtrusive to patient care. Care of the individual patient is then documented in short notes on the triage tags. The MWCOG has adopted the Washington Metro Area COG Disaster Tag (triage tag) as the MWCOG approved tag. Maryland and the District of Columbia all use the same bar-coded triage tag to reduce confusion in times of stress. The individual patient care record may be completed if time

allows during transport.

Documentation of where patients are transferred is completed on NIMS compliant forms which could be collated to track patients later in an incident. Efforts are underway to improve the efficiency of the patient tracking process so that real-time electronic tracking is possible. This will assist in the allocation of resources and reunification of families or groups of people.

4.5 Behavioral Health Services

Behavioral health of the NCR community is of the highest priority. The success of the enemy's attack is based on the expectation of mass fear. Best practices have been incorporated in local, state and regional plans to both *treat persons* suffering from "terrorism" and also to *strengthen the community*. Reflecting the high priority of behavioral health concerns, the NCR functional organization chart designates a senior behavioral health authority in each jurisdiction.

Behavioral health needs in an emergency are very different from the medical model used to treat mentally ill patients. In an emergency, the public responds with normal reactions to an abnormal situation, and large numbers of people need help remembering their coping skills. There will be some increase in behavioral health treatment, especially for Post Traumatic Stress Disorder (PTSD) and substance abuse.

Several strategies are employed in the NCR to address the behavioral health of our community.

- Pre-messaging. This concept—of preparing messages for the public in advance of any major event—is a combined effort among behavioral health, public health, and public information professionals. These messages articulate types of threats, appropriate responses, and coping and resiliency strategies. Messages will be delivered via public service announcements and direct mail or they will be incorporated into statements of public officials.
- Appearances of elected officials and senior health officials on radio, TV and in articles in the print media have been designed to strengthen the population's capacity to endure and survive an event.
- These efforts have been customized to reflect the multi-racial and ethnic composition of the NCR.
- "Just-in-time Messages" have been prepared ahead of time to fit the threats thought to be possible, i.e. the nature of anthrax, earthquakes, etc. They were developed by the Public Health community in conjunction with the PIO committee and will be used in the event of an incident.
- A series of triage systems has been developed to further address the public's needs for information:
 - a recorded message updated routinely for the public to call for the latest information,
 - a call-in center to provide individual counseling, and
 - walk-in centers for evaluation. These have been developed and tested and will be deployed as needed.

- The various members of the behavioral health treatment and prevention community have been most active in addressing anti-terror strategies. A region-wide behavioral health Concept of Operations will be developed to link to Edition II of this paper.

4.6 Medical Examiner

In caring for the dead, each state will follow its own Mass Fatality Plan. The Chief Medical Examiners (MEs) in the three jurisdictions have collaborated to assure proper identification, forensic procedures, preparation of bodies for burial or cremation, and inter-state transport according to protocols. The Medical Examiners are developing Mutual Aid documents that will provide for regional assistance. The MEs have articulated state-specific plans that will be followed once the aid has been requested. The state in which the death occurs will dictate the ME authority and the plan to be followed for proper disposition of bodies. The Federal Coordinating Officer will facilitate with federal resources through the EOCs. [pending concurrence of VA and MD MEs]

5 Threat Scenarios—Preparation for a Regional Emergency

Threats come in many forms—both human-generated and naturally occurring, with either sudden or gradual onset, affecting a small isolated population or the entire region. We have focused our attention primarily on weapons of mass destruction—involving biological, chemical or radiological agents or explosives. However, naturally occurring diseases or natural events such as earthquakes are also likely to occur and may be more probable. In addition, planning should consider the possibility of multiple events in multiple locations.

In the case of sudden massive onset—as with an earthquake or major explosion—mass casualties occur immediately and the problem is quickly apparent; the response system moves rapidly into gear at a relatively high level; and additional resources may be needed in the first 24 hours. However, some events may begin very gradually and not be identified for some time, as in the case of an emerging disease. In that instance, initial responses will develop slowly and in multiple locations.

At the Federal level, planners in the Department of Homeland Security have developed 15 possible threat scenarios of various types to aid groups in planning and testing their management systems. These scenarios cover such events as a biological attack from plague, a chemical attack using nerve agents, and major disasters like hurricanes or earthquakes. While they don't cover every possible threat, they help us to prepare for a variety of incidents and are useful surrogates for the all-hazards approach that the COG group has taken.

The Threat Scenarios are addressed in State and jurisdictional plans; they appear in the appendices. This plan is applicable to all 15 scenarios.

6 Relationship to Other Plans

This NCR Surge plan does not stand alone. It has direct and indirect relationships with many other response plans, in particular:

1. NIMS (National Incident Management System)
2. Health and Human Services Surge Plan
3. Federal Concept of Operations Plan
4. FEMA: NCR Weapons of Mass Destruction Response Plan
5. Washington D.C. Surge Response Plan
6. Maryland Surge Response plan
7. Northern Virginia Surge Capacity Plan
8. *Medical Surge Capacity and Capability* (Federal DHHS)

This document is limited to the key functions of—and collaborative relationships among—the medical and behavioral health communities, both public and private. However, the medical and behavioral health communities do not operate in a vacuum—or independently of other sectors. Other groups are responsible for the following important related functions:

1. Law Enforcement
 - Quarantine and isolation
 - Protection for medical workers
 - Forensic epidemiology
 - Crowd control
 - Protection of the strategic stock pile
 - Maintenance of order at distribution and/or vaccination locations
 - Other major protection and enforcement issues associated with medical surge
 - Establishment of perimeter control
2. Transportation
 - Management of transportation systems in harmony with quarantine and isolation
 - Deployment of systems in support of the Strategic National Stockpile (SNS) and medical personnel
 - Establishment of transportation systems in support of isolation and quarantine supply and support procedures
3. Public Information
 - Collaboration with health officials, hospitals and public safety via the PIO committee
 - Development of pre-messaging strategies
 - Establishment of call-in centers
 - Coordination of messages throughout the region
4. Fire /Rescue
 - Establishment of scene: recognition, mitigation and restoration activities
 - Triage
 - Coordination of rescue
 - Hazmat protocols
 - Decontamination
5. Emergency Managers
 - Establishment of Emergency Operations Centers

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Establishment and maintenance of Incident Command Structure
Coordination with State EOCs

Tiered System

The medical surge planning team, in recognition of recent federal guidance, has moved from matrices to a tier management system. We recommend that the NCR coordinating bodies review this recent guidance and determine whether this is a useful coordinating tool—or suggest other coordination formats. We recognize that NCR coordination will be done by the Joint Operations Center and await their guidance.

7 Legal Framework

Background

The Attorneys General (AGs) of each State have authored recently-enacted legislation that provides guidance to the Healthcare and Public Health communities. Specific guidance on all legal matters—including interruptions, refinements, clarification and general questions—should be directed to the respective Attorney General.

Several major legal issues are involved in Medical Surge:

Modification of Standards of Care

The American College of Emergency Physicians has reviewed these issues, and has issued guidance for practitioners faced with crisis medical management. Additional information can be obtained from respective medical societies, hospital legal counsel offices, and Public Health AGs.

Quarantine and Isolation

These Public Health Powers are codified in the laws of the three states. The Commonwealth of Virginia, the District of Columbia, and the State of Maryland have articulated policies, procedures, and detailed plans incorporating the local jurisdiction plans governing these situations. These powers are utilized occasionally for the containment of contagious diseases such as tuberculosis.

Medical Liability

Guidance on medical liability continues to be studied and refined. In some cases “Good Samaritan Laws” can be employed. In some cases a practitioner may be acting as an “agent of Public Health” thus being governed by Public Health State and local law.

If a person is performing duties as a registered volunteer of a government jurisdiction, local or state law will provide guidance.

If a person is performing duties as a member of a volunteer organization, the agency’s governing documents will provide guidance.

Emergency Powers Acts may be invoked by the Governors of Maryland and Virginia, and the Mayor of the District of Columbia for specific guidance in crisis situations.

For the purposes of NCR Medical, the states' laws govern legal practice. Case law will, over time, bring more clarity to this subject; additional resources are available in the appendices.

DRAFT