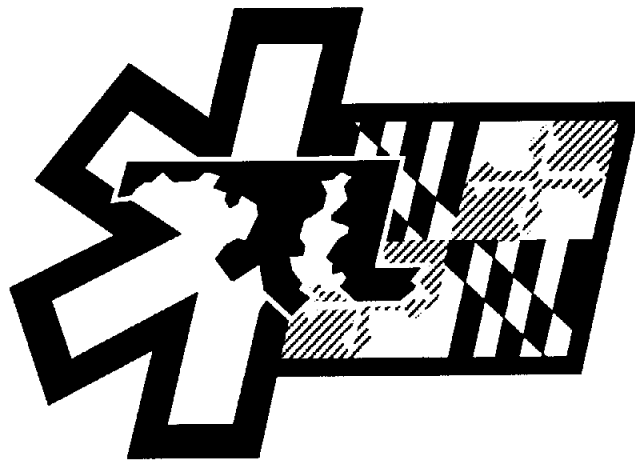


# **Maryland Health & Medical WMD Response Plan**



**Maryland Department of Health & Mental Hygiene  
Maryland Institute for Emergency Medical Services Systems**

**October 11, 2001**

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This series reflects the efforts of many people. Sincere appreciation is extended to the representatives of the emergency medical services, public health, hospitals, emergency management and the first responders who participated in focus groups, task groups, and steering committees. These individuals and their respective organizations provided fundamental insights, reviews and comments throughout the planning and development phases.

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This series is composed of several documents, all of which are available to interested parties and persons in either printed or on-line versions at [miemss.umaryland.edu](http://miemss.umaryland.edu).

These documents are:

- "The Hospital Focus Group Report on Improving the Health and Medical Response to Weapons of Mass Destruction in Maryland"
- "The Public Health Focus Group Report on Improving the Health and Medical Response to Weapons of Mass Destruction in Maryland"
- "The Emergency Medical Services Focus Group Report on Improving the Health and Medical Response to Weapons of Mass Destruction in Maryland"
- "The Maryland Strategic Plan To Improve the Health and Medical Response to Terrorism"
- "The Maryland Health and Medical System Preparedness and Response Plan - Weapons of Mass Destruction (Work Plan)"
- "The Maryland Health and Medical WMD Response Plan"

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## **PREFACE and EXECUTIVE SUMMARY**

This document, "*The Maryland Health and Medical WMD Response Plan*" describes the actions to be taken by Maryland's public and non-governmental healthcare providers to plan, prepare for, and respond to a terrorist attack. The "*Response Plan*" is the sixth document in a series focused on Weapons of Mass Destruction and the health and medical response.

A WMD may take several forms: explosives, chemical, biological, or radiological agents may cause a Mass Casualty Incident that will be a community-wide disaster. A WMD may be caused by domestic terrorism, such as the Oklahoma City bombing, or by international terrorists such, as the September 11, 2001 attack on the World Trade Center, Pentagon and Southwestern Pennsylvania. The purpose of such attacks is to disrupt, kill, inflict pain and cause damage.

The overall concept of operations for Maryland's health and medical WMD response is to build upon existing disaster preparedness and response capabilities by the health and medical community. By identifying the essential areas where coordination, communication, planning, mutual assistance and support are necessary, preparation and response to a WMD event can be maximized. Three major actors - public health, emergency medical services and hospitals - will have to respond efficiently and effectively if lives are to be saved. Other "system partners" - emergency management, law enforcement, military, governmental and non-governmental agencies, and local, state and federal government - are necessary partners to adequate preparation and adequate response

The "*Maryland Health and Medical WMD Response Plan*" has four basic components.

The first section includes the introduction, background and process, and capacity analysis.

The second section is composed of "best practices" identified for the health and medical community in the areas of Planning, Resource Coordination, Notification, Alerting, Surveillance and Detection, Mass Casualty Treatment, Decontamination, Mass Fatality Management, Public Information, and Personnel. These best practices are, for the

most part, stated as "shoulds" to state and reinforce the need for preplanning, coordination and communication among the varied providers and responders. By establishing a set of best practices, individual agencies and providers can adapt necessary procedures to meet the needs of their individual organizations and be able to integrate smoothly with the larger response community.

A central concept of the "*Maryland Health and Medical WMD Response Plan*" is using the Joint Commission on Accreditation of Hospitals Emergency Management Standards, and the requirement for health care organizations to use a community-accepted Incident Management System to enable coordination. The second major concept is a measured and graded set of responses through preparing for Mass Casualty Incidents at three levels: *Low Mass Casualty Incidents at 25 or fewer casualties, Mass Casualty Events at 26 to the hundreds, and Catastrophic Mass Casualty Events at 1000 live casualties or greater.* The third organizing concept is the necessity for surveillance, detection and response coordination by Maryland EMS, Public Health and Hospitals.

While technology can assist with resolving some constraints, adoption of practices that have common bases prior to a mass casualty event or a catastrophic mass casualty incident will increase the capabilities and capacities to effectively care for and manage a large patient surge. It is essential that Maryland hospitals, local and state public health providers, emergency medical services and emergency management personnel develop, establish and exercise a WMD response that is coordinated and understood across the boundaries of each of these sectors.

The third section is a specific description of responsibilities, actions, responses and functional tasks for those actors essential to an adequate preparation and response to WMD. The entities covered are: the Department of Health and Mental Hygiene, Local Health Departments, the Maryland Institute for Emergency Medical Services Systems, Hospitals, the Maryland Emergency Management Agency, Local Emergency Medical Services, the Office of the Chief Medical Examiner, and the Maryland Military Department. Support agencies, partners and resources are: The Maryland State Police and Local Law Enforcement Agencies, Local Emergency Management Agencies, Department of the Environment, Local Fire and Rescue Services, and the Department of Agriculture.

The fourth section is the Appendix which includes the Centers for Disease Control and Prevention's list of biological and chemical agents, the Joint Commission on Accreditation of Healthcare Organization Emergency Management Standards, and a listing of on-line WMD health and medical planning and information resources.

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# I. INTRODUCTION

This document describes the actions to be taken by Maryland's public health agencies and the private health and medical sector to prepare for, and respond to, a terrorist act in Maryland involving weapons of mass destruction. Events such as the September 11 Attacks at the World Trade Center, the Pentagon and Pennsylvania, and at Oklahoma City, have shown that no place in the United States is immune from WMD.

Planning for a weapon of mass destruction ("WMD") event can be daunting. In addition to anticipating the variables that may invite such an attack, the different agents themselves (explosives, biological and chemical, and radiological) present complex surveillance, detection and response issues.

Planning for health and medical system preparedness and response to WMD presents a challenge unlike most Mass Casualty Incidents ("MCI"). **The health care system is built on the premise that quality health care is best provided one patient at a time, with diagnosis and treatment built around the specific needs and conditions of the individual. Planning for a WMD event – which may involve casualties in the hundreds or catastrophic levels of casualties in the thousands – must assume at the outset that traditional processes will be quickly overwhelmed.** Experience has shown, however, that optimal preparedness and response results from systems that are known, practiced, and have become routine over time.

Coordinating a health and medical response to a major or catastrophic WMD event will test and challenge the health care delivery system in a way that few disasters can match. Coordination, communication, mutual assistance and sharing of resources are essential to minimizing loss of life. Such cooperative efforts can be difficult to achieve in a health care system that has become increasingly competitive and cost conscious.

Successful preparation and response can only be found through cooperation and development of mutual assistance, development of shared resources and assets, effective communication systems, and working together within an understood and accepted incident management system.

Preparation and response to a WMD incident will severely stress the health and medical and emergency management systems. It is hoped that this *Maryland's Health and Medical WMD Response Plan* and the series of reports provide a firm foundation for planning, preparation, and response to a WMD incident if - when - one occurs in Maryland.

## **II. BACKGROUND and PROCESS**

This Plan is the result of a unique partnership between three Maryland government agencies: the Maryland Emergency Management Agency ("MEMA"), the Maryland Department of Health and Mental Hygiene ("DHMH"), and the Maryland Institute for Emergency Medical Services Systems ("MIEMSS").

With the establishment of the Maryland Terrorism Forum in 1998 by the MEMA, a statewide coordinating and information sharing body was created. MEMA requested the DHMH and the MIEMSS to develop an improved medical response to a WMD incident in Maryland. A WMD Medical Summit was held in June 1998, and a Health and Medical Steering Committee was established to develop a Strategic Plan, and a strategic planning process was undertaken.

During 1999, work was completed on "The Maryland Strategic Plan to Improve the Health and Medical Response to Terrorism", and three reports were completed, "The Emergency Medical Services Focus Group Report", "The Public Health Focus Group Report", and "The Hospital Focus Group Report." Each focus group was composed of representatives of the target sectors within Maryland, and those discussions provided an in depth analysis of the changes that would be needed to be best prepared for a major or catastrophic mass casualty incident caused by terrorism.

In February 2000, "The Strategic Plan" was adopted by the WMD Health and Medical Steering Committee. A series of regional roundtables, one for each of the Emergency Medical Services Regions, was conducted in the spring of 2000. The purpose of these roundtables was twofold: to educate the principals on the nature of WMD and to begin the process of engaging the stakeholders in the local communities and regions.

In May 2000, a comprehensive planning document titled "Maryland Health and Medical System Preparedness and Response Plan - Weapons of Mass Destruction (Work Plan)" was released to obtain comments from the health and medical community.

The "Work Plan" had three basic purposes. The first was to comprehensively analyze the responses required by the health and medical community at the operations level building on the Strategic Plan and the Focus Group Reports. Secondly the "Work Plan" identified and stated system standards in the operational categories of incident management, public information, surveillance and detection, alerts, resource coordination, mass patient care, and mass fatality management. Finally it described the complex preparations and response actions that are necessary to effectively manage a WMD event by the health and medical and emergency response communities.

The "Work Plan", the first of its kind in the U.S. to fully describe at the operations level the response and actions to be taken in a WMD mass casualty / catastrophic event, received approximately 150 written or oral comments during a formal three month comment period.

While nearly all of the comments were overwhelmingly positive, there was also concern expressed about the degree of complexity and the overall length of the Work Plan. Concern was expressed about the ability of the health care system to implement the actions and to develop toward the system standards with little or no financial assistance. Many commentators stressed the fact that the health care system is working under severe financial constraints and human and other resource constraints that may negatively impact on the system's ability to either prepare for, or respond to, a WMD incident.

The 2000-2001 period also saw significant progress in information and overall coordination of WMD planning at the local, state and federal levels. In July 2000, the Washington Metropolitan Council of Governments completed a draft of its "Plan for the Health System Response to a Bioterrorism Attack for the National Capital Region." In August 2000, the Soldier and Biological Chemical Command released the final draft of "Improving Local and State Agency Response to Terrorist Incidents Involving Biological Weapons". In September, 2000, the General Accounting Office released its report to Congress "Lessons for Public Health Preparedness " as a result of the West Nile Virus Outbreak. In November 2000, the Centers for Disease Control and Prevention released the "Planning Guide for Receiving, Organizing, Repackaging and Distributing the CDC National Pharmaceutical Stockpile." In January 2001, the U.S. Government released its "Interagency Domestic Terrorism Concept of Operations Plan" which states how the federal government will operate and coordinate for a WMD incident. In January 2001, the National Association of County and City Health Officials released "Elements of Effective Bioterrorism Preparedness. Also in January, 2001, the Joint Commission on Accreditation of Healthcare Organizations published and made effective its standards for health care facilities "Emergency Management Plans", including terrorism and WMD events, and established standards for health care facilities' Incident Management Systems. Other significant contributions during 2001 include "updated Guidelines for Evaluating Public Health Surveillance Systems" by CDC, The National Governor's Association "Governor's Guide to Emergency Management, " which will be followed by a WMD companion guide, and the July, 2001 CDC "Updated Guidelines for Evaluating Public Health Surveillance Systems".



During this same time period, the MEMA, with participation by MIEMSS and DHMH, conducted federally requested assessments relating to threat and public health readiness. Both of these efforts helped to instruct this document.

This document, "*Maryland's Health and Medical WMD Response Plan*" responds to the comments on the "Work Plan". This final document focuses on the health and medical areas of preparedness and response. "System Partners" functions are essential and are described in this iteration primarily to assure that the different response sectors can anticipate the needs of the response partners during a WMD incident.

By approaching standard setting from a "best practices" perspective, Maryland health care providers can achieve a level of consistency across the response system that facilitates coordination and effective communications. This approach recognizes that preparations can be consistent with Maryland's communities and the continually evolving health care delivery system.

## **Capacity Analysis of the Maryland Health and Medical WMD Response System**

**Author's Note: The following is taken from The Maryland Strategic Plan To Improve the Health and Medical Response to Terrorism, February 2000. The full analysis and supporting tables can be found at [miemss.umaryland.edu](http://miemss.umaryland.edu).**

The purpose of this analysis is to assess the current capacity of the Maryland health system to accommodate three levels of patient surge caused by a weapon of mass destruction.

The three levels selected are Low Mass Casualties at 25 victims or fewer, Mass Casualties at 26 to the hundreds of victims, and Catastrophic Mass Casualties at 1000 victims or greater. These levels were selected for planning purposes as representative of expected casualty numbers produced by the four major categories of agents: explosives, chemical agents, biological agents and nuclear / radiological agents.

It is not possible to predict the numbers of victims or casualties that may be produced by a weapon of mass destruction event because of the unpredictable nature of the various agents and their impacts, the variables associated with a terrorist event, and the technical differences between and among agents. The impact of any given agent is dependent on such conditions as weather, exposed population, method of dispersal, and potential combinations of agents that can be concocted. It is possible, however, to make certain assumptions about the abilities and capacities of the health care system to handle certain levels of patient surge, if those assumptions are instructed by basic facts about the various potential agents' characteristics.

For example, it is unlikely that a small, conventional explosive device, unless placed in a large mass gathering location with thousands of people present, would produce victims at the 1000 plus level. Obviously, locations such as the World Trade Center in New York City or the Oklahoma Federal Building change the dynamic of the impact of such a device. Similarly, the use of a chemical agent that is dispersed through direct contact with skin will produce a very different casualty rate than a chemical agent that is dispersed through the air with access through the respiratory system. The use of biological agents that are spread through the heating and ventilation system of a building or subway line will have a different victim producing rate than spreading an agent on food that is eaten by a relatively small number of patrons at a restaurant or social event. The spreading of radioactive material around a congested public area in a city will have a different impact than a combination explosive device salted with nuclear material detonated at a major league sports game.

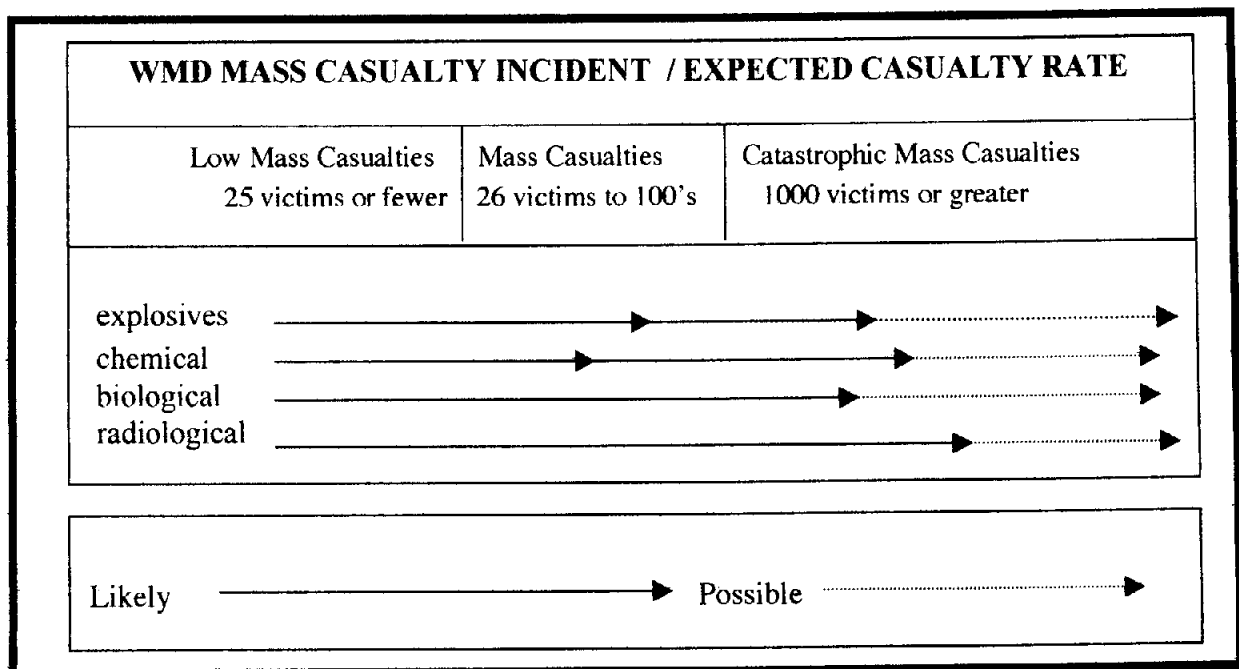
Implicit assumptions can and have been made about the potential impacts of the four agents. By identifying three levels of casualty rates (25 and fewer, 26 into the hundreds,

and one thousand plus) and by positing levels of impact for the four categories of agents (smaller bombs versus major detonations; chemical agents released at a specific target versus a generalized attack; spreading a biological agent that is non-infective versus one that is highly infective, releasing medical radioactive material versus the use of stolen military devices) can assist with planning for various levels of casualties. Further, by making assumptions about “likely and “possible” casualty rates, one can begin to develop corridors of risk for the health system’s ability to handle the various levels of patient surge.

It must be emphasized that the use of these assumptions and extrapolations does not indicate most- or least- likely scenarios. The value of the extrapolations rests within the ability to develop thresholds from which to test the capacities of the health system to respond to a terrorist attack using a weapon of mass destruction. Further utility is within projecting conditions under which a local emergency management system will be overwhelmed, projecting conditions under which state level resources will be needed, and to preplan conditions under which federal assistance will be required. Finally, there may be application for more “routine” disaster planning as additional information or data handling techniques become available for that purpose.

While some individual hospitals may have the potential to handle smaller scale Mass Casualty Incident, it is doubtful that the required staff and expertise is available for the kinds and types of injuries that would be presented by a WMD incident.

Under routine conditions, most hospitals’ emergency departments can be expected to go on by-pass status almost immediately upon receiving a relatively small surge of patients, i.e. “Yellow Alert” and “Red Alert.” For a Mass Casualty Incident, Emergency Departments declare the alert, implement the by-pass for EMS, and implement institutional disaster plans, with the intention of diverting patients to other facilities with the capacity and staffing to assist with incoming patient flows.



For a WMD incident, depending on the agent used and patient volumes at emergency departments, the current system of by-pass and diversion of EMS patients may create an ever widening circle of by-passes and diverting of patients as hospitals attempt to care for a rising surge of patients. With the exception of an explosive agent, a hospital may not be able to rapidly detect a chemical, biological or radiological agent until relatively late in the maturation of the incident. Upon discovery or identification, decontamination protocols may need to be implemented, further reducing the available hospital and emergency capacity.

No Maryland hospital emergency department in any county, by group or by geographic proximity, has the available capacity to handle a Mass Casualty Incident numbering in the hundreds or a Catastrophic 1000 live casualty surge. Equally, no regional grouping of hospital emergency departments produces the surge capacity to handle this number of casualties.

## **SUMMARY and CONCLUSION**

The use of a weapon of mass destruction in Maryland is an event for which the health and medical response system is unprepared. The overt release of a WMD agent, whether explosives, biological, chemical or radiological, will produce a casualty rate that will rapidly overwhelm the emergency response system and the health care delivery system. The covert release of a biological, chemical or radiological agent, perhaps in combination with an explosive device, may be difficult to detect, especially with delayed symptoms or presentation to health care providers.

It is unlikely that there is sufficient hospital capacity to handle a significant weapon of mass destruction event in Maryland. The analysis of surge capacity reveals that a Mass Casualty event with casualties in the hundreds would quickly overwhelm the health system. A Catastrophic Mass Casualty event would swamp the health care system almost immediately.

An analysis of surge capacity by using twenty-percent of average daily census of Maryland hospital inpatient capacity indicates that no county, group of counties, region or statewide configuration will provide sufficient capacity for either a Mass Casualty event or a Catastrophic event. By analyzing the capacity in each EMS Region, it becomes clear that no hospital could accommodate a patient surge at the Mass Casualty level, let alone a catastrophic event. Additionally, when the metropolitan corridor including Washington and Baltimore is considered, numbering ten counties, notwithstanding fairly proximate travel times, no configuration supports either a Mass Casualty event or a Catastrophic event. In an actual attack, the proximity of the hospitals in the metro corridor may increase the overload as victims attempt to obtain care from providers outside their customary locations.

The Maryland ambulance capacity by numbers of units, by region, for both public and commercial ambulances in Maryland has also been considered. The maximum

number available (2000-2001) is approximately 809 statewide, including 543 public and 266 commercial. In the most populated regions, Region III and Region V, there are 154 public ambulances available and 184 available, respectively. Baltimore City has 22 public ambulances available, Montgomery County has 48, and Prince Georges has 79. This capacity is not sufficient for transporting victims of a Mass Casualty event.

Finally, a WMD will produce victims and casualties, expectant / fatally wounded, fatalities, concerned, and persons and families requiring assistance. These patients may present to the formal EMS system and hospitals' emergency departments through private vehicles and by citizen volunteers almost immediately after an incident. Psychiatric care and emotional support may be needed by a significant portion of this population, in addition to somatic medical care.

## **BEST PRACTICES**

## 1. Best Practices: PLANNING

- Maryland Healthcare organizations, (hospitals, public health departments, emergency medical services, medical facilities and other health and medical organizations) should participate in and assist with community-wide planning activities for disasters and potential weapons of mass destruction incidents to help assure that needed health care services are available when needed.
- Because it is not possible to predict which of four agent categories (explosives, chemical, biological and radiological) may be used by terrorists, planning must anticipate any of the agents. Fundamental similarities in preparation can be identified; responses must be differentiated to match the agent involved.
- Because a weapon of mass destruction incident may quickly overwhelm individual providing components of the health care system with a surge of patients, casualties, families, and concerned people, contingency planning for such events should be accomplished by all the necessary components to help assure coordinated preparation, response, mitigation and recovery.
- In Maryland, planning for terrorist actions using explosives, biological or chemical agents, or radiological agents should be based on existing disaster plans and response plans with measured and graded increases designed to respond to increased demands and surges into the health care system.
- By basing weapons of mass destruction planning on potentially more frequent natural or man-made disasters, preparation and response to all types of disasters should be more effective, more cost-effective, and should assist with maintenance of routine practices and procedures.
- Local, regional and statewide planning for health and medical preparation and response should use these planning horizons, consistent with the size of the community and the potential impacts of the four categories of agents:
  - Low Mass Casualty Incident - 25 victims or fewer.*
  - Mass Casualty Event - 26 victims to 100's.*
  - Catastrophic Mass Casualty Event -1000 live victims or greater.*
- Planning for weapons of mass destruction should recognize that the impact and response will most immediately be at the local level, may graduate to the regional level, may require support and assistance from the state level, and may ultimately require support and assistance from the federal government.
- Planning by and for Maryland healthcare organizations should incorporate the assumption that assistance to the State will occur without outside or federal assistance for a period of up to 72 hours *from time of detection of the incident.*

- In addition to contingency planning for larger scale surges of patient and casualties, and fatalities, planning should incorporate recognition that terrorist actions are criminal acts under federal statutes in addition to state laws.
- Planning for Maryland health and medical preparation and response should include these essential areas:
  - Resource Coordination
  - Notification
  - Alerting
  - Surveillance and Detection
  - Mass Casualty Treatment
  - Mass Decontamination
  - Mass Fatality Management
  - Pharmaceuticals
  - Public Information
  - Training and Exercising
  - Personnel
- The base geographic planning units for disasters and weapons of mass destruction incidents are the twenty-four jurisdictions in Maryland (23 counties and Baltimore City), however regional coordination is essential; the five Emergency Medical Services Regions are the planning boundaries for regional planning, with the addition of the Washington Metro area (the National Capital Region).
- Planning efforts should include: Local/State Health Department, Law Enforcement, 911 / Emergency Dispatch / Emergency Operations Centers, Hospitals, Physicians, Office of the Chief Medical Examiner, Pharmacies, Veterinarians, Fire/Rescue/EMS, Mental Health, Local/County/State Executive representatives, American Red Cross, Hazardous Materials Teams, Local Emergency Planning Councils, and other voluntary and governmental /non-governmental agencies and stakeholders.
- Healthcare organizations planning for disasters and weapons of mass destruction incidents should recognize that while preparation and response should be community-wide, the health care system, emergency medical services and other first responders, hospitals and emergency departments, will bear the most significant responsibilities for actual response and care management of victims and casualties.
- Planning should include the use of data and information from the federal Department of Justice Assessment and the Centers for Disease Control Public Health Assessment to assist with threat identification, hazard analysis and capabilities analysis.



## 2. Best Practices: RESOURCE COORDINATION

- Maryland healthcare organizations should perform a risk analysis to identify services and gaps in resources to meet a weapon of mass destruction incident in their community using planning horizons consistent with the size of the community and the potential impacts of the four categories of agents on that community:
  - Low Mass Casualty Incident - 25 victims or fewer.*
  - Mass Casualty Event - 26 victims to 100's.*
  - Catastrophic Mass Casualty Event -1000 live victims or greater.*
- All Maryland hospitals are accredited by the Joint Commission on Accreditation of Healthcare Organizations ("JCAHO"), as are many additional health care providers, to include ambulatory care, behavioral health and long term care providers. Maryland healthcare providers, whether accredited or not, should assist the hospital segment of the health care system with meeting the standards adopted by the JCAHO. In this way, needed services and gaps can be best identified and ways to meet identified needs can be coordinated within the community.
- Priority areas for coordination of efforts and resources are:
  - Communications: radio, telephone and internet
  - Epidemiologic surveillance, monitoring and detection and investigation of outbreaks
  - Laboratory services
  - Pharmaceuticals and antidotes
  - Mass Casualty Treatment: establishment of alternate treatment centers and sites, decontamination procedures, sheltering, patient treatment and tracking systems, triage protocols and treatment protocols, transfers, discontinuance of services, psychiatry and social services
  - Personnel: intra- and inter-hospital / health care organization credentialing of staff and volunteers; shift rotations and extended duty hours; provision of personal support to workers and their families; CISM.
  - Security
  - Medical equipment and supplies back-up and reserve; logistics
  - Mass fatality management: establish and maintain temporary morgues
  - Mutual assistance and mutual aid
  - Public Information
  - Incident Management System
  - Financial accounting procedures

### **3. Best Practices: NOTIFICATION**

- Maryland health and medical facilities and organizations should adopt policies identifying a key person within its organization's management structure who is authorized to assess and report threats, or suspected or actual, terrorist actions.
- Plans developed to implement policies should identify, by title, the person and any alternates who are responsible for assessing and reporting terrorist activities and actions to authorities.
- The individuals identified to report suspected incidents and events to authorities should be available on a 24 hour basis and their contact numbers (telephone, pagers, etc.) should be readily available to all staff of the organization.
- The individuals responsible for notifying authorities should be provided with a list of contacts and 24-hour access numbers for key government officials and authorities in the state.
- For threats, actions or incidents suspected to be terrorist or weapon of mass destruction potential, the policy should reflect the following *priorities* for notification:
  - 911 / Local Emergency Dispatch Center
  - Federal Bureau of Investigation (FBI) Baltimore Field Office
  - Local / County / State Office of Emergency Management
  - Local / County State Health Department
- Emergency contact lists should be reviewed at least monthly and updated whenever changes occur to assure up-to-date contact lists.

## 4. Best Practices: ALERTING

- Each health care organization in Maryland should identify a key person within the hospital management structure who is authorized to receive communications regarding threat conditions from the Maryland State Emergency Operations Center, Local 911 / Emergency Operations / Dispatch Center, or law enforcement agencies.
- This individual should be familiar with the disaster plan of the health care organization and be authorized to prepare to implement the disaster plan for the organization.
- Each health care organization should communicate the name of the individual and the means of contacting the individual to the Local 911 Emergency Dispatch Center in the event of a WMD threat or incident.
- Healthcare organizations should adopt policies and procedures implementing the Maryland Terrorism Forum Threat Condition system:

**Level #5 No Known Threat:** There are no currently known threats or activities that would indicate any actions are needed other than normal and routine actions.

**Level #4 Minimal Threat:** Received threats do not warrant actions above normal operating levels of preparedness.

**Level #3 Potential Threat:** Information from intelligence (e.g., law enforcement) or methods of traditional or non-traditional surveillance (e.g., public health indicators, other information exchanges), or an articulated threat, indicates a potential for a terrorist incident, but without the threat having been assessed as credible.

**Level #2 Credible Threat:** A threat assessment indicates that the potential threat is credible and confirms the involvement of WMD in the developing terrorist incident. The actions taken by government authorities are focused on law enforcement actions taken in the interests of public safety and welfare and are predominantly focused on preventing and resolving the threat. Other government agencies and departments are focused on contingency planning and pre-positioning of tailored resources, as required.

**Level #1 WMD Incident:** It has been determined that a WMD incident has occurred. Actions by government authorities are directed toward public safety and welfare and the preservation of human life.

## **5. Best Practices: SURVEILLANCE and DETECTION**

- All Maryland health care organizations should maintain well-developed general surveillance and epidemiologic capacity to assure overall protection of the public's health within their treatment facilities.
- Each health care organization should identify an individual, by title, within the organization who is responsible for monitoring infections and disease outbreaks in the patients and staff of the organization.
- For those health care organizations with established Infection Control Programs, the responsible person should be within that program. For health care organizations without an established infection control program, such a unit should be established as part of the organizations adopted policies and procedures.
- Each health care organization should adopt policies and procedures consistent with Maryland laws and regulations concerning reportable conditions /diseases and Infection Control Procedures.
- The individual designated as the coordinator of the general surveillance and infection control effort should serve as the designated liaison to other health, medical, public health and non-public health agencies for bioterrorism and terrorism preparedness activities.
- The surveillance procedures adopted by the health care organization should monitor and conduct surveillance for both disease and syndromic patterns that may be present in patients and staff of the facilities to enable early detection of reportable conditions and potential biological and chemical agents.
- Procedures should be adopted by each health care organization for reporting outbreaks to the local health department epidemiology program for investigation.
- Suspected terrorist-caused illnesses or outbreaks should be reported to the Local Health Officer for investigation and the Maryland Department of Health and Mental Hygiene Epidemiology and Disease Control Program ("EDCP") using the DHMH 24 hour toll-free telephone number.
- Each health care organization in Maryland should require that the individual designated as the responsible person for monitoring infection and disease control subscribe to the electronic version of the CDC Mortality and Morbidity Weekly ("MMWR") and to the electronic Maryland Department of Health and Mental Hygiene "Weekly Maryland Bioterrorism Reports" to help assure early information on outbreaks in the U.S. and Maryland.

- Private and public health care organizations should develop secure web-based electronic information and communication systems to facilitate real time knowledge and information transfers across the health care system.
- The members of any electronic information-sharing and communications system should include: Maryland Department of Health and Mental Hygiene, Maryland Institute for Emergency Medical Services Systems, Maryland Emergency Management Agency, Local Health Departments, Hospitals, Clinics and Physicians, Epidemiologists, Office of the Chief Medical Examiner, Laboratories, Poison Control Center, 911 / Local Emergency Dispatch Centers, and appropriate Social Service Organizations, Volunteer and Non-Governmental Organizations.
- The operational principles of any electronic information-sharing and communication system should include:
  1. Identification, maintenance and distribution of points of contact.
  2. Security
  3. Provide information about public health surveillance, disease reporting, epidemiology, and response activities related to terrorism.
  4. Assist with collaboration on educational activities related to terrorism and chemical, biological, radiological or explosive agents for the health and medical community.
  5. Promote in-service training and collaborative educational activities.
  6. Develop and maintain collaborative public health surveillance and monitoring capabilities through traditional and non-traditional data and information sources.
- Maryland health care organizations should collaborate on an make available to the general health and medical community educational and training activities related to weapons of mass destruction, terrorism and disaster preparedness so as to enhance both overall awareness and efficiencies in educational activities.

## **6. Best Practices: MASS CASUALTY TREATMENT**

*Mass Casualty Treatment planning for weapons of mass destruction should be built upon health care organizations' existing disaster plans so as to improve upon overall disaster preparedness. In this way, benefits can be obtained in preparing for "routine" natural and man-made disasters; training and exercising can enhance overall operational efficiencies; and responses to hoaxes, threats, incidents and events can be measured and graded in scale to the incident.*

*Mass Casualty Treatment planning for disasters or a weapon of mass destruction event necessarily involves collaboration and cooperation among various private and public and governmental and non-governmental agencies at the local, regional, state and federal levels.*

*Mass Casualty Disaster Plans for weapons of mass destruction events will require analysis of existing resources and assets in comparison to anticipated patient surges and demands. Pre-planning, pre-arranging, and developing inter-organization resource coordination and support will be essential to an adequate response.*

- Maryland healthcare organizations' disaster plans should be viewed as preparation for community-wide disasters in which the healthcare organization may play an essential role among many different agencies and organizations roles and missions. Conversely, Maryland healthcare organizations' disaster plans should not be viewed as isolated, in-house plans that are not well connected to and rehearsed with the larger response community.
- Maryland healthcare organizations weapons of mass destruction disaster planning should recognize that a terrorist incident may involve a high-visibility, immediate impact event (explosives) or a covert introduction of a chemical or biological agent into the community that may be difficult to detect or identify.
- Disaster contingency planning should include both natural and man-made disasters. Man-made disaster planning should include terrorism and weapons of mass destruction using explosives, biological or chemical agents, and radiological agent releases.
- Contingency planning should use the following categories of Mass Casualty Incidents ("MCI") for risk analysis and planning, consistent with the size of the community for which the healthcare organization may be expected to respond:

*Low Mass Casualty Incident - 25 victims or fewer.*

*Mass Casualty Event - 26 victims to 100's.*

*Catastrophic Mass Casualty Event -1000 live victims or greater.*

- Planning for a weapon of mass destruction incident must recognize that patients, victims and casualties, family members and friends, and concerned individuals and groups will seek health care and support from multiple sources of care and may arrive at healthcare facilities through both emergency medical service systems and through private and mass transit vehicles.
- Surges of patients may require the establishment of alternate care points and treatment centers that are physically separated from the Emergency Department to prevent Emergency Rooms from becoming overwhelmed, to assist with triage, and to protect the Emergency Department and hospital from contamination. Planning for hospital alternate care points and / or treatment centers should attempt to keep such points and centers as physically close to the hospital as possible to help assure support by the hospital's infrastructure. Use of such facilities as schools and other public buildings may not be available, may be needed for other purposes and may not have the necessary infrastructure support, supplies or equipment.
- Maryland healthcare organizations weapon of mass destruction disaster plans should include provision for coordinating:
  1. Establishment of alternate treatment centers both on and off the facility's campus.
  2. Arrangements for sheltering staff, patients and visitors.
  3. Arrangements for decontamination of staff, patients and visitors.
  4. Arrangements for inter-facility and inter-hospital credentialing of medical staff and other personnel to allow for lateral utilization of human resources.
  5. Credentialing of volunteers not affiliated with a health care facility.
  7. Arrangements for back-up, reserve and backfill for medical equipment and Supplies.
  7. Arrangements for security for the facility and any alternate treatment centers or sites.
  8. Patient identification and tracking systems.
  9. Adequate potable water, food and sanitary waste disposal.
  10. Arrangements for establishing temporary morgues.
  11. Procedures and treatment protocols for separating and handling victims, casualties, visitors and concerned individuals.
  12. Arrangements for psychiatric and counseling services for incoming patients or persons who require assistance.
  13. Arrangements for added staff, shift rotations and extended duty hours.
  14. Arrangements for Critical Incident Stress Management for facility staff.
  15. Any protocols for discontinuing services at or by the facility.
  16. Arrangements for financial accounting for costs incurred by the response.
  17. Arrangements for mutual assistance and aid by other facilities or hospitals.
  18. Arrangements for an integrated incident management system (IMS).

19. Arrangements for a coordinated Public Information Offices.
20. Arrangements for any locally identified issues that would be of concern to the local community.
21. Consistency with Joint Commission on Accreditation of Healthcare Organizations standards, if appropriate.
22. Regularly schedule revisions or updates.



## 7. Best Practices: DECONTAMINATION

- Maryland healthcare organizations should assure that decontamination procedures used within a community are known and understood by first responders and healthcare facilities and, to the maximum extent practicable, are consistent among those entities performing decontamination of victims.
- Decontamination procedures should be adopted by communities in coordination with healthcare facilities to help assure that maximum effective procedures are used prior to victims arrival at healthcare facilities. Coordinated procedures assist with triage and treatment at emergency departments and alternative treatment centers, and will assist with preventing contamination of facilities and emergency departments.
- Decontamination procedures should reflect the following principles:
  - Victims should be decontaminated as soon as possible.*
  - Disrobing should be considered as part of decontamination.*
  - Flushing with water is generally the best mass decontamination method.*
  - Triage and prioritizing decontamination helps assure the maximum benefit to the maximum number of victims.*
  - Decontamination materials such as bleach and soaps are effective if immediately available, but decontamination should not be delayed.*
  - Decontamination is not effective for most biological agents, but is effective for most chemical and radiological agents and explosive residues.*
- Field and healthcare facility decontamination procedures should include identification of "Hot Zones", "Warm Zones", and "Cold Zones".
- Emergency first responders and healthcare facilities should expect at least a 5:1 ratio of unaffected to affected victims requiring emergency care and decontamination. (Source: SBCCOM "Guidelines for MCI Decontamination During a Terrorist Chemical Agent Incident", January 2000.
- Disaster plans and contingency plans for healthcare facilities should apply the 5:1 ratio to identify needed decontamination capacities, consistent with the size of the community and for *Low Mass Casualty Incidents - 25 victims or fewer; Mass Casualty Events - 26 victims to 100's; Catastrophic Mass Casualty Event -1000 live victims or greater.*
- Planning for existing and new construction by healthcare facilities should include provision for mass decontamination procedures and protocols.
- Healthcare organizations whose personnel use protective equipment should be prepared to self-decontaminate using NFPA #471 and NOISH standards.

## **8. Best Practices: MASS FATALITY MANAGEMENT**

- Each Maryland healthcare facility should obtain and review the "Mass Fatality Plan" published by the Maryland Office of the Chief Medical Examiner ("OCME") to assure that healthcare facilities mass fatality disaster plans are consistent with those of the Maryland Chief Medical Examiner.
- Mass fatality management caused by WMD ultimately falls under the overall supervision of the OCME for forensic investigation. Procedures must be coordinated with the OCME in Maryland.
- Healthcare organizations should adopt policies and procedures that coordinate the handling of bodies resulting from a disaster or weapon of mass destruction with procedures established by the Office of the Chief Medical Examiner.
- Healthcare organizations should develop contingency procedures and capacity, consistent with the size of the potentially affected community, to accommodate an increase in the body storage capabilities of the healthcare organization.
- Contingency plans, policies, and procedures should recognize that remains and personal effects of victims may be contaminated with residue or agents and may be evidence needed for successful criminal prosecution and proceedings.
- The development of healthcare organizations mass fatality management plans should be coordinated with other healthcare organizations and facilities in the jurisdiction / county.
- Healthcare organizations' mass fatality management contingency plans should include:
  1. Expansion of temporary morgue capacity either on-site or through pre-arranged capacity within the community.
  2. Existing or temporary disaster or weapon of mass destruction morgue capacity should include provision for: records management of remains, proper management of personal effects, transportation of bodies, proper refrigeration and storage and security.
  3. Review of contingency plans by representatives of: the Office of the Maryland Chief Medical Examiner, the Maryland State Police and the Federal Bureau of Investigation.
- Upon adoption of the healthcare organizations mass fatality management plan, the plan should be shared with: the Local Emergency Management Agency, Local Health Department, local Funeral Directors Association, American Red Cross, and religious and clerical leaders representing the diversity of the community.

## **9. Best Practices: PUBLIC INFORMATION**

- Each Maryland healthcare organization should develop and execute a memorandum of understanding with its local 911 / Emergency Management Agency concerning roles and responsibilities for releasing information to the public and media during disasters, mass casualty incidents and events, and events involving weapons of mass destruction.
- Maryland State government agencies should prepare and make available to Maryland healthcare organizations public information offices the procedures and protocols that will be used for weapon of mass destruction incidents.
- Healthcare organizations public information officers should attend and participate in Maryland Emergency Management Agency and Federal Emergency Management Agency Public Information Officer training events to best familiarize themselves with the roles of governmental and non-governmental agencies during a weapon of mass destruction incident.
- For a suspected or known weapon of mass destruction incident, Maryland healthcare organizations should adopt policies and procedures that centralize public information activities to the local/state/federal Joint Information Center which will be established within the local/state/federal Emergency Operations Center / Incident Command Center.
- Media representatives (print, television, and radio) should be invited to attend and observe exercises and training sessions to familiarize the media with the procedures to be used in a mass casualty /terrorist incident and to familiarize authorities with the needs and expectations of public information / media outlets during such an incident.
- Healthcare organizations and their public information offices should be knowledgeable about current sources of information concerning terrorism and agent-specific fact sheets from: the U.S. Centers of Disease Control and Prevention, the U.S. Office of Emergency Preparedness, and the Maryland Department of Health and Mental Hygiene.

## **Best Practices: PERSONNEL**

- Healthcare organizations should assure that their personnel are properly immunized and vaccinated and / or have access to medications for agents to which they may be exposed. Consideration should be given to assuring staff members' families have access to immunizations, vaccinations and medications to assist with alleviating concerns of staff members about primary or secondary exposures and to enable health personnel to continue providing care.
- Health personnel will have legitimate concerns about the safety and security of family members during a terrorist attack using weapons of mass destruction. These concerns may range from day care for young children and school evacuations or closures for school age children and young adults to conditions of spouses and others not located at the health facility. Pre-arranging for communicating with and providing assurance that staff members' families are safe and secure will assist with maintaining staff morale and efforts during a disaster.
- Mass Casualty Incidents from terrorist acts may last longer than a shift and may extend into days or potentially weeks. Accommodations should be pre-planned to enable staff to sleep, shower, telephone family members, and take care of personal business matters. These precautions enable the staff to continue working during crises, assists with maintaining morale, and will assist with recovery by the organization.
- Plans should be made to assure paychecks continue and are received or deposited for staff members who are expected or required to have extended duty hours.
- Critical Incident Stress Management (CISM) should be available and integrated into human resources practices for personnel providing care in MCI responses, especially where there may be large numbers of fatalities.

**ACTIONS, RESPONSES and FUNCTIONAL TASKS**

# **DEPARTMENT OF HEALTH and MENTAL HYGIENE (DHMH)**

## **Responsibilities**

*The Maryland Department of Health and Mental Hygiene ("DHMH"), in coordination with the twenty-four Local Health Departments and Maryland hospitals, is responsible for surveillance of the public health and monitoring of public health indicators to detect outbreaks of disease and the use of biological agents. The DHMH, as the State Public Health Authority in Maryland, is responsible for developing and implementing systems that will alert law enforcement agencies of suspicious outbreaks or potential or actual use of biological, chemical or radiological agents.*

*The DHMH is also the primary agency responsible for alerting the Maryland Emergency Management Agency ("MEMA") to suspected, potential or actual biological, chemical or radiological agents to enable the MEMA to implement Statewide threat condition advisories to the law enforcement, public safety, emergency medical services, hospitals, and the health and medical community.*

*The DHMH, in coordination with the Maryland Institute for Emergency Medical Services Systems, is responsible for developing and maintaining health and medical expertise to advise each echelon of incident management as to how best protect human lives as a result of a WMD incident.*

*The DHMH is responsible for developing and maintaining Rapid Response Teams ("RRT"), with subject matter, epidemiologic, toxicologic, medical and laboratory expertise to assess, report and advise local and the State governments on incident management and patient treatment. This expertise is essential to assisting local and state Emergency Operations Centers with incident management and recovery.*

*The DHMH is the lead agency for coordination of mental health services to the community impacted by a WMD incident.*

## **FUNCTIONAL AREA TASKS**

### **1. SURVEILLANCE AND EARLY DETECTION**

**1.A.** The DHMH should develop and implement a health indicators surveillance system that can detect and identify syndromic outbreaks and suspected terrorist attacks using biological weapons of mass destruction in the general Maryland population. The

basic elements of this system must include data security, timely reporting, analysis and response, and have twenty-four hour / seven-day-a-week capability.

**1.A.1** DHMH, through the Epidemiology and Disease Control Program (“EDCP”), should implement an electronic reporting system whereby Local Health Departments monitor and report on a regular basis syndromes and suspected disease outbreaks within the twenty-four jurisdictions. This system should be based on current capabilities and the system should be continuously refined and improved to assure timely data collection, analysis, and information transfer / availability.

**1.A.2.** The EDCP shall refine and promulgate a standard reporting mechanism (such as the “Biologic Exposure Incident Information Questionnaire”) as the basis for a statewide surveillance mechanism of the public’s health status. This questionnaire should enable Local Health Departments to efficiently gather, collate and report: a) reportable conditions as defined in Maryland COMAR Regulations, b) utilize syndromic patterns, c) allow for collection of additional data that may be determined by the local jurisdiction as necessary, and d) be compatible with the federal Centers for Disease Control and Prevention lists of reportable conditions.

**1.A.3.** The public health surveillance system shall include linkages with other agencies such as the Maryland Poison Control Center, the Maryland Institute for Emergency Medical Services Systems, Department of Agriculture and the Department of the Environment to help assure early detection of disease outbreaks.

**1.A.4.** The public health surveillance system shall be established whereby reports are received from Local Health Departments by the EDCP. The information should be collated and summarized for analysis, with findings of suspected outbreaks identified and presented to the Secretary or designee. These summarized reports shall also be distributed to the Local health Departments, OCME, DHMH Laboratories, MIEMSS, hospital Infection Control Programs, MEMA and MSP.

**1.B.** The DHMH Laboratories Administration capabilities shall be capable of providing rapid and accurate analysis of materials that may indicate the use of a weapon of mass destruction.

**1.B.1.** The DHMH Laboratories Administration shall be capable of analyzing, identifying and reporting disease outbreaks and biological and chemical agents at the appropriate level to provide as much information and warning as possible to health, law enforcement, emergency management and first responders as possible. This capability must include biosafety level laboratory capability, staffing and communications network operability.

**1.B.2.** The DHMH Laboratories Administration should be capable of analyzing and accurately identifying, at a minimum, the current "A" list of biological agents as identified by the federal Centers for Disease Control and Prevention. (See Appendix).

**1.B.3.** The Laboratories Administration shall be capable of supplying a Biosafety Level of BSL 3 and retain its Level "C" certification in order to deliver the expected level of service. BSL 3 will protect the scientists who work in the central laboratory, enable the lab to safely perform assays and analyses, and protect non-laboratory employees who work in the building housing the state laboratory.

**1.B.4.** The Laboratories Administration shall adopt protocols and procedures, in consultation with the Office of the Attorney General, the OCME, MSP and the Federal Bureau of Investigation, that assures chains of custody and evidence preservation are maintained for investigation and apprehension of individuals suspected of using weapons of mass destruction.

**1.B.5.** The Laboratories Administration shall develop and execute memoranda of agreement ("MOA"), consistent with Centers for Disease Control and Prevention guidelines, with hospitals, local health departments, and other laboratories in Maryland. These MOA's shall provide for the safe handling and transportation of bio-hazardous material to the state laboratory for analysis and testing.

**1.B.6.** The Laboratories Administration shall develop and execute memoranda of agreement with the federal Centers for Disease Control and Prevention, the



USAMRIID and USAMRICD, National Reference Laboratories and the National Institute of Health Laboratory to assist with rapid, early and accurate identification of suspected biological and chemical agents of mass destruction.

These agreements should include the identification and confirmation of agents in the categories of announced threat, announced (overt) releases, or unannounced (covert) releases of chemical or biological agents. These agreements should provide for rapid analysis of materials associated with hoaxes to assist with decision making by government and emergency management officials.

**1.B.7.** The Laboratories Administration shall develop written protocols with the Maryland Department of Agriculture Animal Health Laboratory, the National Veterinary Service Laboratory, National Animal Poison Control Laboratory and Antec Veterinary Diagnostic Laboratory to assist with sentinel event detection, reporting of suspected outbreaks, and multilateral notification procedures.

**1.B.8.** The Laboratories Administration, in coordination with the EDCP, shall develop a written procedure for receiving, identifying and notifying the EDCP of the results of testing or sampling of suspected biological or chemical agents. These written procedures shall support and complement the surveillance system and the reporting systems developed by the EDCP for the Secretary, DHMH, Local Health Departments, and law enforcement and emergency management officials.

**1.B.9.** The Laboratories Administration shall develop and promulgate regulations describing the procedures to be followed by private and institutional laboratories for handling and reporting suspected biological and chemical agents of mass destruction. These regulations should describe the analytic capabilities of such laboratories, describe handling, transporting and reporting requirements, and describe certification expectations of such laboratories.

## **2. ALERTS**

*The public health monitoring and surveillance system may provide the first indication of a biological, chemical or radiological WMD event in Maryland. It is essential that this system give accurate and timely information and earliest possible warning to law enforcement, public safety, emergency medical services and emergency management agencies to permit these agencies to prepare and to mobilize resources. The Maryland*

***Terrorism Forum has adopted the following Threat Condition System into which a public health monitoring and surveillance system reports:***

***Level #5 No Known Threat:*** *There are no currently known threats or activities that would indicate any actions are needed other than normal and routine actions.*

***Level #4 Minimal Threat:*** *Received threats do not warrant actions above normal operating levels of preparedness.*

***Level #3 Potential Threat:*** *Information from intelligence (e.g., law enforcement) or methods of traditional or non-traditional surveillance (e.g., public health indicators, other information exchanges), or an articulated threat, indicates a potential for a terrorist incident, but without the threat having been assessed as credible.*

***Level #2 Credible Threat:*** *A threat assessment indicates that the potential threat is credible and confirms the involvement of WMD in the developing terrorist incident. The actions taken by government authorities are focused on law enforcement actions taken in the interests of public safety and welfare and is predominantly focused on preventing and resolving the threat. Other government agencies and departments are focused on contingency planning and pre-positioning of tailored resources, as required.*

***Level #1 WMD Incident:*** *It has been determined that a WMD incident has occurred. Actions by government authorities are directed toward public safety and welfare and the preservation of human life.*

**2.1.** The State and Local public health monitoring and surveillance system shall include a system of categorization consistent with the Maryland Threat Condition System and reflect well-understood public health and medical terminology. An example of such a labeling system is: 1. NORMAL AND ROUTINE, 2. SUSPECT FINDINGS in identified jurisdictions or locality, 3. CONFIRMED OUTBREAK with identification of the syndrome, symptoms or disease entity, with the affected jurisdiction or locality identified, 4. NOTICE OF UPGRADE of ALERT or CANCELLATION OF ALERT based on 1-3.

**2.2** The summarized reports distributed to the Local health Departments, OCME, DHMH Laboratories, MIEMSS, hospital Infection Control Programs, MEMA and MSP (**1.A.3 Surveillance and Detection**, above) shall identify the findings using the terminology described above, or a similar set of terms.

**2.3.** The DMHM shall establish protocols to immediately notify the Federal Bureau of Investigation, the Maryland State Police, the Maryland Emergency Management Agency, and the Maryland Institute for Emergency Medical

Services Systems of findings that may indicate the suspected, potential or actual presence of a WMD agent.

**2.4.** The MIEMSS EMRC / SYSCOM shall notify affected hospitals of findings that may indicate the suspected, potential or actual presence of a WMD agent.

**2.5.** The DHMH shall establish and support a system to notify and communicate with the Local Health Officers. Such a system shall provide for immediate alerting of the Local Health Officer of the status of the incident, enable both voice and message transmission and include routine testing to assure the system is operable.

**2.6.** DHMH shall establish a system to allow for communication from health care providers to report suspected disease outbreaks or suspected use of biological or chemical agents. The health provider contact point shall be designed to operate in conjunction or in parallel with the current DHMH duty officer system but shall link to the EDCP monitoring and surveillance system.

**2.7.** The EDCP, with the approval of the Secretary, shall also establish protocols to notify the Infection Control Program and a designated Infection Control Physician at each affected or potentially affected acute care hospital, the Emergency Medical Resource Center (EMRC/SYSCOM) at MIEMSS, and the Local Emergency Management Agency / 911 EOC.

**2.8.** DHMH should investigate the utility of a statewide telephone system to allow the general public to report suspected disease outbreaks or suspected use of biological or chemical agents. A general public telephone contact point shall be designed such that it operates in coordination with an enhanced Maryland Poison Control Center capability, and links to the EDCP monitoring and surveillance system.

**2.9.** DHMH communications links should include the Department of Environment, Department of Agriculture, MIEMSS, MEMA and the Maryland Poison Control Center.

### **3. HEALTH AND MEDICAL RESOURCE COORDINATION**

**3.1.** The Secretary and all Local Health Officers shall inventory and catalog, by county, with regularly scheduled updates, the existing public and private health and medical facilities, equipment, personnel and supplies that would be needed to support a catastrophic weapon of mass destruction event. Such an inventory is an essential part of preparedness, enables identification of gaps and will support development of inter-county local health department mutual assistance agreements.

**3.2.** The DHMH shall provide the MEMA and MIEMSS with the jurisdictional inventory described in 3.1, above, along with any updates or revisions. DHMH, MIEMSS and MEMA shall develop a shared resource inventory and plan for jointly providing transport of health and medical resources as needed by affected areas.

**3.3.** DHMH shall require a mutual assistance agreement to be developed and executed by each Local Health Department with contiguous Local Health Departments that describes the type, scope and resources available, the conditions for requesting assistance, and the methods for accounting for services provided in the event of disaster or weapon of mass destruction event. Such agreements shall define who has fiscal responsibility for a request, shall have the Secretary as a necessary party to the agreements, and shall be developed in a way to facilitate obtaining federal financial assistance in the event of a terrorist act.

**3.4.** DHMH shall develop an education and training program for every DHMH employee, appropriate for their duties and responsibilities, consistent with the Terrorism Forum Training Action Group recommended levels of Awareness, Operations, Technician and Specialist. This effort should reach across every local health department, facility and program of the DHMH.

**3.5.** In addition to education and training of DHMH personnel, DHMH and MIEMSS should coordinate with MEMA and the Terrorism Forum to develop and implement training programs for other State and local governments, hospitals and healthcare providers.

**3.6.** DHMH shall adopt, and practice an Incident Management System (IMS) and provide Local Health Officers with information and training in that IMS.

#### **4. MASS PATIENT CARE**

**4.1.** DHMH and MIEMSS shall request, through Local Health Officers, the regularly updated disaster plans for each health care facility in each jurisdiction. Requests should be made in coordination with the local Emergency Management Agency and should request that plans include *Low Mass Casualty Incident - 25 victims and fewer, Mass Casualty Event - 26 victims to 100's, and Catastrophic Mass Casualty Event -1000 live victims or greater.*

**4.2.** The DHMH, MIEMSS, MEMA and the Local Health Officer as the Deputy State Health Officer, shall review such plans and make recommendations for improvements or coordination to the facilities. This effort enables integration of facility and local plans with overall system and State plans.

Such disaster plans should be reviewed for:

1. Establishment of alternate treatment centers, on or off the facility's campus.
2. Arrangements for sheltering staff, patients and visitors.
3. Arrangements for decontamination of staff, patients and visitors;
4. Arrangements for inter-facility and inter-hospital credentialing of medical staff and other personnel to allow for lateral utilization of human resources.
5. Credentialing of volunteers not affiliated with a health care facility.
6. Arrangements for back-up, reserve and backfill for medical equipment and supplies.
7. Arrangements for security for the facility and any alternate treatment centers or sites.
8. Patient identification and tracking systems.
9. Adequate potable water, food and sanitary waste disposal.
10. Arrangements for establishing temporary morgues.
11. Procedures and treatment protocols for separating and handling victims, casualties and concerned individuals.
12. Arrangements for psychiatric and counseling services for incoming patients or persons who require assistance.
13. Arrangements for added staff, shift rotations and extended duty hours.

14. Arrangements for Critical Incident Stress Management for facility staff.
15. Any protocols for discontinuing services at or by the facility.
16. Arrangements for financial accounting for costs incurred by the response.
17. Arrangements for mutual assistance and aid by other facilities or hospitals.
18. Arrangements for an incident management system ("IMS").
19. Arrangements for coordinated Public Information Offices.
20. Arrangements for any locally identified issues that would be of concern to the local community.
21. Consistency with Joint Commission on Accreditation of Healthcare Organizations standards, if appropriate.
22. Regularly scheduled revisions or updates.

**4.3.** The Secretary shall obtain assurance, and provide assistance if necessary, that each Local Health Department has a cache or standing resource of medications under its control sufficient to treat victims of a terrorist act using chemical, biological or radiological agents. The "Clinical Treatment Guidelines for Weapons of Mass Destruction" as part of the Maryland Medical Protocols for Emergency Medical Services Providers approved by the Maryland Institute for Emergency Medical Services Systems shall be used as the guide to medications and antidotes.

**4.4.** The Secretary shall require each hospital to have under its control a cache or standing resource of medications to treat victims of a terrorist act using chemical, biological or radiological agents. The "Clinical Treatment Guidelines for Weapons of Mass Destruction" as part of the Maryland Medical Protocols for Emergency Medical Services Providers approved by the Maryland Institute for Emergency Medical Services Systems shall be used as the guide to medications and antidotes.

**4.5.** DHMH shall obtain assurance that the Local Health Department and hospitals have arrangements for medication storage and rotation of medication and antidotes.

**4.6.** The DHMH should establish a Rapid Response Team ("RRT")

specifically capable to assess and assist local communities with a chemical, biological or radiological terrorist incident. Such team(s) shall have expertise in the subject matter, epidemiological investigation, decontamination, and mass patient care strategies and mass patient management. Members of such team(s) shall be assigned personal protective equipment and have communications ability. Such team(s) should be able to provide assistance to local communities, support the Local Health Officer and the Local Health Department and be able to assess and provide status reports to the DHMH and the State Emergency Operations Center.

- DHMH shall develop or have readily accessible and be able to provide and distribute fact sheets on the most likely biological and chemical agents as determined by the "A" list of the Centers for Disease Control and Prevention for release to health care providers and the general public. Such fact sheets shall contain information such as symptoms, actions to be taken by victims to protect themselves, and other information that may be necessary for a citizen to know regarding such agents. Fact sheets shall be acquired and updated by DHMH and distributed with the assistance of the Maryland Poison Control Center and Local Health Departments.

**4.8.** The DHMH shall identify, train and educate a cadre of health professionals knowledgeable about biological, chemical and radiological agents to provide the essential scientific and medical resource to the state Emergency Operations Center, health care facilities, and the media during a weapon of mass destruction incident. This cadre shall be capable of providing expert technical knowledge in handling such an event, and should serve as a resource to the Department, SEOC, local emergency operations centers, and any Joint Information Center ("JIC") activities.

**4.9.** The DHMH shall promulgate regulations or propose legislation as necessary to fulfill its mission to protect the public's health during WMD events. As a priority, DHMH and Local Health Departments shall review existing laws and jurisdictional ordinances to assure that procedures for quarantine and isolation of individuals and groups are known and followed during a disease outbreak or terrorist incident involving communicable diseases.

**4.10.** The DHMH shall review state operated health care facility disaster

plans to identify the support roles such facilities can play in providing mass casualty care in a weapon of mass destruction incident. Pre-planning the roles of such facilities can assist State and federal officials in responding to a catastrophic incident.

**4.11.** DHMH shall review as part of licensure the emergency disaster plans of nursing homes, assisted living facilities, and other homes or facilities.

**4.12.** The Secretary should adopt and incorporate by reference for use by DHMH programs and facilities, and Local Health Departments, the “Clinical Treatment Guidelines for Weapons of Mass Destruction” as part of the Maryland Medical Protocols for Emergency Medical Services Providers approved by the Maryland Institute for Emergency Medical Services Systems.

**4.13.** DHMH shall review the current availability of mental health services statewide and take the lead role in the coordination of these services with the Local Health Departments, local emergency medical services, local, State, and federal agencies, and other agencies and providers, as necessary, to achieve a coordinated system of mental health care.



# LOCAL HEALTH DEPARTMENTS

*Maryland Local Health Officers serve in a dual capacity as Deputy State Health Officers and as the Local Health Officer for the jurisdiction.*

*Maryland's twenty-four Local Health Departments, in coordination with community health and medical providers and the Maryland Department of Health and Mental Hygiene, are responsible for surveillance of the public health and monitoring of public health indicators to detect outbreaks of disease and the use of biological, chemical and radiological agents.*

*Local Health Departments and the DHMH, acting jointly as the Public Health Authority in Maryland, have a primary responsibility for developing and implementing systems that will detect and alert public safety, emergency medical services, law enforcement, emergency management agencies and state and local authorities of suspicious outbreaks or potential or actual use of biological, chemical or radiological agents.*

*The Maryland public health system also has a shared responsibility for preparing communities for disasters and terrorist attacks, assisting with coordination of plans and responses by the health and medical community, and alerting State and local government public safety and emergency management agencies to these threats.*

*This role includes developing and maintaining health and medical expertise to advise and assisting local and state Emergency Operations Centers with incident management, response, and recovery, to best protect human lives as a result of a WMD incident.*

*In many jurisdictions, the Local Health Department and the DHMH are the lead agencies for coordination of mental health services to the community impacted by a WMD incident.*

## FUNCTIONAL TASKS

### 1. SURVEILLANCE AND EARLY DETECTION

**1.1.** Local Health Departments should support and assist with the development of a health indicators surveillance system that can detect and identify syndromic outbreaks and suspected terrorist attacks using biological weapons of mass destruction in the general Maryland population. The basic elements of this system

must include data security, patient confidentiality, timely reporting, analysis and response, and have twenty-four hour / seven-day-a-week capability.

**1.2.** Local Health Departments must be capable of reporting into a Statewide electronic reporting system established by the DHMH through the Epidemiology and Disease Control Program. This system must be capable of reporting on a regular basis and monitoring syndromes and suspected disease outbreaks within all twenty-four jurisdictions. The system should be based on current capabilities and should be continuously refined and improved to assure timely data collection, analysis, and information transfer / availability.

**1.3.** The EDCP shall refine and promulgate a standard reporting mechanism for Local Health Departments (such as the “Biologic Exposure Incident Information Questionnaire”) as the basis for a statewide surveillance mechanism of the public’s health status. This method should enable Local Health Departments to efficiently gather, collate and report: a) reportable conditions as defined in Maryland COMAR Regulations, b) utilize syndromic patterns, c) allow for collection of additional data that may be determined by the local jurisdiction as necessary, and d) be compatible with the federal Centers for Disease Control and Prevention lists of reportable conditions.

**1.4.** The State and Local public health surveillance system shall be established whereby reports are received from Local Health Departments by the EDCP. The information should be collated and summarized by the EDCP for analysis, with findings of suspected outbreaks identified and presented to the Secretary or designee. Summarized reports shall then be distributed to the Local health Departments, in addition to the OCME, DHMH Laboratories, MIEMSS, hospital Infection Control Programs, MEMA and MSP.

**1.5.** Each Local Health Department should coordinate with the Infection Control Program at each acute care general hospital and other health care providers within the jurisdiction to assure that the surveillance and monitoring system is obtaining sufficient and adequate information to detect disease and syndromic outbreaks.

**1.6.** The local public health surveillance system must include linkages with other local agencies such as the Maryland Department of Agriculture, Department of the Environment, local emergency medical services, 911 Dispatch Centers, and

other appropriate local agencies to help assure early detection of disease outbreaks.

**1.7.** Each Local Health Department should develop local protocols and procedures to support a Memorandum of Agreement with the DHMH Laboratories Administration and the EDCP. Such procedures must include but are not limited to: maintenance of chain of custody and evidence preservation for suspect materials, safe handling and transportation of bio-hazardous material, and method of reporting back to and confirming results to the Local Health Department.

**1.8.** Each Local Health Department should assure that there is sufficient capability and coordination to conduct local epidemiological investigation to quickly identify causative agents, determine causes or diagnoses, and identify any precautions that should be taken or alerts that should be issued.

## **2. ALERTS**

*The public health monitoring and surveillance system may provide the first indication of a biological, chemical or radiological WMD event in Maryland. It is essential that this system give accurate and timely information and earliest possible warning to law enforcement, public safety, emergency medical services and emergency management agencies to permit these agencies to prepare and to mobilize resources.*

*The Maryland Terrorism Forum has adopted the following Threat Condition System into which a public health monitoring and surveillance system reports:*

**Level #5 No Known Threat:** *There are no currently known threats or activities that would indicate any actions are needed other than normal and routine actions.*

**Level #4 Minimal Threat:** *Received threats do not warrant actions above normal operating levels of preparedness.*

**Level #3 Potential Threat:** *Information from intelligence (e.g., law enforcement) or methods of traditional or non-traditional surveillance (e.g., public health indicators, other information exchanges), or an articulated threat, indicates a potential for a terrorist incident, but without the threat having been assessed as credible.*

**Level #2 Credible Threat:** *A threat assessment indicates that the potential threat is credible and confirms the involvement of WMD in the developing terrorist incident. The actions taken by government authorities are focused on law enforcement actions taken in the interests of public safety and welfare and is predominantly focused on preventing and*

*resolving the threat. Other government agencies and departments are focused on contingency planning and pre-positioning of tailored resources, as required.*

**Level #1 WMD Incident:** *It has been determined that a WMD incident has occurred. Actions by government authorities are directed toward public safety and welfare and the preservation of human life.*

**2.1.** The State and Local public health monitoring and surveillance system shall include a system of categorization consistent with the Maryland Threat Condition System and reflect well-understood public health and medical terminology. An example of such a labeling system is: 1. NORMAL AND ROUTINE, 2. SUSPECT FINDINGS in identified jurisdictions or locality, 3. CONFIRMED OUTBREAK with identification of the syndrome, symptoms or disease entity, with the affected jurisdiction or locality identified, 4. NOTICE OF UPGRADE of ALERT or CANCELLATION OF ALERT based on 1-3.

**2.2** The reports submitted by Local Health Departments and the summarized reports distributed by the DHMH to the Local Health Departments, OCME, DHMH Laboratories, MIEMSS, hospital Infection Control Programs, MEMA and MSP (**1.A.3 Surveillance and Detection**, above) shall identify the findings using the terminology described above, or a similar set of terms.

**2.3.** The DMHM shall establish protocols to immediately notify the Federal Bureau of Investigation, the Maryland State Police, the Maryland Emergency Management Agency, and the Maryland Institute for Emergency Medical Services Systems of findings that may indicate the suspected, potential or actual presence of a WMD agent. Local Health Departments shall adopt policies and procedures supportive of and consistent with the DHMH protocol.

**2.4.** The MIEMSS EMRC / SYSCOM shall notify affected hospitals of findings that may indicate the suspected, potential or actual presence of a WMD agent.

**2.5.** The DHMH shall establish and support a system to notify and communicate with the Local Health Officers. Such a system shall provide for immediate alerting of the Local Health Officer of the status of an incident, enable both voice and message transmission and include routine testing to assure the system is operable.

**2.6.** DHMH shall establish a system to allow for communication from health care providers to report suspected disease outbreaks or suspected use of biological or chemical agents. The health provider contact point shall be designed to operate in conjunction or in parallel with the current DHMH duty officer system but shall link to the EDCP monitoring and surveillance system.

**2.7.** The EDCP, with the approval of the Secretary, shall also establish protocols to notify the Infection Control Program and a designated Infection Control Physician at each affected or potentially affected acute care hospital, the Emergency Medical Resource Center (EMRC/SYSCOM) at MIEMSS, and the Local Emergency Management Agency / 911 EOC.

**2.8.** DHMH should investigate the utility of a statewide telephone system to allow the general public to report suspected disease outbreaks or suspected use of biological or chemical agents. A general public telephone contact point shall be designed such that it operates in coordination with an enhanced Maryland Poison Control Center capability, and links to the EDCP monitoring and surveillance system. Local Health Departments who choose to implement such a contact point shall assure coordination with a DHMH system.

**2.9.** Local Health Departments shall coordinate with the DHMH the adoption of procedures for notifying authorities within their jurisdictions of suspected WMD agents to assure that appropriate notifications are given, that public order and confidence is maintained, and that necessary preparations can be undertaken.

**2.10.** DHMH shall develop an education and training program for every DHMH employee, appropriate for their duties and responsibilities, consistent with the Terrorism Forum Training Action Group recommended levels of Awareness, Operations, Technician and Specialist. Local Health Officers shall assure that employees in their departments receive this training.

**2.11.** Each Local Health Officer receiving an alert should place into operation an adopted, and practiced, Incident Management System (IMS) system provided by the DHMH, and implement the Local Health Department's emergency operations plan, as necessary and appropriate.

### **3. HEALTH AND MEDICAL COORDINATION**

**3.1.** Local Health Officers, with support of the DHMH, shall inventory and catalog, by county, with regularly scheduled updates, the existing public and private health and medical facilities, equipment, personnel and supplies that would be needed to support a catastrophic weapon of mass destruction event. Such an inventory is an essential part of preparedness, enables identification of gaps and will support development of inter-county local health department mutual assistance agreements. This inventory and any comments shall be directed to the Secretary.

**3.2.** Development of the jurisdiction's inventory of public and private health and medical facilities, materiel and personnel should be done in cooperation with the health and medical resources in the jurisdiction, including local emergency management agencies, EMS, and key voluntary agencies, to develop knowledge and awareness of available resources and any gaps in resources.

**3.3.** The DHMH will provide the MEMA and MIEMSS with the jurisdictional inventory described in 3.1, above, along with any updates or revisions. DHMH, MIEMSS and MEMA shall develop a shared resource inventory and plan for jointly providing transport of health and medical resources as needed by affected areas.

**3.4.** DHMH shall require a mutual assistance agreement to be developed and executed by each Local Health Department with contiguous Local Health Departments that describes the type, scope and resources available, the conditions for requesting assistance, and the methods for accounting for services provided in the event of disaster or weapon of mass destruction event. Such agreements shall define who has fiscal responsibility for a request, shall have the Secretary as a necessary party to the agreements, and shall be developed in a way to facilitate obtaining federal financial assistance in the event of a terrorist act.

**3.5.** DHMH shall develop an education and training program for every DHMH employee, appropriate for their duties and responsibilities, consistent with the Terrorism Forum Training Action Group recommended levels of Awareness, Operations, Technician and Specialist. This effort should reach across every local health department, facility and program of the DHMH.

**3.6.** In addition to education and training of DHMH personnel, DHMH and MIEMSS should coordinate with MEMA and the Terrorism Forum to develop and implement training programs for other State and local governments, hospitals and healthcare providers.

**3.7.** DHMH shall adopt, and practice an Incident Management System (IMS) and provide Local Health Officers with information and training in that IMS.

#### **4. MASS PATIENT CARE**

**4.1.** Each Local Health Officer shall assist with development of a weapon of mass destruction disaster plan for the local health department's jurisdiction. The plan should include the participation of the hospitals in the jurisdiction, the local emergency management agency, local and regional EMS, key voluntary agencies, and law enforcement agencies.

**4.2.** The Local Health Officer shall assure that plans include these parameters: *Low Mass Casualty Incident - 25 victims and fewer, Mass Casualty Event - 26 victims to 100's, and Catastrophic Mass Casualty Event - 1000 live victims or greater.*

**4.3.** The local weapon of mass destruction disaster plan should include the following elements:

- A. Compatibility with the acute care general hospitals disaster plans and weapon of mass destruction plans;
- B. Review and coordination of the following components:

- 1. Establishment of alternate treatment centers, on or off the facility's campus.
- 2. Arrangements for sheltering staff, patients and visitors.
- 3. Arrangements for decontamination of staff, patients and visitors;
- 4. Arrangements for inter-facility and inter-hospital credentialing of medical staff and other personnel to allow for lateral utilization of human resources.
- 5. Credentialing of volunteers not affiliated with a health care facility.
- 6. Arrangements for back-up, reserve and backfill for medical equipment and supplies.

7. Arrangements for security for the facility and any alternate treatment centers or sites.
8. Patient identification and tracking systems.
9. Adequate potable water, food and sanitary waste disposal.
10. Arrangements for establishing temporary morgues.
11. Procedures and treatment protocols for separating and handling victims, casualties and concerned individuals.
12. Arrangements for psychiatric and counseling services for incoming patients or persons who require assistance.
13. Arrangements for added staff, shift rotations and extended duty hours.
14. Arrangements for Critical Incident Stress Management for facility staff.
15. Any protocols for discontinuing services at or by the facility.
16. Arrangements for financial accounting for costs incurred by the response.
17. Arrangements for mutual assistance and aid by other facilities or hospitals.
18. Arrangements for an incident management system ("IMS").
19. Arrangements for coordinated Public Information Offices.
20. Arrangements for any locally identified issues that would be of concern to the local community.
21. Consistency with Joint Commission on Accreditation of Healthcare Organizations standards, if appropriate.
22. Regularly scheduled revisions or updates.

**4.4.** Each Local Health Department should develop a cache or standing resource of medications under its control sufficient to treat victims of a terrorist act using chemical, biological or radiological agents. The "Clinical Treatment Guidelines for Weapons of Mass Destruction" as part of the Maryland Medical Protocols for Emergency Medical Services Providers approved by the Maryland Institute for Emergency Medical Services Systems shall be used as the guide to medications and antidotes.

**4.5.** Each Local Health Department shall be prepared to readily access and obtain from DHMH fact sheets on the most likely biological and chemical agents as determined by the "A" list of the Centers for Disease Control and Prevention for release to health care providers and the general public. Such fact sheets shall contain information such as symptoms, actions to be taken by victims to protect



themselves, and other information that may be necessary for a citizen to know regarding such agents.

**4.6.** Local Health Departments shall review existing laws and jurisdictional ordinances to assure that procedures for quarantine and isolation of individuals and groups are known and followed during a disease outbreak or terrorist incident involving communicable diseases.

**4.7.** Each Local Health Department should establish, with State assistance, a Rapid Response Team (“RRT”) specifically capable to assess and assist local communities with a chemical, biological or radiological terrorist incident. Such team(s) shall have expertise in the subject matter, epidemiological investigation, decontamination, and mass patient care strategies and mass patient management. Members of such team(s) shall be assigned personal protective equipment and have communications ability. Such team(s) should be able to integrate with other local resources, provide assistance, support the Local Health Officer, the Local Health Department and DHMH and be able to assess and provide status reports on an incident.

**4.8.** Each Local Health Officer should adopt and incorporate by reference as necessary and appropriate, the “Clinical Treatment Guidelines for Weapons of Mass Destruction” as part of the Maryland Medical Protocols for Emergency Medical Services Providers approved by the Maryland Institute for Emergency Medical Services Systems.

**4.9.** Each Local Mental Health Authority shall review the current availability of mental health services in its jurisdiction and take the lead role in the coordination of these services with local emergency medical services, local and State agencies, and other agencies and providers, as necessary, to achieve a coordinated system of mental health care.

# **MARYLAND INSTITUTE FOR EMERGENCY MEDICAL SERVICES SYSTEMS (MIEMSS)**

*The Maryland Institute for Emergency Medical Services and Systems is the State government authority for planning and implementing pre-hospital and emergency medical services response to a weapons of mass destruction event. These activities include but are not limited to overseeing training and education of EMS personnel through the Maryland Fire and Rescue Institute, certifying EMS personnel, inspecting and assuring that Ambulances / Rescue Squads and commercial ambulances meet standards.*

*MIEMSS is responsible for conducting and assuring current certification for EMS providers in the categories of Emergency Medical Dispatchers, First Responders, Basic Emergency Medical Services Technicians, Cardiac Rescue Technicians, and Paramedics across the State.*

*The Maryland Institute for Emergency Medical Services and Systems is also responsible for managing emergency medical services, emergency medical communications, patient transport and coordinates patient transports to health care facilities during disasters and weapons of mass destruction incidents.*

*This responsibility is carried out through the Emergency Medical Resource Center ("EMRC") systems communications center, or SYSCOM. EMRC / SYSCOM maintains direct radio communications with all Maryland hospitals, with linkages to hospitals in the District of Columbia, and all ambulances and Medevac helicopters in the State.*

*The Maryland Institute for Emergency Medical Services and Systems is responsible for developing and maintaining Rapid Response Teams ("RRT") to assist jurisdictions and the State Emergency Operations Center with emergency medical services and advising higher echelons on emergency management actions and decisions.*

## **FUNCTIONAL TASKS**

### **1. SURVEILLANCE AND EARLY DETECTION**

- 1.1. The MIEMSS shall modify the Maryland Ambulance Information System ("MAIS") ambulance run sheet to better assist with identification of symptoms

and syndromes resulting from chemical, biological or radiological agents. By modifying the MAIS form to include additional symptomology, earlier detection may be possible and better patient tracking for epidemiological investigations will be enhanced.

**1.2.** The MIEMSS shall implement a real time reporting system that enables hospital emergency rooms to submit information to the Emergency Medical Resources Center ("EMRC") of unusual or cluster syndromes. This system must enable MIEMSS / EMRC to alert DHMH, hospitals, EMS and local and state Emergency Operations Centers to suspected or actual disease outbreaks or terrorist acts.

**1.3.** The MIEMSS EMRC / SYSCOM shall assure that dispatch and communications personnel are trained to identify patterns of disease outbreaks or clusters of unusual conditions or syndromes to assist with rapid and accurate detection of potential terrorist attacks. Such reporting can permit notification of EMS and emergency management officials when protective actions should be implemented for first responders.

**1.4.** The MIEMSS EMRC shall implement procedures and protocols for notifying law enforcement (FBI and MSP), MEMA and DHMH of suspected, potential or actual terrorist weapons of mass destruction incidents.

## **2. ALERTS**

***The Maryland Terrorism Forum has adopted the following Threat Condition System that permits MIEMSS / SMRC / SYSCOM to notify hospitals, EMS and first responders of terrorist actions:***

***Level #5 No Known Threat:*** There are no currently known threats or activities that would indicate any actions are needed other than normal and routine actions.

***Level #4 Minimal Threat:*** Received threats do not warrant actions above normal operating levels of preparedness.

***Level #3 Potential Threat:*** Information from intelligence (e.g., law enforcement) or methods of traditional or non-traditional surveillance (e.g., public health indicators, other information exchanges), or an articulated threat, indicates a potential for a terrorist incident, but without the threat having been assessed as credible.

***Level #2 Credible Threat:*** A threat assessment indicates that the potential threat is credible and confirms the involvement of WMD in the developing terrorist incident. The actions taken by government authorities are focused on law enforcement actions taken in

*the interests of public safety and welfare and is predominantly focused on preventing and resolving the threat. Other government agencies and departments are focused on contingency planning and pre-positioning of tailored resources, as required.*

**Level #1 WMD Incident:** *It has been determined that a WMD incident has occurred.*

*Actions by government authorities are directed toward public safety and welfare and the preservation of human life.*

**2.1.** The MIEMSS EMRC / SYSCOM is the entity in Maryland to notify hospitals, EMS authorities and health and medical first responder agencies of alert status and changes to threat conditions in Maryland. Notifications are coordinated through this communications network connecting these components through out the State to enable preparations and implementation of health and medical disaster plans.

**2.2.** The State and Local public health monitoring and surveillance system includes a system of categorization consistent with the Maryland Threat Condition System and reflect well-understood public health and medical terminology. An example of such a labeling system is: 1. NORMAL AND ROUTINE, 2. SUSPECT FINDINGS in identified jurisdictions or locality, 3. CONFIRMED OUTBREAK with identification of the syndrome, symptoms or disease entity, with the affected jurisdiction or locality identified, 4. NOTICE OF UPGRADE of ALERT or CANCELLATION OF ALERT based on 1-3. MIEMSS / EMRC / SYSCOM shall use this labeling system to communicate information about biological, chemical or radiological WMD events to hospitals, key EMS authorities, public safety access points, and other health and medical providers.

**2.3.** The MIEMSS EMRC / SYSCOM alerting and notification system shall be regularly tested to assure the system is practiced and operable.

### **3. HEALTH AND MEDICAL RESOURCE COORDINATION**

**3.1.** MIEMSS is responsible for coordinating pre-hospital resources, patient transport and allocations to facilities, and communications with, and between and among, hospitals in Maryland.

**3.2.** MIEMSS should inventory existing Maryland hospital capabilities and

identify resources such as burn center, HAZMAT hospitals and other specialty units to help assure patients from a catastrophic mass casualty event are transported by ground or air transport to appropriate facilities. This inventory shall be formalized and shared with the DHMH and MEMA as part of a resource development and coordination plan maintained by MIEMSS at the state Emergency Operations Center.

**3.3.** MIEMSS should enhance the hospital bed status reporting system to a statewide, by hospital, by service, report that can be utilized for patient transport during a disaster and transmitted to the SEOC when necessary. This enhancement should incorporate the existing National Disaster Medical System (NDMS) reporting system at EMRC, and should include specialty and referral hospitals in states nearby Maryland. Enhancements should be built upon the current yellow and red alerting system in use for hospitals in Maryland.

**3.4.** MIEMSS should maintain up-to-date lists of specialty response teams, GO Teams, Rapid Response Teams (RRT's), Search and Rescue Teams (SAR Teams), HAZMAT Teams and other response units to facilitate contacting members or dispatching centers in preparation for or during a weapon of mass destruction event or other disaster. Such information, including capabilities and readiness, should be maintained and updated by the MIEMSS with copies of the material available to the MEMA at the State Emergency Operations Center.

**3.5.** MIEMSS should develop and implement decontamination protocols for field EMS units and hospital emergency departments to assist with transport of non-contaminated patients by MEDEVAC helicopters. Such protocols are necessary to help assure that this vital resource remains available and in service, as well as a means of protecting personnel from exposure to agents or suspected agents.

**3.6.** MEIMSS and the MSP should be available to assist with coordinating transport of essential health and medical experts by helicopter to assist with assessment, investigation and protection of the public health during a weapon of mass destruction incident.

**3.7.** MIEMSS shall develop a Rapid Response Team ("RRT") to assure expertise in the EMS treatment of chemical, biological and radiological exposures is available in the field. Members of such team(s) should be assigned response

vehicles, appropriate personal protective equipment, and communications capability. Such team(s) should be specifically trained to interface with local EMS providers and other state agency RRT's.

**3.8.** MIEMSS shall develop a mutual assistance agreement with the Military Department, specifically the Maryland Army National Guard and the Maryland Air National Guard, to coordinate capabilities and medical support available through the Military Department. Assets to be coordinated include ground and /or air transport and establishment of mobile hospitals, field medical equipment, support services and communications systems.

**3.9** MIEMSS shall create a system for obtaining status reports from field units and hospitals on resources available for deployment to other locations in the state, or for deployment to other states. This inventory must enable accurate and timely situation reports to the state Emergency Operations Center with recommendations for any additional actions or resources that may be needed.

#### **4. MASS PATIENT CARE**

**4.1.** MIEMSS should develop a WMD catastrophic mass casualty management plan that assures coordination and allocation of patients to hospitals and alternate care locations for the EMS and pre-hospital component of the health care system. This plan shall be rehearsed and exercised in coordination with MEMA, DHMH, hospitals, and local and regional EMS agencies.

**4.2.** MIEMSS shall identify thresholds and pre-plan procedures for EMS system overload, and develop alternate response plans. By pre-identifying thresholds, MIEMSS can better balance mass patient care needs with health system capabilities, and better assist with and recommend / request additional assistance needs to MEMA, such as federal Disaster Medical Assistance Teams and Metropolitan Medical Response Systems. This plan must include private health care agencies such as the commercial ambulance companies.

**4.3.** MIEMSS should adopt field patient decontamination protocols that describe best practices for chemical, biological, radiological and explosive agents. Development of such practices will promote patient treatment and help assure maintenance of the EMS system as a WMD incident evolves.

## **5. MASS FATATLITY MANAGEMENT**

**5.1.** MIEMSS should pre-plan Critical Incident Stress Management resources for EMS and first responders to assist these personnel during and following a weapon of mass destruction event.

# **HOSPITALS**

*Maryland hospitals play an exceptionally important role in preparedness and response to terrorist weapons of mass destruction using explosives, chemical, biological or radiological agents. Hospitals, both individually and collectively, are the essential component in treating and managing casualties from a high-impact explosive event, and will be the preferred treatment location for chemical agent incidents. For biological terrorism, hospitals may be one of the first to identify a release or disease outbreak and may be one of the most important treatment centers for victims and casualties of biological agents. For radiological agents, hospitals may be both primary detectors of an event and will be perhaps the most important treatment location.*

*Hospitals are recognized instantly as places where health care and treatment can be obtained; experience has shown conclusively that hospitals are quickly overwhelmed by demands produced by a Mass Casualty Incident. Equally, it has been conclusively shown that in the absence of pre-planning and preparation, the disaster may be rapidly relocated from the scene of the incident to the doors of the hospitals.*

*Most traditional hospital disaster plans have been built on incidents of relatively lower magnitudes of MCI, or have focused on internal-to-the-hospital disasters. Mass Casualty Incidents may have multiple source points, be covert or overt, and can produce both immediate impacts and longer range impacts. Events causing casualties ranging from the lower limits to catastrophic levels in the thousands can only be approached through a coordinated, community-wide perspective.*

*The fiscal climate in which community hospitals provide care, and the challenges presented by WMD, requires hospital WMD disaster planning be efficient and effective. Routine care and emergency department care must continue to be provided, prior to, during, and following disasters.*

*Finally, hospital disaster and WMD planning in Maryland explicitly includes Joint Commission on Accreditation of Healthcare Organizations (JCAHO) Emergency Management Standards. Also, the use of the Maryland Health Incident Management System is recommended to assure coordination across the health and medical and public safety response sectors.*

## **FUNCTIONAL TASKS**

### **1. SURVEILLANCE AND EARLY DETECTION**

- 1.1. Hospitals shall report into a health indicators surveillance system that can



detect and identify syndromic outbreaks and suspected terrorist attacks using biological agents in the general Maryland population. The basic elements of this system must include data security, timely reporting, analysis and response, and have twenty-four hour / seven -day-a week capability. Each acute care general hospital in Maryland shall report to the DHMH Epidemiology and Disease Control Program through the Local Health Department. This reporting must be on a regular basis, should be based on current capabilities, and should be continuously refined and improved to assure timely data collection, analysis, and information transfer / availability. The hospital Infection Control Program is recommended as the reporting entity for hospitals.

**1.2.** Reports submitted by the hospital (or the Infection Control Program) should enable Local Health Departments to efficiently gather, collate and report: a) reportable conditions as defined in Maryland COMAR Regulations, b) utilize syndromic patterns, c) allow for collection of additional data that may be determined by the local jurisdiction as necessary, and d) be compatible with the federal Centers for Disease Control and Prevention lists of reportable conditions.

**1.3.** Hospital reports should be given to the designated Infection Control Physician for review and medical determination of steps to be taken or precautions indicated for that hospital.

**1.4.** Each hospital should adopt procedures concerning protocols and notification procedures concerning information received through this monitoring and surveillance system.

## **2. ALERTS**

*The public health monitoring and surveillance system may provide the first indication of a biological, chemical or radiological WMD event in Maryland. It is essential that this system give accurate and timely information and earliest possible warning to law enforcement, public safety, emergency medical services and emergency management agencies to permit these agencies to prepare and to mobilize resources. The Maryland Terrorism Forum has adopted the following Threat Condition System into which a public health monitoring and surveillance system reports:*

*Level #5 No Known Threat: There are no currently known threats or activities that would indicate any actions are needed other than normal and routine actions.*

**Level #4 Minimal Threat:** Received threats do not warrant actions above normal operating levels of preparedness.

**Level #3 Potential Threat:** Information from intelligence (e.g., law enforcement) or methods of traditional or non-traditional surveillance (e.g., public health indicators, other information exchanges), or an articulated threat, indicates a potential for a terrorist incident, but without the threat having been assessed as credible.

**Level #2 Credible Threat:** A threat assessment indicates that the potential threat is credible and confirms the involvement of WMD in the developing terrorist incident. The actions taken by government authorities are focused on law enforcement actions taken in the interests of public safety and welfare and is predominantly focused on preventing and resolving the threat. Other government agencies and departments are focused on contingency planning and pre-positioning of tailored resources, as required.

**Level #1 WMD Incident:** It has been determined that a WMD incident has occurred. Actions by government authorities are directed toward public safety and welfare and the preservation of human life.

**2.1.** The State and Local public health monitoring and surveillance system shall include a system of categorization consistent with the Maryland Threat Condition System and reflect well-understood public health and medical terminology. An example of such a labeling system is: 1. NORMAL AND ROUTINE, 2. SUSPECT FINDINGS in identified jurisdictions or locality, 3. CONFIRMED OUTBREAK with identification of the syndrome, symptoms or disease entity, with the affected jurisdiction or locality identified, 4. NOTICE OF UPGRADE of ALERT or CANCELLATION OF ALERT based on 1-3. Hospitals shall implement procedures that assure alerts and notifications are able to be received by a senior management level individual who may have the authority to implement the hospital disaster plan.

**2.2** Surveillance reports distributed to the hospitals and Infection Control Programs (**1.A.3 Surveillance and Detection**, above) shall identify the findings using the terminology described above, or a similar set of terms.

**2.3.** Hospitals shall establish protocols to immediately notify the Federal Bureau of Investigation, the Maryland State Police, the DHMH, and the Maryland Institute for Emergency Medical Services Systems / EMRC / SYSCOM of findings that may indicate the suspected, potential or actual presence of a WMD agent.

**2.4.** The MIEMSS EMRC / SYSCOM is the government agency that shall notify affected hospitals of alerts that may indicate the suspected, potential or actual presence of a WMD agent.

**2.5.** Each hospital shall adopt procedures and protocols to receive an alert from MIEMSS EMRC / SYSCOM, and from the Local Health Officer, concerning disease outbreak or suspected terrorist activity.

**2.5.** Each hospital should adopt policies and procedures to be implemented when receiving an alert, including but not limited to preparing to implement internal emergency plans and disaster plans and implementing Incident Management Systems (IMS).

### **3. HEALTH AND MEDICAL RESOURCE COORDINATION**

**3.1.** Each hospital shall provide to the Deputy State and Local Health Officer For the jurisdiction in which the hospital is located, in a format provided by the DHMH, the current inventory, capacities and capabilities of the hospital facilities, equipment, personnel and supplies that are available to support disaster management as a necessary step to supporting a catastrophic weapon of mass destruction event. Such an inventory is an essential part of preparedness, enables identification of gaps and supports development of inter-hospital and inter-county hospital mutual assistance agreements.

**3.2.** Each hospital shall review and provide its current disaster plan to the Deputy State and Local Health Officer for the jurisdiction and to MIEMSS to enable integration of hospital disaster plans with overall system and State plans.

**3.3.** Hospital disaster plans shall be updated to account for Mass Casualty Incidents caused by explosives, chemical, biological and radiological agents WMD at these levels, consistent with a risk analysis and the size of the community:

*Low Mass Casualty Incident - 25 victims and fewer,*

*Mass Casualty Event - 26 victims to 100's,*

*Catastrophic Mass Casualty Event -1000 live victims or greater.*

**3.4.** Hospital disaster plans shall be developed consistent with Joint

Commission on Accreditation of Healthcare Organizations (JCAHO) Emergency Management Standards effective January 1, 200, specifically including weapons of mass destruction and Incident Management System requirements.

**3.5.** The hospital weapon of mass destruction disaster plan should include the following elements:

- A. Compatibility with the jurisdiction's disaster plans and weapon of mass destruction plans;
- B. Coordination and provision for the following components:
  - 1. Establishment of alternate treatment centers, on or off the facility's campus.
  - 2. Arrangements for sheltering staff, patients and visitors.
  - 3. Arrangements for decontamination of staff, patients and visitors;
  - 4. Arrangements for inter-facility and inter-hospital credentialing of medical staff and other personnel to allow for lateral utilization of human resources.
  - 5. Credentialing of volunteers not affiliated with a health care facility.
  - 6. Arrangements for back-up, reserve and backfill for medical equipment and supplies.
  - 7. Arrangements for security for the facility and any alternate treatment centers or sites.
  - 8. Patient identification and tracking systems.
  - 9. Adequate potable water, food and sanitary waste disposal.
  - 10. Arrangements for establishing temporary morgues.
  - 11. Procedures and treatment protocols for separating and handling victims, casualties and concerned individuals.
  - 12. Arrangements for psychiatric and counseling services for incoming patients or persons who require assistance.
  - 13. Arrangements for added staff, shift rotations and extended duty hours.
  - 14. Arrangements for Critical Incident Stress Management for facility staff.
  - 15. Any protocols for discontinuing services at or by the facility.
  - 16. Arrangements for financial accounting for costs incurred by the response.
  - 17. Arrangements for mutual assistance and aid by other facilities or hospitals.
  - 18. Arrangements for an incident management system ("IMS").

19. Arrangements for coordinated Public Information Offices.
20. Arrangements for any locally identified issues that would be of concern to the local community.
21. Consistency with Joint Commission on Accreditation of Healthcare Organizations standards, if appropriate.
22. Regularly scheduled revisions or updates.

**3.6.** Each hospital should meet with the Local Health Officer, the local Emergency Management Agency, and MIEMSS for assistance to determine the adequacy of the weapon of mass destruction disaster plans and to make any necessary arrangements for contingencies or necessary coordination of hospital and emergency preparedness plans in that jurisdiction.

#### **4. MASS PATIENT CARE**

**4.1.** Hospitals shall plan for a surge of patients arriving at the hospital Emergency Department from traditional EMS transport, self transport, multiple persons in privately owned vehicles and mass transit vehicles. Triage and treatment strategies should recognize that treatment and triage may have to be done at a location adjacent to existing Emergency Department resources to accommodate the patient surge. Preplanning for resources and logistics is an essential part of meeting the demands of such a surge.

**4.2.** Planning for WMD incident may involve a high-visibility, immediate impact event (explosives) or a covert introduction of a chemical or biological agent that may be difficult to detect or identify. Mass patient care plans shall anticipate patients arriving from either a single point-source or from multiple sites and locations across the service area.

**4.3.** WMD disaster plans must be viewed as preparation for community-wide disasters in which the health care organization will play an essential role among many different agencies and organizations. Hospital disaster plans for WMD must be developed in coordination with community resources such as public health, EMS, other health providers, public safety, fire and rescue services, emergency management authorities, and social service and voluntary agencies.

**4.4.** Patient tracking and identification will be essential to care management

and triage, but will also be essential to handle inquiries from family and friends. Hospitals shall adopt the MIEMSS Triage Tag System to facilitate tracking both from outside the hospital from pre-hospital treatment, including alternate treatment sites and centers, and use that or a compatible system in-hospital to assure patient tracking and management.

**4.5.** Hospitals shall use the MIEMSS EMRC / SYSCOM communications system for inter-hospital communication, communication with government and health care authorities, and to communicate bed and availability status to the balance of the emergency and medical care system.

**4.6.** Each hospital should adopt the “Clinical Treatment Guidelines for Weapons of Mass Destruction” as part of the Maryland Medical Protocols for Emergency Medical Services Providers approved by the Maryland Institute for Emergency Medical Services Systems.

**4.6.** Each hospital should adopt policies concerning immunizations and vaccinations, medications and prophylaxis, and decontamination of hospital personnel who may be exposed to chemical or biological agents. The purpose of such policies must be to protect, prior to a WMD incident, hospital employees and staff to assure their availability at the time of an incident.

**4.7.** Each hospital shall have under its control a cache of medications or a standing resource of medications sufficient to treat victims of a terrorist act using explosives, chemical, biological, or radiological agents. Adjustments shall be made to just-in-time-inventories to achieve an adequate threshold of availability for hospital staff, members, patients and casualties.

**4.8.** Each hospital shall have in place policies concerning the handling and reporting and transport to laboratories of suspected biological and chemical agents of mass destruction, using national certification standards available through the CDC for handling of infectious and bio-hazardous material.

**4.9.** Each hospital shall develop decontamination plans, facilities and procedures that enable it to decontaminate patients from the use of a chemical, biological, radiological or explosive agent. Development of procedures shall be coordinated with field providers to assure primary and secondary decontamination practices are known, understood and compatible within the community.

Procedures shall include designation of "Hot Zones", "Warm Zones", and Cold Zones" in and around the hospital.

**4.10** Decontamination plans and procedures shall use a 5:1 ratio to identify needed decontamination capacities for *Low Mass Casualty Incident - 25 victims and fewer, Mass Casualty Event - 26 victims to 100's, Catastrophic Mass Casualty Event -1000 live victims or greater.*

**4.11.** Hospitals shall assure that employees are educated and trained, to the levels of Awareness, Operations, Technician and Specialist, as recommended by the Maryland Terrorism Forum. Personal Protective Equipment shall be provided consistent with the job function and NIOSH standards.

## **5. MASS FATALITY MANAGEMENT**

Each hospital should develop a mass fatality management plan that includes arrangements for body storage and disposition, decontamination, and evidence preservation. Mass fatality plans shall be developed in consultation with the Maryland Office of the Chief Medical Examiner and the Maryland State Police, or the law enforcement agency responsible for the hospital's jurisdiction.

# **MARYLAND EMERGENCY MANAGEMENT AGENCY (MEMA)**

*The Maryland Emergency Management Agency is the lead State agency responsible for disaster management and for consequence management, actions and activities responding to a Weapon of Mass destruction Incident. MEMA coordinates response and recovery operations by State government departments and agencies under the Governor's authority. Maryland law provides for coordination across governmental and non-governmental agencies through Executive (Governor) Emergency Declarations.*

*The Maryland Emergency Management Agency, through the State Emergency Operations Plan, provides missions to the State departments and agencies responsible for the health and medical aspects of a weapon of mass destruction incident. Those agencies have the inherent responsibility to be prepared for and able to effectively respond to a Mass Casualty or Catastrophic Mass Casualty WMD incident in Maryland.*

*The Maryland Emergency Management Agency is the lead for public information releases and contact with the news media in preparation for, during, and in recovering from a weapon of mass destruction incident and it coordinates with Federal, State and local partners to establish a Joint Information Center under federal laws.*

*The Maryland Emergency Management Agency implements and operates the State Emergency Operations Center (SEOC) to manage disasters and WMD incidents, advises the Governor, and recommends requests for intergovernmental and federal assistance related to a weapon of mass destruction incident.*

## **FUNCTIONAL TASKS**

### **1. Surveillance and Early Detection**

**1.1.** The Maryland Emergency Management Agency shall actively coordinate the appropriate sharing of public health and law enforcement information to assure maximum possible warning and alerting to first responders, EMS, Fire and Rescue, Law Enforcement, Local Health Officers,



hospitals, health and medical facilities and officials, and emergency management officials of an impending WMD event.

**1.2.** The Maryland Emergency Management Agency should support as the highest health and medical priority the establishment of an electronic public health indicators surveillance, monitoring, and detection system that coordinates assessment of the public health of Maryland for chemical, biological and radiological WMD agents.

## **2. Alerts**

***The Maryland Terrorism Forum has adopted the following Threat Condition System:***

***Level #5 No Known Threat:*** There are no currently known threats or activities that would indicate any actions are needed other than normal and routine actions.

***Level #4 Minimal Threat:*** Received threats do not warrant actions above normal operating levels of preparedness.

***Level #3 Potential Threat:*** Information from intelligence (e.g., law enforcement) or methods of traditional or non-traditional surveillance (e.g., public health indicators, other information exchanges), or an articulated threat, indicates a potential for a terrorist incident, but without the threat having been assessed as credible.

***Level #2 Credible Threat:*** A threat assessment indicates that the potential threat is credible and confirms the involvement of WMD in the developing terrorist incident. The actions taken by government authorities are focused on law enforcement actions taken in the interests of public safety and welfare and is predominantly focused on preventing and resolving the threat. Other government agencies and departments are focused on contingency planning and pre-positioning of tailored resources, as required.

***Level #1 WMD Incident:*** It has been determined that a WMD incident has occurred. Actions by government authorities are directed toward public safety and welfare and the preservation of human life.

**2.1.** The MEMA shall adopt procedures to notify Maryland governmental and non-governmental health and medical providers of suspected, potential, impending or actual WMD incidents using the Maryland Terrorism Forum Threat Condition System.

**2.2.** The State and Local public health monitoring and surveillance system

includes a system of categorization consistent with the Maryland Threat Condition System that reflects well-understood public health and medical terminology. An example of such a labeling system is: 1. NORMAL AND ROUTINE, 2. SUSPECT FINDINGS in identified jurisdictions or locality, 3. CONFIRMED OUTBREAK with identification of the syndrome, symptoms or disease entity, with the affected jurisdiction or locality identified, 4. NOTICE OF UPGRADE of ALERT or CANCELLATION OF ALERT based on 1-3. The MEMA shall adopt procedures that enables public health and medical authorities to alert and warn emergency management authorities and agencies of threats to the public health.

**2.3.** The MEMA shall identify the Maryland Terrorism Forum Threat Condition System as standard operating procedure for all Maryland non-military governmental and non-governmental agencies to use in for weapons of mass destruction incidents, whether for crisis management, consequence management or technical responses.

**2.4.** For biological or chemical agents, communication of threats shall include terminology such as that used by public health and medical authorities to assure accurate communication of information, locations and precautions to be implemented.

**2.5.** Alerting of public health shall be accomplished through notification of the Secretary, Department of Health and Mental Hygiene.

**2.6.** Alerting of EMS and hospitals shall be accomplished through notification of the Maryland Institute for Emergency Medical Services Systems -EMRC / SYSCOM.

### **3. Health and Medical Resource Coordination**

**3.1.** Support and assist with the development, coordination, execution and implementation of local, jurisdictional and regional WMD disaster plans and inter-jurisdictional health and medical mutual assistance agreements.

**3.2.** Coordinate requests for assistance and support from health and medical providers and coordinate responses to those requests.

**3.3.** Coordinate requests for federal health and medical assistance, including but not limited to: National Disaster Medical System (NDMS), Disaster Medical Assistance Teams (DMAT), Disaster Mortuary Teams (DMORT), National Pharmaceutical Supply (NPS), Veterinary Medical Assistance Teams (VMAT), U.S. Department of Health and Human Services (DHHS, Office of Emergency Preparedness (OEP), and Centers for Disease Control and Prevention (CDC).

#### **4. Mass Patient Care**

**4.1.** Prepare the State Emergency Operations Center to manage and support Mass Casualty Incident or a Catastrophic Mass Casualty Incident resulting from the intentional or accidental use of a weapon of mass destruction, in coordination with the DHMH and MIEMSS.

**4.2.** Coordinate State department and agency responses and assistance to local government, local public and private health care resources in preparing for, responding to, and recovering from a weapon of mass destruction incident.

**4.3.** Establish and support, with pre-planned and pre-positioned assistance of the Maryland and National Red Cross and the Maryland Office of the Chief Medical Examiner, any Family Center(s) that may be needed as the result of a weapon of mass destruction event.

#### **5. Mass Fatality Management**

**5.1.** Designate the Office of the Chief Medical Examiner as the lead authority for mass fatality management in the State of Maryland.

**5.2.** Assure through the Emergency Operations Plan and the Emergency Operations Center that other Maryland State agencies and departments assistance is available to the Office of the Chief Medical Examiner to perform its public health and forensic duties in a disaster of weapons of mass destruction event.

# **LOCAL EMERGENCY MEDICAL SERVICES**

## **FUNCTIONAL TASKS**

### **1. SURVEILLANCE AND EARLY DETECTION**

- 1.1.** Each jurisdiction should assure that its EMS personnel have knowledge concerning symptoms, syndromes and characteristics of chemical, biological, radiological and explosive agents as recommended by the Maryland Terrorism Forum Training Action Group. Suggested levels of training are: Awareness, Operations, Technician, and Specialist.
- 1.2.** Field EMS personnel should assist with sentinel reporting of suspected weapon of mass destruction agents through observation and through use of EMS reporting methods.
- 1.3.** Field and supervisory EMS personnel should develop a procedure for reporting suspicious disease symptoms, syndromes or outbreaks. Such procedures help assure overall early detection and protection of the first responder community.
- 1.4.** Field EMS personnel and EMS supervisors should observe and report clusters of patients with unusual symptoms or symptoms with unusual characteristics (seasonal, clusters of patients from multiple locations, clusters of patients from unexpected or unusual locations) to alert infection control and epidemiological personnel to potential outbreaks.
- 1.5.** EMS jurisdictions should develop a standard rapid and accurate procedure for reporting suspicious trends or encounters by an EMS supervisor. These procedures should be developed in coordination with the Maryland State Police.

### **2. ALERTS**

- 2.1.** EMS jurisdictions should assure, in coordination with the central dispatch /

911 Center, that an alerting system for EMS that enables field and unit first responders to take appropriate personal protective action and provide patient care is in place and operable.

### **3. HEALTH AND MEDICAL COORDINATION**

**3.1.** Each EMS jurisdiction should maintain up-to-date lists of specialty response teams that can assist with a weapon of mass destruction event using chemical, biological, radiological or explosive agents.

**3.2.** Each EMS jurisdiction should develop procedures for rapidly deploying Personnel and equipment as part of a statewide response to a weapon of mass destruction event. Plans should require EMS personnel to first report to the home station for further staging as a unit.

**3.3.** Each EMS jurisdiction should inventory its capabilities and capacities to effectively manage a catastrophic mass casualty event using a weapon of mass destruction. Such an inventory should include personnel, supplies, equipment and communications, specialty personnel and equipment, and availability estimates to include back fill and resupply.

### **4. MASS PATIENT CARE**

**4.1.** EMS jurisdictions must be prepared to provide emergency medical services to casualties of a weapon of mass destruction using a chemical, biological, radiological or explosive agent. Personnel, supplies and equipment must be prepared to triage, treat, stabilize and transport patients as directed by emergency management and health officials during a catastrophic event.

**4.2.** EMS jurisdictions must assure that personnel are knowledgeable and prepared to implement special actions, such as personal protection practices, infection control precautions, decontamination practices, and treatment protocols necessary to prepare for or to respond to a WMD incident.

**4.3.** Each EMS jurisdiction should make preparation to provide pre-hospital care for patient surges:

*Low Mass Casualty Incident - 25 victims and fewer,  
Mass Casualty Event - 26 victims to 100's,  
Catastrophic Mass Casualty Event -1000 live victims or greater.*

- 4.4.** Plans should include arrangements for:
1. Availability of personnel, including credentialing procedures for walk-on volunteers;
  2. Reliable arrangements for medical supplies and equipment;
  3. Mutual assistance agreements with neighboring units, to include credentialing out-of-state EMS personnel and inter-jurisdictional aid;
  4. Procedures for establishing patient collection and alternate treatment centers;
  5. Triage tags, patient identification and tracking procedures;
  6. Procedures for relief of EMS personnel and shift rotations;
  7. Donations management;
  8. Procedures for stand down and release of EMS personnel;
  9. Accommodation and supplies for mass decontamination;
  10. Arrangements for resupply and back fill of supplies.

**4.4.** Each EMS jurisdiction and EMS personnel should assist with and help Establish alternate care locations that may be necessary to provide mass casualty care, as requested and as appropriate.

**4.5.** Each EMS jurisdiction and EMS personnel should assist with public outreach and administration of antidotes, prophylaxis, immunizations and administration of medications that may be needed by the general public as the result of the threat of or actual use of a weapon of mass destruction.

**4.6.** EMS officers and supervisors must assure that EMS personnel receive Critical Incident Stress Management assistance during and following a mass casualty incident.

# **MARYLAND OFFICE OF THE CHIEF MEDICAL EXAMINER (OCME)**

*The Office of the Chief Medical Examiner is the lead government authority for all matters regarding mass fatality management and forensic medicine in Maryland. It is responsible for investigating and determining the cause of sudden, unexpected, violent, and non-natural deaths.*

*In a Weapons of Mass Destruction incident, the OCME will: 1. Investigate and determine the cause of death(s), 2. Assist with body identification, 3. Be responsible for coordinating morgue services and disposition of bodies, 4. Establish and maintain a data collection system for recording information on all deaths resulting from the disaster, and 5. Provide emergency information to news media on activities and operations.*

*The OCME "Mass Fatality Plan" details the operational procedures and actions that this Office will undertake for a WMD incident. Health care providers shall coordinate their plans for handling mass fatalities with the OCME.*

## **1. SURVEILLANCE AND EARLY DETECTION**

**1.1.** The OCME may be a sentinel point for detecting the use of a biological, chemical or radiological agent. Upon identifying a death as potentially caused by a WMD agent, the OCME shall immediately notify the Secretary, DHMH and the FBI.

**1.2.** The OCME shall implement a set of protocols to detect deaths caused by WMD agents. These protocols shall be designed to screen for chemical, biological and radiological agents.

**1.3.** The OCME shall maintain a Biosafety Level 3 area to protect the personnel of the OCME and the surrounding environment.

## **2. ALERTS**

**2.1.** The OCME shall receive Threat Condition System warnings and status from the MEMA and the DHMH.

## **3. HEALTH AND MEDICAL COORDINATION**

**3.1.** The OCME shall be a member of the DHMH Incident Management System to assure coordination of mass fatality management.

**3.2.** The OCME should develop and execute a memorandum of agreement with the Maryland Army National Guard, coordinated with the Maryland State Police, for support services and security for the activities and forensic duties of the OCME. Specific attention should be paid to arrangements for the establishment and security of temporary morgues separate and apart from Armories, support, security and transportation of staff of the OCME and any Rapid Response Team(s) operated by the OCME. Pre-planning for evidence preservation, chain of custody, decontamination, storage and disposal of deceased victims should be developed by these three agencies.

**3.3.** The OCME should develop and execute mutual aid agreements with the following agencies and departments to help assure adequate back-up and supply during a catastrophic mass casualty event caused by a weapon of mass destruction: the Armed Forces Institute of Pathology Medical Examiner; the Dover, Delaware Air Force Base; the federal Disaster Mortuary Team (“DMORT”); the Maryland Board of Anatomy; the Maryland Funeral Directors Association; and any necessary arrangements for mass refrigerated body storage.

#### **4. MASS PATIENT CARE**

**4.1.** The OCME shall provide State agencies and health care providers advice and recommendations to protect the public health and to assure that the special forensic considerations of the OCME are met.

**4.2.** The OCME should be available as an integral participant and expert for health and medical consultation to the EOC and for any public information requirements that may arise.

**4.3.** The OCME should be available to support Family Crisis Centers to provide needed information and status reports to families and next-of-kin.

#### **5. MASS FATALITY MANAGEMENT**

**5.1.** The OCME has lead responsibility in Maryland for handling mass fatality management, information requirements and procedures.



# MARYLAND MILITARY DEPARTMENT

*The Maryland Army National Guard and the Maryland Air National Guard provides support for health and medical activities when ordered by the Governor to conduct such activities. Maryland National Guard personnel, equipment and expertise deployment is coordinated through the Maryland Emergency Management Agency to civilian authorities upon direction and orders of the Governor of Maryland.*

## FUNCTIONAL TASKS

### 1. ALERTS

**1.1.** In the event of a credible threat, suspected release or actual release of an explosive, biological, chemical or radiological weapon of mass destruction, the Military Department will react to the levels of preparedness as directed by the Governor through the Maryland Emergency Management Agency.

**1.2.** The Maryland Army National Guard is responsible for posturing forces based on the guidelines and the threat analysis provided by MEMA. Assistance is subject to approval by the Maryland National Guard Adjutant General and the Maryland Emergency Management Agency. Assets are authorized through the Governor's proclamation, which authorizes the assets needed to protect the public health that may be needed by affected jurisdiction(s).

**1.3.** The Military Department reacts to the levels of preparedness as directed by the Maryland Emergency Management Agency. These levels, which will be based on the threat of a WMD or the execution of a WMD event, are the basis of the response provided by the Military Department and the National Guard.

### 2. HEALTH AND MEDICAL COORDINATION

**2.1.** The Maryland Army National Guard should be viewed as an essential partner at the state level and jurisdictional level for preparedness and responses to weapon of mass destruction events.

**2.2.** The Maryland Army National Guard should be invited and fully participate in WMD planning activities to be aware of constraints on the civilian health and medical community and to enable the civilian authorities to understand the constraints of the Military Department in assisting with a weapon of mass destruction or other disaster.

- 2.3.** The Military Department may provide assistance in the following areas:
1. Planing and participating in planning, training and exercises;
  2. Maintenance of mobile medical assets;
  3. Assisting with establishing and maintaining emergency and secure communications capabilities for medical and command infrastructure;
  4. Assisting with communications among all state agencies;
  5. Providing support and assistance to DHMH and MIEMSS to coordinate mass medical care.
  6. Support other state agencies and private voluntary agencies, such as the American Red Cross, in establishing and operating shelter facilities.
  7. Assist with ground and air transport of essential personnel, medications and medical supplies;
  8. Assist with establishing temporary morgues. Maryland Armories shall not be used as temporary morgues.
  9. Assist with providing security for health care facilities and centers;
  10. Assist with recommendations for interstate assistance and requests for additional federal assistance.

### **3. MASS PATIENT CARE**

**3.1.** The Military Department, to include the Maryland Army National Guard and the Maryland Air National Guard, will provide assistance as ordered by the Governor of Maryland. During this period of time, credentialing of all Maryland Army / Air National Guard medical personnel will be the responsibility of the State, based on the military occupational specialties of the military personnel. The levels of credentialing will be based on the skill levels of the military personnel.

**SUPPORT AGENCIES, PARTNERS and RESOURCES**

## **Maryland State Police, Public Safety and Local Law Enforcement Agencies**

- Law enforcement agencies require early-as-possible alerting to WMD agents in order to take personal protective actions because of their first responder role at every level.
- Law enforcement agencies may be able to provide early alerting to emergency management authorities and health providers through intelligence gathering and investigations.
- Health providers and hospitals may not be able to rely on traditional security provided by law enforcement agencies as they respond to community-wide or statewide incidents.
- Law enforcement and public safety officers may require special considerations for immunizations, vaccinations, and medications to help assure their continued availability and service during a WMD incident.

## **LOCAL EMERGENCY MANAGEMENT AGENCIES**

- Each of the Local Emergency Management Agencies should assure that 911 dispatchers and other personnel receiving calls for assistance are trained to detect and identify disease outbreaks or clusters of illnesses that may indicate the use of weapon of mass destruction and that procedures are in place to report suspected incidents to the EMRC and Local Health Officer for investigation and analysis
- Each of the Local Emergency Management Agencies should assist with health surveillance activities by reporting suspected disease outbreaks or suspected incidents using chemical, biological, radiological or explosive agents to the Local Health Officer of the jurisdiction simultaneously with reports to law enforcement agencies and the Federal Bureau of Investigation.
- Each Local Emergency Management Agency should adopt the necessary procedures to implement the jurisdiction's weapon of mass destruction disaster plan and the jurisdiction's Incident Management System / Local Emergency Operations Center.

## **Maryland Department of the Environment**

- Coordinate monitoring and detection of the use of chemical and radiological agents and provide alerting to law enforcement and key public health officials of threats, credible threats, suspected terrorist incidents or actual terrorist events using weapons of mass destruction.
- Alert public health, health facilities and law enforcement officials and emergency management agencies of a suspected or actual weapon of mass destruction incident.
- Coordinate and assist with assuring actions are taken to protect human lives and the surrounding environment related to decontamination of personnel, patients, facilities and health and medical equipment.
- Provide advice and support to public health and medical providers on technical matters relating to weapons of mass destruction event management, mitigation, remediation and recovery.

## **Local Fire and Rescue Service**

- Local Fire and Rescue Services, to include paid and volunteer members of Fire Departments, Search and Rescue Units (“SAR”), Special Response Units such as HAZMAT teams and units, Emergency Response Teams, Water Rescue Units and Fire Police possess knowledge, skills and experience that will be essential in responding to a weapon of mass destruction event.
- The Fire Chief, or first ranking officer on the scene, will be the initial incident commander for single point source incidents and must make initial determinations on tactical responses and additional support. These officers or personnel arriving as first responders should obtain additional training and education in awareness, detection and response to incidents involving intentional or accidental weapons of mass destruction, i.e., explosives, biological, chemical or radiological / nuclear agents in order to protect themselves and the public.
- Local Fire and Rescue Officers and personnel will be requested to assist with multiple point source incidents involving biological, chemical and radiological / nuclear agents and must be prepared to work with an interdisciplinary team of health and medical

personnel, experts and responders from within the jurisdiction and from other jurisdictions.

- Essential functions of Local Fire and Rescue Services include, but may not be limited, to the following:
  1. Provide on-scene command and control in a weapons of mass destruction event.
  2. Assess and advise emergency management and public health officials on needed resources and tactics to effectively manage an incident.
  3. Identify, request and execute mutual assistance agreements with neighboring communities and resources.
  4. Execute procedures and tactics necessary to preserve human life and property arising from the use of a weapon of mass destruction.
  5. Assist public health and medical personnel in weapons of mass destruction events that are not site- or location specific.
  6. Assist public health and medical officials with outreach and delivering health and medical information to the general public as requested and as appropriate.
  7. Provide information and status reports to key health and government authorities to assist with overall management of an incident.
  8. Receive and act upon information that will protect fire and rescue personnel and responders.
  9. Maintain fire and rescue services for the general public.
  10. Maintain cost accounting to assist with recovery of expenses and equipment as the result of responding to a weapon of mass destruction incident.

## **Maryland Department of Agriculture**

- Assist with surveillance and monitoring activities to detect the use of a weapon of mass destruction in animals and agriculture.
- Assist with detection of sentinel events and reporting suspected terrorist acts using weapons of mass destruction.
- Assist with analysis and identification of suspected chemical or biological agents.
- Coordinate proper treatment of domestic and large animal health problems associated with the release of an agent in the community.
- Assist the public health and medical community as requested and as appropriate through the state Emergency Operations Center or Joint Operations Center.
- Coordinate and assist in the disposal of animal remains of animals killed by a release of an agent in the community.

## **APPENDICES**

# APPENDIX 1: CDC LIST OF BIOLOGICAL and CHEMICAL AGENTS

## CRITICAL BIOLOGICAL AGENTS

**Category A – easily disseminated or transmitted person-to-person, high mortality, might cause public panic and social disruption, require special action for public health preparedness:**

- Variola major (smallpox)
- Bacillus anthracis (anthrax)
- Yersinia pestis (plague)
- Clostridium botulinum toxin (botulism)
- Francisella tularensis (tularemia)
- Filoviruses (Ebola hemorrhagic fever, Marburg hemorrhagic fever)
- Arenaviruses (Lassa fever, Junin/Argentine Hemorrhagic fever, other)

**Category B – moderately easy to disseminate, cause moderate morbidity and low mortality, require specific enhancements of CDC diagnostic capacity and enhanced disease surveillance:**

- Coxiella burnetii (Q fever)
- Brucella species ((brucellosis)
- Burkholderia mallei (glanders)
- Alphaviruses (Venezuelan encephalomyelitis, eastern and western encephalomyelitis)
- Ricin toxin (from Ricinus communis <castor beans>)
- Epsilon toxin (Clostridium perfringens)
- Staphylococcus enterotoxin B (SEB)
- Salmonella
- Shigella dysenteriae
- Escherichia coli O157; H7
- Vibrio cholerae
- Cryptosporidium parvum

**Category C – emerging pathogens that could be engineered for mass dissemination in the future because of availability, ease of production and dissemination, potential for high morbidity and mortality and major health impact.**

- Nipah virus
- Hantaviruses
- Tickborne hemorrhagic fever viruses



Yellow fever

Multidrug-resistant tuberculosis

## **Chemical Agents**

Chemical agents that might be used by terrorists range from warfare agents to toxic chemicals commonly used in industry. Criteria for determining priority chemical agents include: chemical agents already known to be used as weaponry, availability of chemical agents to potential terrorists, chemical agents likely to cause major morbidity or mortality, potential of agents for causing public panic and social disruption, and agents that require special action for public health preparedness.

Categories of chemical agents include:

**Nerve agents (tabun, sarin, soman, GF, VX)**

**Blood agents (hydrogen cyanide, cyanogen chloride)**

**Blister agents (lewisite, nitrogen and sulfur mustards, phosgene oxime)**

**Heavy metals (arsenic, lead, mercury)**

**Volatile toxins ( benzene, chloroform, trihalomethanes)**

**Pulmonary agents (phosgene, chlorine, vinyl chloride)**

**Incapacitating agents ( BZ)**

**Pesticides, persistent and non-persistent)**

**Dioxins, furans, and polychlorinated biphenyls (PCBs)**

**Explosive nitro compounds and oxidizers (ammonium nitrate combined with fuel oil)**

**Flammable industrial gases and liquids (gasoline, propane)**

**Poison industrial gases, liquids, and solids (cyanides, nitriles)**

**Corrosive industrial acids and bases (nitric acid, sulfuric acid)**

Source: U.S. Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report (MMWR), April 21, 2000, "Biological and Chemical Terrorism: Strategic Plan for Preparedness and Response: Recommendations of the CDC Strategic Planning Workgroup" @ [www.cdc.gov.mmwr](http://www.cdc.gov.mmwr)

## **Appendix 2: Joint Commission on Accreditation of Healthcare Organizations (JCAHO) Standards - Emergency Management**

### **Introduction**

This section contains an abstract of the Joint Commission on Accreditation of Healthcare Organizations (“JCAHO”) standards for emergency management for health care facilities that are accredited by that organization. This abstract covers only the Emergency Management standards of a much larger set of standards and best practices that have been established by the JCAHO to help assure that health care facilities meet quality of process and procedural standards. The emergency management standards became effective January 1, 2001.

The abstract was originally prepared for and presented to the Maryland Institute for Emergency Medical Services Systems (MIEMSS) State Emergency Medical Services Medical Directors at their Sixth Annual Meeting held in April, 2001. The purpose of that presentation was to help assure that the medical directors were aware of the updated standards as they plan and prepare for mass casualties of a terrorist weapon of mass destruction (“WMD”) incident. The JCAHO standards, however, are primarily oriented toward broader health care facility emergency management and disaster preparedness planning than WMD.

This abstract, therefore, was developed to assist the Maryland health care industry and emergency management officials and agencies to be aware of and knowledgeable about the newer standards for health care facilities for both disasters and WMD incidents. These standards expect much greater planning and coordination between the health care facility and emergency management agencies than was previously required. The purpose of the standards is to enable and facilitate planning and coordination among the health care facility and community agencies and resources prior to a disaster. The standards expect a higher degree of cooperation and exercising among these entities; this abstract is intended to make explicit the expectations to improve the actual planning and

preparations for a disaster by the Maryland health care providers and the emergency management and response communities.

In this way, more adequate planning and preparation can be potentially achieved for natural and man-made disasters, including WMD incidents.

## **The JCAHO and the Emergency Management Standards**

The JCAHO is arguably the major health care facility accrediting body in the United States. Through the development and implementation of JCAHO standards, patients, payers and consumers of health services can be more certain that the procedures, protocols and processes used by providers have been reviewed and physically surveyed by an outside panel of experts. Standards are developed and adopted in order to establish a “yardstick” that can be objectively applied to health care facilities across the U.S., establishing consistency and a reasonable set of expectations for the health care industry to meet.

Accreditation by the JCAHO is voluntary for health care facilities such as hospitals, long term care facilities, ambulatory care centers and mental health facilities. Achievement of accreditation is the end result of practices that have been approved by the health care organization’s governing authority and the subsequent site visit and review of those procedures and processes by the Joint Commission on Accreditation of Healthcare Organizations. While voluntary, many health care insurance companies have come to expect that providers will be accredited; many states, including Maryland, rely on JCAHO standards and site surveys to supplement, and in some cases supplant, multiple regulatory agency reviews and surveys. Certain health care payers will not pay for health care provided by non-accredited health care facilities.

The JCAHO Emergency Management Standards require hospitals, long term care facilities (such as nursing homes), ambulatory care facilities (such as ambulatory surgery centers and certain outpatient care centers), and behavioral health care centers (certain mental health facilities) to have plans and procedures describing how that organization will:

“establish and maintain a program to ensure effective response to disasters or emergencies affecting the environment of care. The plan should address four phases of emergency management activities: mitigation, preparedness, response and recovery.”

A “disaster” is defined by the JCAHO as:

“a natural or man-made event that significantly disrupts the environment of care, such as damage to the organization’s building(s) and grounds due to severe wind storms, tornadoes, hurricanes, or earthquakes. Also, an event that disrupts care and treatment, such as loss of utilities (power, water, telephones) due to floods, civil disturbances, accidents, or emergencies within the organization or in the surrounding community. Disasters are sometimes referred to as "potential injury creating events" (i.e., "PICE").

“Mitigation activities” are defined:

“as those a health care organization undertakes in attempting to lessen the severity and impact a potential disaster or emergency may have on its operation while preparedness activities are those an organization undertakes to build capacity and identify resources that may be utilized should a disaster or emergency occur.”

“Hazard vulnerability analysis” is defined as:

“the identification of hazards and the direct and indirect effect these hazards may have on the health care organization.”

The Emergency Management Standards are worded the same for the four types of health care facilities and are numbered EC.1.4. in the four manuals: “CAMAC” (the Comprehensive Accreditation Manual for Ambulatory Care), “CAMH” (the Comprehensive Accreditation Manual for Hospitals), “CAMLTC” (the Comprehensive Accreditation Manual for Long Term Care), and “CAMBHC” (the Comprehensive Accreditation Manual for Behavioral Health Care).

The JCAHO Emergency Management Standards are reproduced below.

The JCAHO Emergency Management Standards

NOTE: These standards are taken directly from the Joint Commission on Accreditation of Healthcare Organizations and are the property of the JCAHO. They are reproduced here solely to provide the actual wording of the standards to the health care and emergency

management and response communities in Maryland. Questions or comments on the standards should be directed to the JCAHO or to the appropriate health care facility.

**Comprehensive Accreditation Manual for Ambulatory Care**  
**Comprehensive Accreditation Manual for Behavioral Health Care**  
**Comprehensive Accreditation Manual for Hospitals**  
**Comprehensive Accreditation Manual for Long Term Care**

**Emergency Management**

This standard is numbered EC.1.4 in the CAMAC, CAMH, CAMLTC and CAMBHC.

Revisions become effective January 1, 2001.

Standard EC.1.4

A plan addresses emergency management.

Intent of EC.1.4

The emergency management plan describes how the organization will establish and maintain a program to ensure effective response to disasters or emergencies affecting the environment of care. The plan should address four phases of emergency management activities: mitigation, preparedness, response, and recovery.

The plan provides processes for:

- a. identifying specific procedures in response to a variety of disasters based on a hazard vulnerability analysis [see note 3] performed by the organization;
- b. initiating the plan (including a description of how, when, and by whom the plan is activated);
- c. defining and, when appropriate, integrating the organization's role with community-wide emergency response agencies (including the identification of who is in charge of what activities and when they are in charge) to promote inter-operability between the health care organization and the community;
- d. notifying external authorities of emergencies;
- e. notifying personnel when emergency response measures are initiated;
- f. identifying personnel during emergencies;
- g. assigning available personnel in emergencies to cover all necessary staff positions;
- h. managing the following during emergencies and disasters:

Patient activities including scheduling, modification, discontinuation of services, control of patient information, and patient transportation;

Staff activities (e.g., housing, transportation, and incident stress debriefing);

Staff/family-support activities;

Logistics of critical supplies (e.g., pharmaceuticals, medical supplies, food supplies, linen supplies, water supplies);

Security (e.g. access, crowd control, traffic control); and

Interaction with the news media.

**i.** evacuating the entire facility (both horizontally and, when applicable, vertically) when the environment cannot support adequate patient care and treatment;

**j.** establishing an alternative care site when the environment cannot support adequate patient care including processes that address (when appropriate) management of patient necessities (e.g., medications, medical records) to and from the alternative care site; patient tracking to and from the alternative care site; inter-facility communication between the organization and the alternative care site; transportation of patients, staff, and equipment to the alternative care site; and

**k.** continuing and/or re-establishing operations following a disaster.

The plan identifies:

**l.** an alternative means of meeting essential building utility needs (e.g., electricity, water, ventilation, fuel sources, and medical gas and vacuum system, etc.) when the organization is designated by its emergency preparedness plan to provide continuous service during a disaster or emergency;

**m.** backup internal and external communication systems in the event of failure during disasters and emergencies;

**n.** facilities for radioactive or chemical isolation and decontamination; and

**o.** alternate roles and responsibilities of personnel during emergencies, including who they report to within a command structure that is consistent with that used by the local community.

The plan establishes:

**p.** an orientation and education program for personnel who participate in implementing the emergency management plan. Education addresses

1. specific roles and responsibilities during emergencies;
2. the information and skills required to perform duties during emergencies;
3. the backup communication system used during disasters and emergencies;
4. how supplies and equipment are obtained during disasters or emergencies;

**q.** ongoing monitoring of performance regarding actual or potential risk related to one or more of the following:

1. Staff knowledge and skills;
2. Level of staff participation;
3. Monitoring and inspection activities;
4. Emergency and incident reporting; or
5. Inspection, preventive maintenance, and testing equipment; and

**r.** how an annual evaluation of the emergency preparedness safety management plan's objectives, scope, performance, and effectiveness will occur.

## Frequently Asked Questions - JCAHO Emergency Management Standards

NOTE: These questions and answers are taken directly from the Joint Commission on Accreditation of Healthcare Organizations and are the property of the JCAHO. Other or additional questions or comments should be directed to the JCAHO or to the appropriate health care facility.

Q. If a health care organization has no part in the community wide disaster plan, does the organization still have to have one drill per year with an influx of patients from the outside? Can the "influx of patients" be from patients or visitors who are injured by an event occurring inside the medical center?

A. Any accredited organization that provides emergency services or is designated as a disaster receiving station needs at least one external drill per year that includes an influx from outside the organization of volunteer or simulated patients. If you have a drill scenario whereby only patients and visitors within the hospital are injured during some sort of disaster, then that would be considered an internal disaster drill. Enough "victims" should be used for the mass-casualty exercise to adequately test the system, with the number of victims necessary to test the organization's resources and reactions under stress. A real incident may be used if it activates the plan; modifies the normal use of services, equipment, staff, and normal patient management procedures; and fits the timing requirements outline in the standards.

Q. If a health care organization has several types of care (for example, hospital, long term care and behavioral health care) does each EC management plan have to specifically address each of these areas?

A. Yes. Either one plan covers all areas, or a unique plan must be written for specific areas. Either approach is acceptable. There will be specific and unique issues that must be addressed regardless of method. Remoteness will complicate attempts to write a common plan. Separate facilities might be better served with independent plans.

Q. What kinds of situations should be included in an organization's emergency management plans?

A. All organizations must have an emergency management program (also known as a disaster plan) so that patient care can be continued effectively in the event of a disaster. Health care organizations that offer emergency services or are designated as disaster receiving stations must have an emergency preparedness program that addresses both external and internal disasters. The emergency preparedness plan should be general and allow specific responses to the types of disasters likely to be encountered by the organization. The Joint Commission discourages the development of separate plans for each contingency because these would be impractical to use and difficult to keep updated. Based on an evaluation of incident probability/frequency specific to the organization, disasters that might be considered in an organization's emergency preparedness plan include, but are not limited to, (based on definitions of Red Cross and the Disaster Relief Act of 1974) Natural disasters, including the following types:

Meteorological disasters: cyclones, typhoons, hurricanes, tornadoes, hailstorms, snowstorms and droughts;

Topological disasters: landslides, avalanches, mudflows and floods;

Disasters that originate underground: earthquakes, volcanic eruptions and tsunamis (seismic sea waves);

Biological disasters: communicable disease epidemics and insect swarms (locusts).

Man-made disasters, including the following types:

Warfare: conventional warfare (bombardment, blockade and siege) and non-conventional warfare (nuclear, chemical and biological);

Civil disasters: riots and demonstrations, strikes;

Criminal/terrorist action: bomb threat/incident, nuclear, chemical, or biological attack, hostage incident;

Accidents: transportation (planes, trucks, automobiles, trains and ships), structural collapse (buildings, dams, bridges, mines, and other structures), explosions, fires, chemical (toxic waste and pollution) and biological (sanitation).

**Q.** Can "paper patients" be used in lieu of mock patients during an external disaster drill?

A. Organizations are finding it increasingly difficult to conduct external disaster drills with mock victims, sometimes because of a shortage of volunteers. Because volunteer victims have been injured during the course of a drill, liability concerns have increased. Many of the youth groups that were consistently involved in drills are now declining to participate. In response to the issues, the Joint Commission has allowed paper patients to replace live victims.

Paper patient drills should not be confused with tabletop drills. The simulated paper patients must be treated as if they were live patients and must therefore be processed through a variety of departments and/or services based upon their condition, diagnosis, and treatment.

**Q. Is a tabletop drill acceptable as an implementation of the disaster plan?**

A. There are several commercial products available that help organizations develop emergency preparedness plans and conduct drills. One of these is known as a tabletop drill. Considerable confusion exists as to how a tabletop drill can or should be used. Most tabletop drills are conducted in a single room and involve a limited number of personnel. These drills allow key personnel to anticipate staff response, determine communication requirements, coordinate activities, and establish priorities. As such, tabletop drills can be a very effective tool in developing or revising the emergency preparedness plan. However, tabletop drills are not acceptable by the Joint Commission as either of the two drills required. For a drill to be acceptable, it must be conducted throughout the facility and involve personnel throughout the organization. A tabletop drill does not meet this requirement.



## **APPENDIX 3: WMD HEALTH and MEDICAL PLANNING and INFORMATION RESOURCES**

Federal Bureau of Investigation (FBI), National Domestic Preparedness Office (NPDO)  
Mission, information bulletins, newsletters, training compendium, links: [www.npdo.gov](http://www.npdo.gov)

Office for Domestic Preparedness, Office of Justice Programs  
Training and technical assistance, equipment, exercise development, state-based needs  
assessment: [www.ojp.usdoj.gov](http://www.ojp.usdoj.gov)

Federal Emergency Management Agency (FEMA)  
Planning and disaster information, state and local government planning guidance, links to  
other governmental and non-governmental web sites: [www.fema.gov](http://www.fema.gov)

Emergency Preparedness Information Exchange (EPIX)  
Links to international and US disaster organizations and web pages: [hoshi.cic.sfu.ca/epix](http://hoshi.cic.sfu.ca/epix)

National Emergency Management Association (NEMA)  
Professional association of state emergency management agencies with library,  
conferences and data bases: [www.nemaweb.org](http://www.nemaweb.org)

Office of the Surgeon General, US Army Medical Department  
Medical NBC Information server from US Army with updated worldwide WMD news,  
medical references, training, calendar, search capability and links: [www.nbc-med.org](http://www.nbc-med.org)

FIREHOUSE magazine  
News, links, searchable data base, columns and commentaries, message and posting  
board on terrorism and weapons of mass destruction, exercise designs:  
[www.firehouse.com](http://www.firehouse.com)

Center for Nonproliferation Studies of the Monterey Institute of International Studies

Publications, databases, student information, programs, chronologies and incidents around the world: [www.cns.miis.edu](http://www.cns.miis.edu)

The ANSER Institute for Homeland Defense

National defense oriented Journal, subscription (free) weekly bulletins, legislative updates, links and library: [www.homelanddefense.org](http://www.homelanddefense.org)

International Association of Fire Chiefs (ICHIEFS)

Fire and emergency services organization with links, conferences, news, resources: [www.ichiefs.org](http://www.ichiefs.org)

Centers for Disease Control and Prevention (CDC)

MMWR (Morbidity and Mortality Weekly Report) news (free weekly subscription), health and medical prevention and treatment guidelines, searchable database on agents and health information, Bioterrorism Page with information, protocols and links: [www.bt.cdc.gov](http://www.bt.cdc.gov)

Association of Public Health Laboratories (APHL)

Laboratory testing resource with state by state resources and links, education and training resources, publications and videos, news: [www.aphl.org](http://www.aphl.org)

Office of Emergency Preparedness, US Department of Health and Human Services

National Disaster Medical System information and resources, catastrophic care resources, search engine: [ndms.dhhs.gov/NDMS](http://ndms.dhhs.gov/NDMS)

Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction (The Gilmore Commission)

Charter and Legislation, First and Second Annual Reports to the President, RAND Corporation: [www.rand.org/nsrd/terrpanel](http://www.rand.org/nsrd/terrpanel)

US Army Soldier and Biological Chemical Command (SBCCOM)

Research and Development, emergency preparedness and response, emergency training and response for the federal Domestic Preparedness Program including the Improved Response Program (IRP) and 120 Cities Program, testing and results of equipment and protection for first responders: [www.sbccom.army.mil](http://www.sbccom.army.mil)

#### American Red Cross

Chartered to assist with WMD events in the US, the ARC provides food and shelter, augmentation of the medical system, public information, mobilization of volunteers, and assures of medical supplies and blood in time of disaster. Disaster preparation and response information: [www.redcross.org/services/disaster](http://www.redcross.org/services/disaster)

#### American Hospital Association

Hospital preparedness information, checklists, testimony and links to other information sites: [www.aha.org](http://www.aha.org)

#### Maryland Institute for Emergency Medical Services Systems (“MIEMSS”)

Hospital, EMS, Public Health Weapons of Mass Destruction planning and public policy documents and reports, strategic plans, State preparation and response plan, medical protocols for EMS providers, clinical treatment guidelines for WMD (based on the 1996 Olympic Protocols): [miemss.umaryland.edu](http://miemss.umaryland.edu)

#### National Fire Academy

On-line, printed, local, state, regional and national training resources, including self-study and CD-ROM; links to other fire and emergency services sites, virtual library and search capability: [www.usfa.fema.gov](http://www.usfa.fema.gov)