**Annex: Medical Surge**

I. Purpose, Scope, Situation, Hazard Vulnerability, Assumptions

1. Purpose

Medial surge is the ability to provide adequate medical evaluation and care during events that exceed the limits of the normal medical infrastructure of the affected community.

The Maine CDC Medical Surge Annex provides guidance, including roles and responsibilities, for providing state level public health support to local/regional response activities in the event of a medical surge event. The support includes public health, medical and mental/behavioral health services to those individuals impacted by a medical surge whether from a mass casualty traumatic event or a widespread infectious disease event.

1. Scope

This Annex is applicable to the entire Maine CDC, including the District Public Health Units, which consist of District and Tribal Liaisons (DLs), Public Health Nurses, Health Inspectors, Drinking Water Inspectors, Sanitarians, Local Health Officers and three Regional Resource Centers (RRCs) located in the northern, central and southern regions of the state of Maine, in the event of a medical surge disaster event.

The overall functional objectives of the Medical Surge Annex are to:

* Assess the nature and scope of the incident initially and ongoing
* Support activation of medical surge activities at the local/regional level
* Provide support to local/regional medical surge operations
1. Situation

Natural and human-caused disasters may result in mass casualties and/or a medical surge. Local resources in impacted areas may be damaged or inaccessible. Key response personnel may be victims of a disaster, including an infectious disease outbreak, and local jurisdictions may be overwhelmed beyond their capacity to respond effectively. As such, local communities may need medical surge resources from regional mutual aid partners, or State response partners to respond to their community’s needs prior to, during and after an emergency.

1. Hazard Vulnerability

The Maine CDC conducted a statewide Hazards Vulnerability Analysis (HVA) in May of 2012. The HVA was attended by various subject matter experts (SMEs). The outcome of the HVA process identified the hazards to which the residents of Maine are thought to be most vulnerable.

Of the hazards identified those types of events that pose the greatest of a medical surge include:

* natural events such as tornados, floods, hurricanes or earthquakes involving major infrastructure damage often with loss of power with potential for food spoilage, water contamination and mold; extreme heat and heat illnesses; or a pandemic involving widespread infectious disease;
* other types of disaster events potentially involving mass casualties and infrastructure damage include bombings /explosions, and civil disturbances;
* chemical, radiological or biological exposures/terrorism, or hazmat events

Although there is a variation relative to hazard vulnerability of the aforementioned mentioned hazards (see the Maine CDC All Hazards EOP Base Plan), it is clear that there are many possibilities for the occurrence of a significant medical surge event.

1. Planning Assumptions

General

* A disaster event may result in a medical surge whether resulting from a mass casualty traumatic event, a widespread infectious disease event, or weather a related emergency.
* Demand on local medical resources may overwhelm local capacity and capabilities; local medical resources may be damaged or unavailable in a significant emergency.
* Demands for medical surge support may vary greatly, generating from one region or multiple regions of the state.
* Medical surge is the primary responsibility of local health care facilities who will take reasonable steps to provide for the care of their residents in the event of an emergency.
* Local health care facilities have emergency resources, plans and procedures to support a medical surge event on a short-term basis (usually 96 hours).
* Once local medical resources are overwhelmed, regional resources will be activated to support the local medical surge response including the regional Health Care Coalition (HCC) Communications Plan and the HCC Response Plan.
* Health Care Coalitions will communicate, collaborate and coordinate to implement the regional Communications and Response Plans.
* If regional resources become overwhelmed, state resources will be activated to support local and regional medical surge response efforts.
* State will request federal assistance to support the response if and when an incident exceeds local, regional and state capabilities and capacity.
* Coordination among response partners at all levels is expected in order to successfully meet medical surge needs.

Public Health Medical Surge Planning Assumptions

* The public will need up-to-date and accurate information and instructions
* Health care facilities will become overwhelmed with persons seeking care
* Health care facilities will experience scarce resources including supplies, equipment and personnel within the context of extreme need
* Transportation will be required to move supplies and equipment to areas of need
* Patients will require medical transportation to and between health care facilities

* Patient movement will require tracking
* Vulnerable populations, including but not limited to children and the elderly, will have special and enhanced medical and emotional needs
* Decisions will need to be made regarding distribution of resources within the context of scarce resources and overwhelming need
* Clinicians will need clinical guidelines
* Victims, families and members of the general public will experience stress and may have difficulty coping
* Responders and caregivers will experience stress and may have difficulty coping.

II. Concept of Operations

1. General

In the event of a disaster involving an excessive medical surge in the state, the Maine CDC Initial Response Team (IRT) will be notified and convened to receive real time information from the field and to assess the need to activate the Public Health Emergency Operations Center (PHEOC). Information will be received from the region(s) by way of the Regional Resource Centers who are in close communication with the regional HCCs, and or by way of the District Liaisons or the Maine CD field staff.

The Maine CDC Medical Surge plan will be activated at the direction of the Director of Maine CDC or his/her designee upon recommendation of the Maine CDC IRT. The PHEOC activation level may be to continue to monitor the situation Level (3), partial activation (Level 2), or full activation (Level 1).

Activation will be triggered by the request to support medical surge activities at the regional level due to a real or anticipated shortage of supplies, equipment or medical support volunteers.

The Maine CDC Medical Surge Annex includes guidance for supporting a regional medical surge response through providing the following:

* Disease surveillance and reporting
* Public information and warning
* Information sharing and coordination with response partners
* Management and distribution of resources including supplies and medical equipment
* Volunteer deployment and management of medical support personnel
* Patient tracking
* Clinical guidelines within the context of scarce resources [Crisis Standards of Care (CSC)]
* Disaster behavioral health (DBH) to victims, families and the public in general
* Responder safety and health
* Vulnerable populations with functional needs
1. Hazard Control and Assessment

There is no way to control most disaster events; however it is important to prepare for the occurrence of disasters. The Maine CDC prepares for disasters through collaborative planning and exercising, documenting Lessons Learned from either exercises or real events, completing Improvement Plans and updating Response Plans to mitigate the effects of future disasters.

The Maine CDC is constantly monitoring and conducting ongoing disease surveillance throughout the state. PHEP continues to increase its cache of medical surge supplies and equipment that includes durable medical equipment for persons with functional needs. Maine Respond is enlarging its pool of pre-credentialed medical support volunteers. DBH recruits and trains volunteers on an ongoing basis.

Individual and family personal preparedness and the public’s response to warnings and emergency instructions can predictably decrease the impact of a disaster. Maine CDC promotes personal and family emergency preparedness planning.

1. Protective Action

The three Regional Resources Centers (Southern, Central and Northeast) have organized and guided the development of regional Healthcare Coalitions. These coalitions consist of healthcare organizations and facilities in their regions including hospitals, long term care facilities, Federally Qualified Health Centers (FQHCs), EMA, EMS, skilled nursing facilities, public health, and other healthcare organizations. The purpose of the formation of these Coalitions is to form a network of regional healthcare stakeholders who plan and exercise those plans together, and who will respond collaboratively as a coordinated group in the event of a regional disaster.

Through the leadership of the RRCs, the Coalitions have a Communications Plan in place to facilitate the sharing of real time situational awareness. They have assessed resources available among them for potential sharing and they have discussed resource needs. The Coalitions have exercised together, have developed lessons learned and have implemented mitigation measures.

An Alternative Care Site (ACS) may need to be initiated to limit the medical surge impact on local hospitals. The decision to establish an ACS will be made by senior officials within each health care facility in collaboration with HHC stakeholders and the RRCs.

The Maine CDC will be continuously informed of the status of a regional disaster by way of the RRC. If it becomes apparent that the disaster is larger than the regional HCC and its collective resources can manage, the RRC will request disaster support from the Maine CDC Logistics Section Chief.

1. Public Warning

The Maine CDC will be the primary agency responsible for public alert and warning, information and instructions regarding a medical surge event. The Maine CDC will use a variety of communication methods to communicate with the public including press releases, interviews and social media (see the Communications Annex for details). Information may include hygiene, self-care, quarantine and isolation instructions if the event is an infectious disease outbreak (see the Maine CDC Pandemic Influenza Operations Plan). For all medical surge events including infectious disease and mass casualty, the public will receive information and instructions re: where to receive medical and/ or mental health care including ACSs, implementation of Crisis Standards of Care (CSC) if needed, and other information relevant to the specific medical surge event.

1. Protective Action Implementation

The Maine CDC will continuously provide up-to-date accurate information to the general public using a variety of communication methods pre-disaster, during and post disaster. Maine CDC will implement the Vulnerable Populations Communications Plan (VCPC) to communicate public health and emergency management risk communications to vulnerable populations within the state. Maine CDC will activate an MOU with 2-1-1 Maine to establish a 24/7 call center to ensure up-to-date information is available to the public at all times.

1. Short-term Needs

In the short term, the Maine CDC has a cache of medical supplies and durable medical equipment to, and a pool of prescreened medical volunteers that can be quickly deployed to support the initial needs of the medical surge response.

1. Long-term Needs

If the medical surge event is of a long term nature, the Maine CDC supplies, equipment and medical volunteer resources will become depleted. As it becomes obvious that the Maine CDC will require additional resources to support the medical surge response, the Maine CDC will activate MOUs and MOAs to request resources from other partners within the state, from adjacent states, US Region I, and/or from the US CDC directly.

1. Organization and Assignment of Responsibilities
2. General

Maine CDC will work closely with regional partners to support the regional response to a medical surge event. The Maine CDC is prepared to partially or fully activate the PHEOC to provide the needed support, as well as to request assistance from response partners if the state resources are unable to meet the medical surge need.

1. Organization

Various components of the Maine CDC will have public health responsibilities to ensure the successful response to a medical surge event. Those Maine CDC Department/ Programs involved in support of the medical surge event include Public Health Emergency Preparedness (PHEP), Epidemiology, the Regional Resource Centers, the DLs, Public Health Nursing and the Maine CDC Field Staff.

1. Assignment of Responsibility

The department/programs involved in a medical surge support response will assume the following responsibilities within the framework of ICS:

1. PHEP within the framework of the PHEOC:
* To facilitate the activation of the PHEOC
* To coordinate the PH medical surge support response
* To deploy pre-screened medical support personnel from Maine Responds and the Medical Reserve Corps (MRC)
* To deploy supplies and equipment from the Maine CDC cache as needed
* To provide risk communications to the general public and to vulnerable populations
* To coordinate with response partners
* To recommend the declaration of a Public Health Emergency as appropriate;
* To provide guidance for Crisis Standards of Care (currently under development)
* To deploy a DBH team to provide behavioral health support; To activate patient tracking system
* To maintain situational awareness via EMResource
1. Epidemiology:
* To provide disease surveillance initially and ongoing, and provide timely surveillance data
* To provide clinical guidance to clinicians
1. Environmental Health:
* To ensure environmental safety and health of the ACSs and /or shelters
1. The District Liaison:
* To work collaboratively with the RRCs to provide coordination of resources
* To provide situational awareness to the state PHEOC
* To provide liaison between the Maine CDC and local partners
* To oversee and support the public health response locally
1. The RRC:
* To ensure the accessibility of health and mental/ behavioral health services through activation of the resources of the regional Health Care Coalition as needed
* To obtain and report real time regional situational information including bed availability to the PHEOC
* To serve as liaison between the Maine CDC and the local medical surge response partners
* To coordinate regional resource management

The decision to initiate a regional ACS will originate with the HCC according to HCC pre-determined trigger points.

1. Support Functions

Maine CDC will be collaborating with other response partners to coordinate a medical surge response. Those response partners include:

* Emergency Medical Services (EMS): ON-scene patient triage and transport, patient tracking
* Department of Transportation: Transportation of resources
* Maine National Guard: Transportation of resources and security
* Maine State Policy: Security
* Maine Emergency Management Agency: Approve pre-credentialed volunteer personnel for deployment
* 2-1-1 Maine: 24/7 call center
* Federal Partners: additional resources
* Poison Control: provider call center, toxicology consultations, PPE management, Chempak and/or SNS pharmaceutical release
* Maine Intelligence and Analysis Center: Medical Intelligence and information sharing
* Health Centers: direct patient services
* County Emergency Management: Communications, traffic control, security
1. Direction, Control and Coordination
2. Authority to Initiate Actions

The state will monitor all medical surge activities in the state on an ongoing basis. Maine CDC will recommend the declaration of a public health emergency to the Governor and with that declaration, will activate the state public health response. Once the request for medical surge support is received, the Maine CDC Incident Response Team (IRT) will be convened to determine the level of PHEOC activation that is needed. The IRT lead has the authority to direct that the PHEOC be opened at a designated level of activation to initiate an agency response. A partial activation level (Level 2) will allow the state take action to support the local/regional response. If the regional medical surge response becomes overwhelmed and resources are depleted or are anticipated to become depleted, the Maine CDC can fully activate the PHEOC and mobilize all available resources.

1. Command Responsibility for Specific Actions

The PHEOC will be activated at either a Level 2 (partial activation) or Level 1 (full activation) using the Incident Command Structure (ICS).

PHEOC activation includes the following:

* The Incident Commander will: lead the state public health medical surge support response; coordinate that response with all other response partners; recommend that a declaration of a public health emergency as indicated; recommend the implementation of CSC as indicated
* The PIO will: disseminate public health messaging using a variety of communication methods including activation of the Vulnerable Populations Communications Plan; activate the MOU with 2-1-1 Maine to establish a 24/7 call center; will use the Health Alert Network (HAN) to send communications to clinical facilities, including clinical guidelines and CSC guidelines.
* The Operations Section Chief will provide guidance for the medical surge response including deployment of Epidemiology for disease surveillance; Environmental Health field staff for ACS inspections; the RRCs for coordination of regional resources, maintain ongoing communications with the PHEOC for situational awareness and maintain communications with the HCC; the District Liaisons for provision of real time situational information to the PHEOC, to support the RRC in resource management, and to provide on the ground public health oversight.
* The Logistics Section Chief will obtain and deploy needed medical resources including medical supplies and equipment, and prescreened medical support volunteers from Maine Responds and the MRC, as requested. DBH teams will be deployed to support the local/regional DBH response. Federal resources will be sought as State resources become, or approach depletion. Logistics Chief will ensure provisions are made for responder safety and health.
* The Planning Section Chief will prepare an Incident Action Plan (IAP) for the next operations period by working with Operations to anticipate what the regional medical surge response needs will be in the upcoming operational period based on real time data from the field.
1. Information Collection and Dissemination
2. Disaster information managed by the ME CDC PHEOC is coordinated through division/department/program representatives located in the PHEOC. These representatives collect information from and disseminate information to counterparts in the field. These representatives also disseminate information within the PHEOC that can be used to develop courses of action and manage emergency operations.
3. The type of information needed, where it is expected to come from, who uses the information, how the information is shared, the format for providing the information, and specific times the information is needed are as follows:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Information type** | **Source** | **Receiver** | **Method shared** | **Format** | **When** |
| Situational awareness | RRCs, DLs, Epi and EH field staff, DBH team,  | PHEOC, MEMA, EMS | Phone, email, fax, Web EOC, EMResource, HAN | Situational Report | Initial and ongoing |
| Disease surveillance | Epi field staff, RRCs, DLs | PHEOC, Epi Operations, EMS, MEMA | Phone, email, fax Web EOC, EMResource, HAN | Situation Report | Initial and ongoing |
| Regional medical response status | RRCs, DLs, PH Field staff,  | PHEOC, Operations, Logistics, MEMA  | Phone, email, fax Web EOC, EMResource, HAN | Situation Report | Initial and ongoing |
| Status of resources needed  | RRCs, DLs, Epi field staff | PHEOC Ops, Logistics, Planning | Phone, email, fax Web EOC, EMResource, HAN | Situation Report | Initial and ongoing |
| Status of resources available | PHEOC Logistics | PHEOC Ops, Planning | Phone, email, fax Web EOC, EMResource, HAN | Situation Report | Initial and ongoing |

VI. Communications

As the state’s lead public health agency, with primary responsibility for policy development

and technical expertise regarding public health issues, Maine CDC is responsible for developing, directing, and coordinating health-related communications both internally to the Maine CDC, externally to response and recovery partners and to the general public, with particular attention to vulnerable populations, during an emergency with public health implications.

When indicated, Maine CDC will be in close contact with its federal partners, the US CDC and Assistant Secretary for Preparedness and Response (ASPR). Maine CDC will provide situational information from the state to the US CDC and ASPR. In turn, information received by the Maine CDC from the US CDC and ASPR will be communicated back to state, regional and local partners.

Maine CDC PIO will collaborate and coordinate the dissemination of information with other agency PIOs, and initiate a Joint Information Center (JIC), if indicated.

The HAN will be used to distribute critical information out to Maine CDC health care partners, other disaster support response partners and to vulnerable populations. Press releases, media interviews, websites and social media will be used to inform the general public regarding public health issues. A call center can be established at 2-1-1 Maine to allow 24/7 access to person-to person information.

The Maine CDC has developed multiple redundant communications methods by which to communicate with response and recovery partners, and the public. For more detailed information on the Maine CDC communications function and capability see the Communications Functional Annex.

VII. Administration, Finance and Logistics

1. Administration

The PHEOC Planning Section Chief is responsible for collecting and compiling all event documentation including the Incident Action Plans and all completed ICS forms. These official records serve to document the response and recovery process of the Maine CDC and provide an historical record as well as form the basis for cost recovery, identification of insurance needs, and will guide mitigation strategies.

1. Finance

Each Maine CDC department head will submit reports/ledgers to the Maine CDC PHEOC Finance Section Chief relating to their department’s expenditures and obligations during the emergency situation as prescribed by the Department of Emergency Management and Homeland Security. All original documents will be forwarded to the Planning Section Chief for the official record. A financial report will be compiled, analyzed and submitted to DHHS for possible reimbursement following the event.

When local and state resources prove to be inadequate during emergency operations, requests should be made to obtain assistance from the Region I Emergency Coordinator and other agencies in accordance with existing mutual aid agreements and understandings including the Emergency Management Assistance Compact (EMAC) and Interstate Emergency Management Assistance Compact (IEMAC), or any real time emergency negotiated agreements.

1. Logistics

Maine CDC has identified and acquired key resources in advance of a disaster, storing them in various locations throughout the state, and stands ready to deploy them as necessary. During an actual disaster situation, the Maine CDC will receive requests for resources, will arrange distribution of needed resources to areas of need, and will attempt to obtain additional resources that are in short supply through other state or federal agencies or private partnerships. An MOU between MEMA, Maine CDC and a non-profit corporation is currently in place to provide durable medical goods and supplies to support medical operations in general population shelters with specific emphasis on the functional needs population in the event that federal and state resources are no longer available.

VIII. Annex Development and Maintenance

1. Development

The Medical Surge Annex to the Maine CDC All Hazards Emergency Operations Plan is developed by the PHEP staff in close coordination and cooperation with internal response partners including Epidemiology, Environmental Health, the RRCs, and the DLs; and external response partners including but not limited to EMS, MEMA, DOT, 2-1-1 Maine.

1. Maintenance

The Medical Surge Annex will be reviewed by the Maine CDC Emergency Preparedness Committee as a component of the overall annual review of the Maine CDC All Hazards EOP. The Plan will be updated to reflect Lessons Learned as they emerge from After Action Report/ Improvement Plans following real events or planned training exercises. If suggested changes to the Medical Surge Annex are drafted, these suggested changes will be discussed internally and vetted as indicated by significant changes. Any agreed upon changes will be added to the Plan as a DRAFT. Once the DRAFT is finalized and approved, a copy of the Medical Surge Annex will be distributed to various emergency preparedness and medical response partners and stakeholders for review and comment.

The PHEP staff will ensure that the Plan is reviewed by the stakeholders and appropriate subject matter experts a minimum of every three to five years

IX. Authorities and References

1. Legal Authority

Federal

* Sections 319C-1 and 319C-2 of the Public Health Service (PHS) Act as amended by the Pandemic and All-Hazards Preparedness Act (PAHPA). (P.L. 109-417) (2013)
* Presidential Policy Directive (PPD) 8: National Preparedness
* Homeland Security Directives (HSPD) 5 and 21

State

* Title 22: HEALTH AND WELFARE Subtitle 2: HEALTH Part 3: PUBLIC HEALTH HEADING: PL 1989, C. 487, §11 (RPR); Chapter 250: CONTROL OF NOTIFIABLE DISEASES AND CONDITIONS HEADING: PL 1989, C. 487, §11 (RPR); 2005, C. 383, §1 (RPR)
* Chapter 634, S.P. 789, L.D. 2044, “An Act to Enhance the Protection of Maine’s Families from Terrorism and Natural Disasters
1. References
* Maine CDC All Hazards Emergency Operations Plan, 2014
* US CDC, Public Health Emergency Preparedness Capabilities, March 2011
* FEMA EOP ANNEX Template, 2009