

Minnesota Emergency Medical Services Regulatory Board (EMSRB)
Pandemic Flu Response Plan – Draft
 (Supplement to HSEM and MDH-OEP Pandemic Influenza Plans)

I. Purpose:

To provide a coordinated EMS response to a Pandemic Influenza outbreak using the National Incident Management System (NIMS) and following the National Response Framework (NRF).

II. Planning Assumptions:

- A. Assistance from outside organizations may be limited.
- B. During a pandemic influenza outbreak, up to 30 percent of the workforce will be too sick to come to work at some point. Rates of absenteeism may be driven to 40 percent during the peak weeks of a community outbreak. Lower rates of absenteeism will occur during the weeks before and after a pandemic when employees may stay home to care for ill family members or fear of infection at work.
- C. Evaluate and implement procedures to protect employees from increased exposure risk while still maintaining Priority Service Functions (shifts, spacing, PPE).

Minnesota Pandemic Influenza Planning Assumptions^{1,2,3}

Minnesota Characteristics	Moderate (1958/68-like)	Severe (1918-like)
Illness	1,544,000 (30%)	1,544,000 (30%)
Outpatient medical care	772,000 (50%)	772,000 (50%)
Hospitalization	15,000	172,000
ICU care	2,250	27,700
Mechanical Ventilation	1,120	12,900
Deaths	3,600	32,900

¹These data are derived from the November 2005 HHS Pandemic Influenza Plan. Estimates were based on extrapolation from past pandemics in the United States. These estimates do not include the potential impact of interventions not available during the 20th century pandemics. Using demographic data from the Minnesota State Demographic Center, categorical data was scaled to the HHS data to provide regional and state data.

²Column totals do not necessarily equal the sum for the total population because numbers have been rounded.

³A pandemic outbreak will last about 6 to 8 weeks. The above data reflect the number of persons affected during this time frame.

III. Concept of Operations

The Minnesota Response Phases are aligned on the World Health Organization (WHO)’s six pandemic alert phases as well as the United States stages of federal government response. The U.S. stages characterize an outbreak in terms of the immediate and specific threat a pandemic virus poses to the U.S. population whereas the WHO phases represent actions taken by various partners including WHO.

The Minnesota Response Phases are utilized to provide a standard framework for the State of Minnesota’s and the EMSRB’s response to HPAI and pandemic influenza. Monitoring will occur in all phases, and will be heightened as the situation warrants.

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The Division of Homeland Security and Emergency Management (HSEM), is the coordinating agency for pandemic influenza, is augmented by lead technical and support agencies. The lead technical agencies have specific technical expertise and assets for responding to particular outbreaks. The EMSRB is a support agency that will facilitate response per the Governor's Executive Order 07-14. The lead technical and support agencies are represented in the State Emergency Operations Center (SEOC). The EMSRB will utilize this response plan along with the State Pandemic Flu Supplement during activation.

The EMSRB will ensure that all responders within their agency are familiar with plans and that SEOC staff are NIMS trained.

III. Overview and Planning Considerations:

The pandemic flu scenario presents many challenges to the health care system because it is anticipated that:

- A very high percentage of the population could be ill at the same time
- A similarly high percentage of the health care workforce could become ill
- Other infrastructure systems EMS relies upon (fuel supply, food supply, equipment supply, etc.) could be interrupted for a significant time period.
- Typical mutual aid at local, state and national levels may become overwhelmed.

Considerations and Strategies for managing a pandemic event are largely public health measures such as early identification of the illness, isolation and quarantine, etc. There is a great deal that can be done by EMS agencies, State, Regional and Local Health Partners, Regional EMS Programs, Emergency Management, the EMSRB and others to prepare for the possibility of a pandemic outbreak. The following concepts will assist EMS in preparing for a pandemic.

Planning Considerations by the EMSRB for Pandemic Flu Outbreak has been guided by the following two nationally recognized planning documents for EMS Response Agencies and EMS Communication and Dispatch Centers.

The documents are available at the following links:

<http://www.nhtsa.gov/people/injury/ems/PandemicInfluenzaGuidelines/Task61136Web/PDFs/Task%206.1.13.6Lo.pdf>

<http://www.nhtsa.gov/people/injury/ems/PandemicInfluenza/PDFs/Task%206.1.4.2Lo.pdf>

Protect Your Workforce:

- Use Appropriate PPE
 - Gloves
 - Masks (N95) likely the preferred protection until guidance for use of a surgical mask is received from MDH Infection Control
 - Gowns and eye protection for aerosolizing procedures
- Use excellent hygiene
 - Wash hands with soap, water or alcohol based foam
 - Clean all equipment and surfaces after every patient contact
 - Encourage your staff not to come on duty if they are having symptoms of illness
 - Follow specific MDH, EMSRB and CDC guidance related to the outbreak

Reduce Exposures:

- Approach patients slowly in cases of unknown illness or a report of flu like symptoms

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assure that PPE is worn.

- Apply a surgical mask to patients who can tolerate them.
- Administer oxygen via full face mask if indicated or the patient cannot tolerate surgical mask.
- Limit crew size and contact with the patient
- One first responder per patient unless additional assistance is needed
- No more than two personnel on ambulance crews for scene calls and transports to the hospital of patients with flu like symptoms.
- Minimize contact time if possible.
- Maintain a distance of more than 2 feet from the patient's mouth and nose whenever possible.
- Minimize the exposure of support agencies (first responders/police) whenever possible.
- Request only the minimal resources needed and limit exposure times and distances whenever possible.
- Use the exhaust ventilation settings in the patient compartment of the ambulance
- Close the door between the driver and patient compartment of the ambulance

Response Capacity:

- Consider steps to:
 - Assure uninterrupted fuel supplies for ambulances
 - Maintain additional quantities of expendable supplies such as PPE, oxygen and delivery supplies, suction unit disposables, IV supplies, etc.
 - Maintain a supply of food staples or other feeding arrangements at your station to avoid personnel needs to shop or eat out while on duty
 - Assure adequate supplies of hand hygiene, laundry and other cleaning materials
 - Encourage your crew members to take personal steps in their homes to avoid illness and stay response ready
 - Stockpiling food and supplies
 - Keep personal cars fueled at or above a half tank
 - Minimize large group interactions in public or private gatherings

Plan Internally and with Partner Agencies:

- Reduce the number of personnel who respond to calls (particularly illness calls).
 - Two person ambulance crews and one first responder max initial response.
 - Coordinate between ambulance and first response agencies to assure that priority is given to staffing ambulance crews.
 - Discuss your hospital's plans for handling surge capacity during a pandemic, including alternate transport destinations.
 - Consider how you will maintain response readiness if a significant portion of your workforce (10% to 25% at any time during the outbreak) is ill. Plan for extended schedules, cancellation of standby coverage at low risk events, etc.
 - Establish internal mechanisms for rapid communication of information to your crews.
 - Establish pager groups, email lists, phone trees, conference call arrangements, squad website updates, or other mechanisms.
 - Establish internal mechanisms for monitoring which of your personnel have symptoms of illness and will not be available for service. Daily checks at change of shift, etc.

Planning Considerations Continued:

Note: The following planning considerations were provided by Dr. John Hick, Medical Director for MDH-OEP and Hennepin County EMS system.

The following information is offered as a checklist of some key issues to address in preparation for pandemic influenza. It is not a comprehensive list of issues.

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Emergency Medical Services agencies should work closely with their local medical direction, public safety and public health resources to assure that planning and preparedness efforts are complementary.

- 1. Incident Management**
- 2. Multi-Agency Coordination (Regional Coordination)**
- 3. Medical Direction**
- 4. Dispatch / Call triage**
- 5. Response**
- 6. Personal Protective Equipment**
- 7. Anti-Virals**
- 8. Vaccine**
- 9. Continuity of Operations**

Incident Management / Administration

- Service Incident Management Plan in place with emphasis on long-term response (use of incident action plans, operational cycles, chain of command, staffing of command post/operations center).
- Communications links (eg: conference calls) can be set up between key individuals on short notice.
- Contact information for key individuals is up-to-date
- Plan in concert with regional stakeholders (health, public safety, hospitals)
- Assure plan in place to educate staff as influenza issues evolve, crisis information plan in place and rumor control mechanisms established.
- Consider behavioral health support (information on stress management, danger signs, availability of phone and in-person counseling, peer-support) available and monitoring of staff during event.
- Check with common insurance carriers to see if procedures/payment/documentation would change during a pandemic
- Provide general family preparedness information to all employees (www.ready.gov, www.redcross.org, etc.)
- Assure agency is receiving MDH Health Alerts – these should come to the PSAP from EMSRB and may be also sent by the local public health department.
- Assure that PSAP is forwarding to all applicable EMS agencies.

Multi-Agency Coordination (MAC) (Regional Coordination)

- Regional site of operations should be pre-identified, however due to risk of face-to-face contact during pandemic MAC may be virtual / conference call facilitated.
- Regional EMSRB and EMS program representatives will be informational conduit for services and identify regional issues / attempt to find common ground for solutions. These personnel will work with emergency management, public health, and hospitals to maximize EMS operations during an event and assure that guidance/information is shared with all services.

Medical Direction

- Service Medical Director (or designee) should have authority and plan with operations personnel for denial of service / dispatch codes when call volume overwhelms resources.
- Service Medical Director will need to approve and modify as needed care procedures for highly infectious patients (pandemic influenza).

Dispatch / Call Triage

- Dispatch (PSAP) should have procedures in place for response when requests overwhelm resources available including but not limited to:
 - Mutual aid agreements
 - Request for state assistance
 - Assign single-agency response for certain calls (eg; fire only on motor vehicle accidents unless injuries requiring EMS transport confirmed) to reduce burden on strapped agencies.

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- Denial of service for certain calls (certain musculoskeletal complaints, abdominal pain categories, etc) to be tiered/prioritized depending upon need (see medical direction above also).
- Auto-answer for very high call volumes (may divert some calls to other resources based on need at the time – record appropriate information for callers to hear if dispatchers are all busy).

Patient Care / Transport

- Determine when screening questions for pandemic influenza will be asked (eg; fever / respiratory symptoms – automatically ask about travel outside of U.S. and if to high-risk area, any contact with poultry/waterfowl for fever / shortness of breath calls once pandemic influenza is in MN). Determine what screening criteria might be applied to pandemic influenza calls.
- Assure understanding of destination hospital for initial case/cases and assume closest hospital transport rules would be invoked during widespread outbreak.
- Consider how ambulance decontamination will be handled after transport of suspected cases in the following situations (and consider supplies for same):
 - Isolated cases in area
 - Frequent cases in area
 - Overwhelming number of cases in area
- Consider authority/latitude crews will have in denying service once on-scene if call acuity does not warrant transportation in relation to calls pending.
- Consider alternatives to nebulizers if currently using. Reduce suctioning, intubation, BiPAP if possible to reduce chances of aerosolized infection.
- Discuss with hospitals if the ED's are overwhelmed what obligations crews transporting patients have to stay with the patient while waiting for a bed (consider 15 minute rule or similar to find bed/WC/etc.) or even for transporting low acuity patients.
- Consider that transports may be to non-hospital facilities depending upon acuity of patient condition (may be routed to auxiliary flu clinics, etc).
- Consider whether you would 'pool' certain calls (eg: pick up several patients in a given geographic area and transport together to nearest facility as long as they are stable).
- Consider potential security needs of EMS if civil unrest develops.

Staffing

- Consider alternative staffing if need would arise (eg; if currently using 2 paramedics could 1 paramedic respond with 1 EMT-Basic/Intermediate OR potentially driver could be military / public works / other public safety if crews stretched too thinly.
- Consider how non-response staff (office / billing / other) could do jobs from home if needed.
- Consider how to adjust day/night staffing, shift types and duration, system status management pattern based upon call volumes.
- Ill calls - have a plan to determine what personnel are ill with flu-like symptoms. (eg: when provider calls in sick, be able to ask yes/no – 'do you have a fever / cough?' to identify ill employees and target personnel for possible anti-viral treatment. Track all 'exposed' and 'ill' staff.
- Consider that all personnel may be working under 'work quarantine' (being monitored for fever and symptoms and having to wear a mask at all times) considering their exposure risks should a pandemic occur.
- Staff will need to be screened for symptoms at start of each shift and self-monitor during shifts. (may need to consider carrying thermometers for patients and staff in order to risk-stratify).
- Can childcare / petcare / eldercare be arranged for employees?

Personal Protective Equipment

- Assure all personnel have access to PAPR in patient care compartment once cases identified in area (for high-risk procedures)
- Assure all personnel fit-tested for N95 masks (or plan to do so as just-in-time)
- Stock droplet masks to put on suspect patients.
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- Stock N95 masks for EMS provider use, assume will have to use them for 4-plus hours at a time rather than patient-to-patient should pandemic occur.
- Assure access to adequate stocks of alcohol hand rubs and other non-water disinfectants.
- Assure access to barrier gowns, eye protection, gloves (note that in an overwhelming pandemic, may have to rely on masks and good hand hygiene to protect personnel)

Anti-Virals

- Assure that local planners / EMSRB regional EMS Specialist has accurate numbers of personnel regarded as ‘Mission Critical’ response personnel (all field providers, supervisors, dispatch personnel) so that any available state/federal stocks of anti-virals may be accurately distributed.
- Consider stocking limited anti-virals (Oseltamivir (Tamiflu), Zanamivir (Relenza) for a certain percentage of providers that might become ill despite appropriate PPE (though eventually vaccine and state/federal stocks should account for essential personnel). 10-25% of staff might be reasonable, with the higher number allowing for some treatment of home illness caused by the provider. Procedures need to be in place to accurately identify the ill employee and family member to assure that limited anti-virals are used appropriately.

Vaccine

- Assure that essential personnel numbers and service contact information is up-to-date with EMSRB regional representative and local health departments to allow timely administration of vaccine when it becomes available. EMS is included the MDH-OEP pandemic flu plan where MDH will be the lead agency for planning to provide vaccinations or antiviral medications to ambulance service providers if such medications are available and would be of use in protecting the workforce. The model for administration is through locally assembled clinics in each of the MDH Districts. Information on clinics and vaccination or antiviral indications will be communicated in real time via the MNSTAR Emergency Alert System and Knowledge Base, MNTRAC and HAN.

Continuity of Operations

- Fuel supply contingencies
- Mechanical / vehicle parts and repair
- Patient care supply contingencies – linens, medications, oxygen supplies, etc.
- Cleaning / disinfecting supplies (equipment / rigs)
- Service operational costs – public vs. private solutions? Who do you go to if you cannot continue operations / purchasing due to financial constraints?
- See above – PPE, staffing, dispatch

EMSRB Support / State Support:

If a Pandemic flu event occurs, the EMSRB in coordination with the Minnesota Department of Health and the Minnesota Department of Public Safety – Homeland Security and Emergency Management will be supporting the State Emergency Operations Center, MDH Department Operations Centers, Regional and Local EOCs to coordinate the local regional and statewide response of EMS, as requested.

The EMSRB will provide this support in accordance with agency responsibilities in the Governor’s Executive Order – 07-14 and the Minnesota Emergency Operations Plan (MEOP) pandemic flu supplement.

The Governor’s Executive Order 07-14 and the MEOP pandemic flu supplement assign the EMSRB the following responsibilities:

Emergency Medical Services Regulatory Board shall:

1. With technical assistance from the Department of Transportation – Office of Electronic Communications, ensure the statewide emergency medical services radio communication plan is implemented during an influenza pandemic outbreak.

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2. In coordination with other state agencies and local authorities, provide guidance to pre hospital emergency medical services (EMS) agencies in areas affected by an influenza pandemic outbreak.
3. When requested, the EMSRB will coordinate resources for local ambulance service providers to coordinate pre-hospital emergency medical services (EMS) and transportation for patients who require an ambulance during the evacuation of health/medical facilities.
4. Assign personnel, as necessary, to state, regional, and local emergency operations centers, for the purpose of coordinating pre-hospital emergency medical services.
5. Maintain a list/database of the critical pre-hospital emergency medical resources throughout the state and implement system to rapidly access data to determine availability of these resources.
6. Upon request, assist in coordinating resources for Critical Incident Stress Management (CISM) support to pre-hospital EMS providers.

State of Minnesota Emergency Responsibility Assignments in a Highly Pathogenic Avian Influenza Outbreak

MEOP Annex:	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Department/Agency/Office/Board	Notification & Warning	Incident Management	Public Information	Accident/Damage Assessment	Search & Rescue	Health Protection	Medical Services	Fire Protection	Evacuation/Traffic Control/Security	Mass Care, Housing and Human Services	Debris Management	Public Works/Utilities Restoration	Environmental Hazard Response	Resource Management
Administration				S										S
Agriculture	T	T	T	T		T					S	T ³	T ³	S
Animal Health	T	T	T	T		T				S	S			
Attorney General		S												
Commerce		S		S								T		S
Education														S
EMS Regulatory Board		S				S	C ₄ S		S	S				
Employee Relations		S												S
Employment & Economic Development														S
Health		S	S	S		T	T			S	T ⁶	S	S	S
Housing Finance														S
Human Services										S				S
Labor & Industry				S		S								
Military Affairs	T ⁵	S	S	S	S		S	S	S	S	S	S	S	S
Natural Resources	T	S	T	T	S	T ³		C ²	S		S	S	S	S
Office of Enterprise Technology		S		S								T		S
Pollution Control				S		S					T	T ³	T ³	S
Public Safety	C ¹	C ¹	C ¹	C ¹	C ¹	C ¹	C ¹	C ^{1,2}	C ¹	C ¹	C ¹	C ¹	C ¹	C ¹
Revenue				S										
Transportation		S		S					S		S	S	S	S

C = Coordination T = Lead Technical S = Support

Additional Coordination, Lead Technical and Support information on next page.

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Definitions of the C, T and S code letters shown on Table 5 are as follows:

C: Coordination responsibility. Agency is in charge of and responsible for specified function.

T: Lead Technical Agency responsibility during MN Response Phases A1, A2, A3 and A4. During each MN Response Phase, the Lead Technical Agency will prepare daily priorities, heavily staff the planning cell and serve as the Deputy State Incident Manager.

S: Support responsibility. Agencies will assist the coordinating and technical agencies for a specified function.

Definitions of the numbered footnotes to the code letters on Table 5 are as follows:

¹ Minnesota Statutes, Chapter 12 stipulates, “[T]he Governor has general direction and control of emergency management...”

² DNR, Forestry Division has primary responsibility for forest and grassland fires. DPS, Fire Marshal Division has primary responsibility for all other fires.

³ The Department of Agriculture has technical responsibility when agricultural chemicals cause the hazard. The Pollution Control Agency has technical responsibility for response to incidents not involving radiological materials or weapons of mass destruction. The Department of Public Safety is the coordinating state agency during the public safety phase of an environmental hazard response to a terrorist incident involving a weapon of mass destruction.

⁴ Coordination responsibility for critical incident stress management support to EMS providers.

⁵ Technical responsibility during a nuclear generating plant incident.

⁶ Technical responsibility during an accident/incident involving radioactive materials and protection of public health from food borne disease.

The alerting and notification function is found in column A (above); the command and control function is found in column B; the communications and public information functions are in columns B and C; the law enforcement function is found in columns E and I; the transportation function is found in column I, the protective response function is found in columns B, D, F and G; and the radiological exposure control function is found in column F. The public health and sanitation function is found in column F. The social services function is found in columns F and J.

EMS Mutual Aid Requirements:

Minnesota Statutes requires ambulance services to have agreements signed to have mutual aid provided during times when and ambulance service is overwhelmed with calls. The mutual aid requirement is applicable for day to day operations and would also be applicable during a pandemic outbreak or other natural or man-made disaster. This requirement is in accordance with Minnesota Statutes, section 144E.101, subdivision 12, which provides:

Mutual Aid Agreement: A licensee shall have a written agreement with at least one neighboring licensed ambulance service for coverage during times when the licensee's ambulances are not available for service in its primary service area. The agreement must specify the duties and responsibilities of the agreeing parties. A copy of each mutual aid agreement shall be maintained in the files of the licensee.

<https://www.revisor.leg.state.mn.us/statutes/?id=144E.101>

Suspension of EMS Requirements during a Declared Disaster:

In addition to the above requirement for mutual aid agreements, the EMSRB under the authority of Minnesota Statutes, section 144E.266 authorizes ambulance services to operate during declared disasters in other ways not authorized under normal operations. This could include variations in crew configurations, tiered response, or other requirements that might facilitate operations during a major pandemic type event. Information about any such special authorizations would be communicated to EMS providers using various emergency communications systems.

During this time of extensive disaster preparedness planning, the EMSRB recognized the need to allow for suspension of certain ambulance requirements during legally declared disasters. The following legislation was enacted during the 2005 session and became **effective August 1, 2005**. The requirements would be applicable to a declaration during pandemic flu outbreak.

Minnesota Statutes, section 144E.266, provides:

EMERGENCY SUSPENSION OF AMBULANCE SERVICE REQUIREMENT.

(a) The requirements of sections [144E.10](#); 144E.101, subdivisions 1, 2, 3, 6, 7, 8, 9, 10, 11, and 13 ; [144E.103](#); [144E.12](#); [144E.121](#); [144E.123](#); [144E.127](#); and [144E.15](#), are suspended:

(1) throughout the state during a national security emergency declared under section [12.31](#);

(2) in the geographic areas of the state affected during a peacetime emergency declared under section [12.31](#); and

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(3) in the geographic areas of the state affected during a local emergency declared under section [12.29](#).

(b) For purposes of this section, the geographic areas of the state affected shall include geographic areas where one or more ambulance services are providing requested mutual aid to the site of the emergency.

Suspension of Specific Ambulance Requirements in Legally Declared Disasters:

The disasters must be declared by the Governor (5-day limit) or local disasters declared by the mayor or county board chair (3-day limit), in accordance with Minnesota Statutes, section 12.31 and 12.29. The following requirements would be suspended in the area affected by the disaster or for those responding to requested mutual aid in the affected area:

Explanation of Specific Requirements Suspended:

- 1) [144E.10](#): license required to operate an ambulance service;
- 2) [144E.101 subd. 1](#): requires certified personnel and staffing appropriate to the level of service on ambulance; also requires ambulance service to have medical director;
- 3) [144E.101, subd. 2](#): requires at least one ambulance attendant in patient compartment and EMT-P in patient compartment if ALS care provided.
- 4) [144E.101, subd.3](#): requires ambulance service to offer continual service (24 hours a day, every day of the year);
- 5) [144E.101, subd. 6](#): basic life support staffing and care requirements;
- 6) [144E.101, subd. 7](#): advanced life support staffing and care requirements;
- 7) [144E.101, subd. 8](#): part-time advanced life support staffing and care requirements;
- 8) [144E.101, subd. 9](#): specific requirements for specialized life support ambulances;
- 9) [144E.101, subd. 10](#): requires driver of ambulance to have drivers license and emergency driving course;
- 10) [144E.101, subd. 11](#): requires on-call schedule, documentation of personnel qualifications, and statement signed by medical director accepting responsibilities;
- 11) [144E.101, subd. 13](#): limits ambulance to assigned PSA, except when called for mutual aid or requested by transferring physician;
- 12) [144E.103](#): equipment and safety restraints requirements; requires drugs approved by medical director for ALS;
- 13) [144E.12](#): licensure of air ambulances;
- 14) [144E.121](#): requirements for air ambulance;
- 15) [144E.123](#): requires pre-hospital care data be collected and submitted to Board on every response; requires copy of patient care report to be left at hospital;
- 16) [144E.127](#): allows substitution of physician, RN, or PA for one of required ambulance attendants on inter-hospital transfer;
- 17) [144E.15](#): requires board approval for relocating base of operations within PSA.

Communications:

The EMSRB has a statewide communications plan that addresses use of VHF, UHF and 800MHZ radio systems used statewide. This plan is applicable for day to day operations and during disasters. In the event of a pandemic flu outbreak the EMSRB would work from the guidance provided in the document to ensure ambulance services have communication capabilities with hospitals, ambulance services statewide and when providing mutual aid or tiered response regionally or statewide. The EMS Communications Plan will also provide information for system interoperability between EMS communications systems and with Law Enforcement, Fire Departments and Public Health Agencies. The applicable sections of the plan for day-to-day EMS communications, disaster communications, 800MHZ and the system interoperability are below:

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The Emergency Medical Services Regulatory Board-Role in EMS Radio Communications:

The Minnesota Emergency Medical Services Regulatory Board (EMSRB or EMS Regulatory Board) is the state agency responsible for assuring the public has access to emergency medical services throughout the state. Through its planning, regulatory and grant-making activities, the EMSRB is responsible for overseeing the state's emergency medical services system. (Minnesota Statutes, Chapter 144E and Minnesota Rules, Chapter 4690)

While the EMS Regulatory Board does not own or operate EMS communications systems, it acts in the role of a regulator, coordinator and facilitator for local emergency medical services and EMS communications systems. As such, it produces the Statewide EMS Communications Plan in an effort to assure EMS radio communications are well coordinated in the best interest of patient care. The first such plan was created in the early 1970s, and has been updated periodically since that time. The state is divided into eight (8) EMS regions, and the EMS communications regions have mirrored the same regional boundaries. This regionalized approach has formed the basis for frequency assignments to ambulance services and hospitals, a pattern that continues to exist today.

The Federal Communications Commission (FCC) recognizes the role of each state's EMS office in EMS communications planning. The FCC requires that applications for EMS or hospital radio licensure in the public safety pool to be accompanied by a statement from the state's EMS office. CFR § 90.20. Thus, applicants for FCC licenses in the frequencies reserved for emergency medical services in Minnesota must obtain a letter of authorization from the EMSRB, indicating that the applicant's request is consistent with the State EMS Communications Plan.

The EMSRB participates as required in federal regulatory decision-making processes, including review and comment on FCC dockets impacting state EMS communications. The EMS Regulatory Board assists EMS agencies by monitoring federal regulations affecting EMS communications systems. This information is disseminated to agencies during ambulance inspections conducted by EMSRB Specialists, through its website and in various meetings and forums.

The EMS Regulatory Board also is an advisory committee member of the Statewide Radio Board created in 2004, as provided in Minnesota Statutes § 403.36, subdivision 1f. Currently the EMSRB fulfills this role by serving as a member of the Operations and Technical Committee of the Statewide Radio Board.

Finally, in carrying out its mission to assure the public has access to emergency medical care, the EMSRB promotes assistance with communications training, equipment purchases and planning through the funding and direction it provides to the eight regional EMS programs.

3 - Minnesota EMS Radio Communications System

Basic EMS radio communications consist primarily of two-way voice communications, using 800 MHz in the Metro area and VHF high band spectrum for the most part in Greater Minnesota, used for medical care direction, notification of patient transport and vehicle dispatch. Advanced life support medical communications also utilize frequencies in the UHF radio spectrum in some parts of the State to provide EKG telemetry capability, patient-side communication and to enable wide area radio coverage through the use of mobile relays. Frequency usage and selective signaling have been coordinated in the VHF, UHF and 800 MHz radio systems. Statewide compatibility ensures that EMS communications systems in all areas of the state are able to inter-communicate with a minimum of interference to each other. Ambulances operate not only in their own service area, but also travel to other areas for transfer of patients to specialized medical facilities, or to provide assistance during a multiple casualty incident (MCI). For ambulances in every part of the state to be able to communicate with facilities in other areas, statewide compatibility is required. Because there are a very few number of radio frequencies available for EMS, each frequency has numerous users. In order to achieve effective communications with minimal interference, statewide coordination of radio frequencies becomes necessary. Basic elements of a radio

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communication system are described in Appendix H. The following sections describe communications systems operating in VHF, UHF and 800 MHz spectrum.

3.1 - Statewide VHF

A VHF communications system supports simplex communication between EMS personnel in the field and destination hospitals primarily for the purpose of coordinating patient arrival. It is usually not centrally coordinated or ordinarily intended to support lengthy medical consultation or biomedical telemetry that may be needed for administration or control of ALS procedures. Regional maps showing locations of hospitals, along with their service and dispatch areas for those areas outside of the Metro Region are included in Appendix A. In order for a VHF communications system to conform to the regional or county EMS plan, such regional or county plans must first exist. The plans must define the purpose and scope of the VHF system and the local operating procedures.

3.1.1 - EMS Regional Channels

The state radio system consists of eight EMS regions. Each region is assigned a single VHF frequency for hospital to ambulance communications. The EMS Regions and frequency assignments are as follows:

MEDICAL CHANNELS & EMS REGIONS

155.325 MHz: Northwest & Metropolitan Regions

155.355 MHz: West Central, Northeastern, & South Central Regions

155.385 MHz: Central & Southeastern Regions

155.400 MHz: Southwestern Region

155.340 MHz: All Regions & All Licensed Services

Please note that in addition to the regional frequency, all licensed ambulance services must have 155.340 MHz, the national EMS frequency. For those ambulance services that have migrated to using 800 MHz exclusively, they must maintain the capability to communicate via radio with those using a VHF system. Each hospital uses the regional frequencies shown above, along with a sub-audible squelch tone assignment. The tone assignments can be found in the hospital directory in Appendix B.

3.1.1.1 - National Emergency Channel

In addition to the regional frequencies, 155.340 MHz is assigned as the National frequency. This frequency allows for communicating between different regions of the state. The objective is to enable every EMS mobile unit to travel and communicate anywhere in the state, on mutual aid assignment, for patient transport to a distant specialty care facility, or for MCI response, while maintaining communications with a base EMS system at all times. This channel is also used for hospital to hospital communications.

3.1.1.2 - EMS Tactical Channel

Frequency 150.775 MHz will be designated as a statewide EMS tactical channel to be used at the scene of an emergency incident. Its operation must be limited to EMS providers for portable and mobile operation. Carrier squelch must be used. In the past, 150.775 MHz and its adjacent 150.790 MHz have been used as input frequencies for VHF vehicular repeaters. Research of licensed users has shown limited use of VHF vehicular repeaters throughout Minnesota. If vehicular repeater operation is necessary, UHF frequencies are available as input frequencies. As 150.775 MHz is implemented as the EMS tactical channel, then 150.790 MHz should be used discretely because of potential adjacent channel interference to the tactical channel. Perhaps both channels will be able to be used simultaneously in nearby operations when narrow band radios are in widespread use.

3.1.1.3 - Channel Names

To reduce confusion among various EMS channel names, frequency 155.340 MHz shall be designated **National**. Frequency 150.775 MHz shall be designated as **EMS tactical**. The VHF regional channels shall be designated as **Regional**, followed by the name of the hospital.

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Example: Ridgeview Ambulance in Waconia regularly communicates with both Ridgeview Medical Center in Waconia and St. Francis Hospital in Shakopee. Each channel should be designated as follows:

Regional - St. Francis

Regional - Ridgeview

3.1.1.4 Hospital Systems

All hospitals in the same region have the same "local" channel, but are assigned discrete Continuous Tone Coded Squelch System (CTCSS) tone/codes. Ambulances operating within their normal area of operation use this channel to contact their local hospitals. Both the ambulance and the hospital transmit and decode the CTCSS code on the local channel.

In addition to the local channel, each hospital operates on the National channel 155.340 MHz with a CTCSS tone of 210.7 Hz for both receive and transmit. Ambulances operating out of their normal service area use this channel to contact a hospital if assistance is required. The ambulance transmits on 155.340 MHz with a CTCSS tone of 210.7 Hz. The hospital receives this frequency and CTCSS tone and decodes it to provide audio transmission.

3.1.1.5 - Ambulances

Ambulances are equipped with multi-channel radios with minimum capability of operating on any local hospital channels and the National channel. Additional channel capability will permit operation on other recommended channels, such as the Minnesota Statewide Emergency Frequency (MINSEF) (155.475 MHz), National Interoperability channels, if authorized, or other local government channels for dispatch or intercommunications.

3.1.1.6 - VHF Paging systems

Tone, voice and alphanumeric radio paging systems alert medical and ambulance personnel to emergencies, and establish two-way radio communications. The same systems are often used for routine paging operations within a hospital. The following Special Emergency Radio Service Channels have been assigned exclusively for paging operations and are not required to operate in a narrowband mode:

152.0075 MHz

157.450 MHz (Limited to 30 watts transmitter output)

163.250 MHz

A licensee regularly conducting two-way communications operations on the EMS regional channels can, on a secondary basis, also transmit one-way alert paging signals to ambulance and rescue squad personnel. Since these channels are shared by many hospitals in a region and because paging can disturb voice communication, paging should be used sparingly on these channels. Two-way voice communication has priority over secondary paging operations on the regional channels.

3.1.1.7 - VHF Repeaters

Repeater systems have proven essential for police, highway maintenance and forestry public safety communications systems. They provide the capability for wide-area mobile-to-mobile communications and also are able to extend the coverage of hospital base/mobile systems.

A repeater system requires a pair of frequencies; one to be used for repeater to mobile communications and one to be used for mobile to repeater communications. While the pairing of frequencies is now common in other frequency bands, the VHF spectrum was not configured for this type of communications when originally authorized by the FCC. However, provisions now exist to permit this type of operation in VHF spectrum. Emergency Medical Radio Service (EMRS) channels could be paired with a regional or the National Channel. Local government channels could be paired. An inter-service pairing arrangement where an EMRS channel is paired with a local government channel may be appropriate in some situations. Any proposal for a repeater system must be approved by the regional EMS organization responsible for communication. A proposal for a repeater system using EMRS channels must also be approved by the Minnesota EMSRB. Either approval shall be obtained prior to applying for a license. Section 4.10.1 contains procedure for applying for a repeater system.

3.2 - ARMER 800 MHz System:

3.2.1 - Description of existing and proposed build-out of the system

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The Allied Radio Matrix for Emergency Response (ARMER) 800 MHz Statewide Public Safety Radio and Communication System is a two-way trunked communications system for public safety/government service radio. The ARMER System is a modern digital trunked 800 MHz radio network, currently employing Motorola’s ASTRO25® release 6.X technology, as well as an independent microwave system connecting all network sites. ARMER’s land mobile radio component is based upon use of the P25 architecture1, which has been designated by the Federal Department of Homeland Security as the preferred standard for first responder radio communications interoperability.

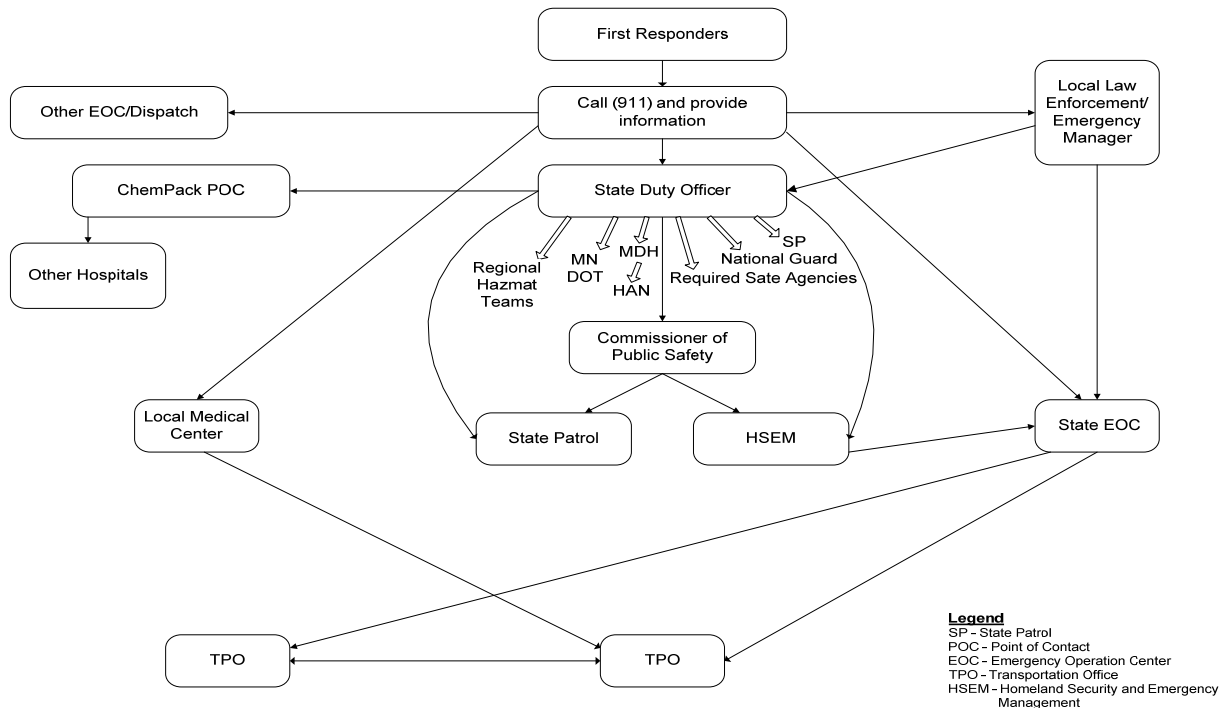
The complete **Statewide EMS Communications Plan - 2007** can be viewed and downloaded from the following link: [http://www.emsrb.state.mn.us/docs/MN EMSRB Communications Plan 2007-21.pdf](http://www.emsrb.state.mn.us/docs/MN_EMSRB_Communications_Plan_2007-21.pdf)

Local, Regional and State Communication Matrix:

The following Matrix represents a plan for communication from local, regional and state agencies including public health and PSAPs. This is specifically for communication regarding Chempack, but would also be applicable in a pandemic or all hazard situations.

On Scene Scenario or At Hospital/Clinic (Victims Self Present):

ChemPack (CP) Notification Process



Communications and Notification:

The MNSTAR Emergency Alert System, MNTRAC and the Health Alert Network (HAN) are communications tools that are available to EMS to receive and reply to alerts notifications and information provided to pandemic influenza. These communication tools will allow for real time dissemination of information during a Pandemic flu or other public health event. It is very important for ambulance service managers, regional program directors and other have access and are capable to receive these notifications.

MNSTAR Emergency Alerts – Contact – Robert Norlen

MNTRAC Alerts – Contact – Megan Thompson

HAN Alerts – Contact – MDH

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MNSTAR - Emergency Alert Notifications:

The Minnesota State Ambulance Reporting System (MNSTAR) has the capability to provide emergency messages and notifications to ambulance services statewide. The MNSTAR emergency alert system is a tool to notify ambulance services on important event related information during a pandemic. The information is disseminated via the web-based system to e-mail, text-message cell phone or text message pager. Emergency information can be posted on the secure MNSTAR knowledge base. This information can be accessed by all Minnesota EMS providers.

MNTRAC System:

Minnesota system for Tracking Resources, Alerts, and Communications (MNTrac) is a database-driven web application intended as a statewide solution. As such, it services all areas of the state whether rural or metropolitan, since it provides anytime, anywhere access via an internet connection. This system has been designed specifically to track bed, pharmaceutical and resource availability from all designated facilities within the state as well as providing for allocation of these resources to support surge capacity needs. Hospital bed diversion status, emergency event planning, command center, and alert notifications are supported in real time.

The MNTRAC system provides:

- Hospital diversion status.
- Resource tracking (beds, pharmaceuticals, and other resources).
- Emergency alert notifications and contingency planning.
- The aggregation of information from all facilities and the possibility of sharing this with other systems and agencies.
- Unique views to facilitate system and data access for all users throughout the state.
- Electronic reporting and transport of information to other systems and agencies to improve communications and to share pertinent information.
- Standard and ad hoc reporting to turn data into useful information.
- The application is scalable to conform to the needs of small, medium and large facilities as required.
- Easy expansion through its open architecture as needs grow and evolve.

The EMSRB in cooperation with MDH-OEP has access to the MNTRAC system to receive emergency alert information provided through the system. The EMSRB is working with EMS providers statewide to have access and permission to receive information from the MNTRAC system. Access to MNTRAC and the command system within MNTRAC will be a valuable communication tool to keep all agencies and partners involved in an event up to date on information and with the capability to exchange information.

HAN Alert Network:

When an event threatens the health of Minnesotans, fast, efficient, and reliable communication to those responding to the event can prevent illness and save lives. Minnesota's Health Alert Network (HAN) enables public health staff, tribal governments, health care providers, emergency workers, and others working to protect the public to exchange information during a disease outbreak, environmental threat, natural disaster, or act of terrorism.

All of Minnesota's ninety one (91) public health agencies have built local HANs to distribute alert information rapidly to health care providers and others in their jurisdiction. Tribal governments have also developed their own health alert networks. This decentralized development has resulted in a robust and flexible communication system that is an effective communication tool for local, state, or national emergencies.

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Since January 2000 when the first health alert was sent, Minnesota's HAN has been used to:

- alert public health agencies to a potential bioterrorism event (later determined to be a hoax) involving anthrax contaminated letters;
- distribute Web-based resources for the public and health care providers in the wake of the concern about asbestos contaminated vermiculite;
- alert responders to resources about protecting health during flooding and flood cleanup;
- alert local public health agencies and clinics to a case of rubella and direct them to Web resources for clinicians including diagnostic and treatment guidelines and a photo of a rubella rash, and for the public including rubella vaccine information in English and eleven other languages;
- provide information to public health agencies and health care providers about anthrax contaminated meat, that led to the death of a Minnesota man
- keep Minnesota health care providers and public health staff up to date on health threats following 9/11; and
- provide just-in-time information about other time sensitive and urgent issues threatening the health of Minnesotans.

An archive of MDH health alerts is located on the Web at <http://www.health.state.mn.us/han/index.html> . To learn more about Minnesota HAN, call your local public health agency, e-mail workspace@health.state.mn.us .

How the Health Alert Network Works:

A **cascading alert system** is used for alerts sent during normal business hours. A **direct alerting system** is used when the health threat is urgent or the alert is sent outside of business hours. A **health threat is suspected or identified**. MDH program managers activate the Health Alert Network and decide:

- Who needs the information?
- What information?
- What action should MDH recommend to public health and health care providers?

The decision to issue a health alert is not taken lightly. An approval process involving MDH division management and content experts is always used.

Health alert e-mail is sent to local public health agencies, tribal governments, the EMSRB and others with a summary of the health threat, Web links for details, and recommendations regarding distribution of the alert information. If an urgent health threat is suspected or identified. The health alert is sent via auto-phone call to home and cell phone numbers of 24/7 contacts and followed up with email and fax.

Surge Capacity and Triage, Treatment & Transport Decisions – Medical Direction:

Hospitals in Minnesota are organizing resources to absorb additional patients based on their percentage of the total hospital bed capacity statewide. Other provisions are being made to use alternative sites for patient management beyond the existing hospitals. Management of patient surge will be coordinated locally until capacity is overwhelmed and then by a patient coordination unit within MHD-OEP if necessary. Triage and transport decisions for low risk calls during an overwhelming pandemic event are being addressed at the local level. The EMSRB will provide guidance to EMS agencies, medical directors and PSAP's statewide on the use of established guidelines to minimize demand on the EMS system during a pandemic event. The concept is to use a triage model that may provide alternatives to an EMS response during a pandemic event. Responsibility to provide written guidelines on the triage, treatment and transport of patients on a day to day basis and during a pandemic event lies with local ambulance service medical direction in accordance with Minnesota Statutes 144E.265, Subdivision 2, (4), which provides in relevant part:

Medical Director Responsibilities. Responsibilities of the medical director shall include, but are not limited to: (4) approving written triage, treatment, and transportation guidelines for adult and pediatric patients;

<https://www.revisor.leg.state.mn.us/statutes/?id=144E.265>

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The following guidelines can be adopted by local medical direction for triage, treatment and transport of patients during a pandemic. **Note: The following guidelines are provided by John Hick, M.D., Medical Director for MDH-OEP and Hennepin County EMS system.**

Overall planning:

EMS agencies statewide are working on developing Multi-Agency Coordination model of communication and coordination during a pandemic which will allow information sharing between agencies, improved mutual aid, and consistent policy decisions.

Dispatch:

- A recommended pandemic triage algorithm has been drafted that would allow Public Safety Answering Points to defer sending EMS to certain calls during times of high demand.
- The following actions may be taken at the service level:
 - Use of Priority Dispatch systems to triage requests for service
 - Medical Director approval of triage of calls
 - Assignment of single agency responses during periods of high demand (law enforcement only on 'one down' calls for example)
 - Referral of non-life threatening calls to public health or other hotline
 - Use of non-medical transportation assets to transport persons who do not require EMS interventions but need transportation for urgent medical care.
 - Automatic answering systems are being explored in the metropolitan area that would ask callers to enter numeric responses to a series of questions to determine whether an EMS dispatcher should answer the call or whether it can be routed to other information or transportation sources.

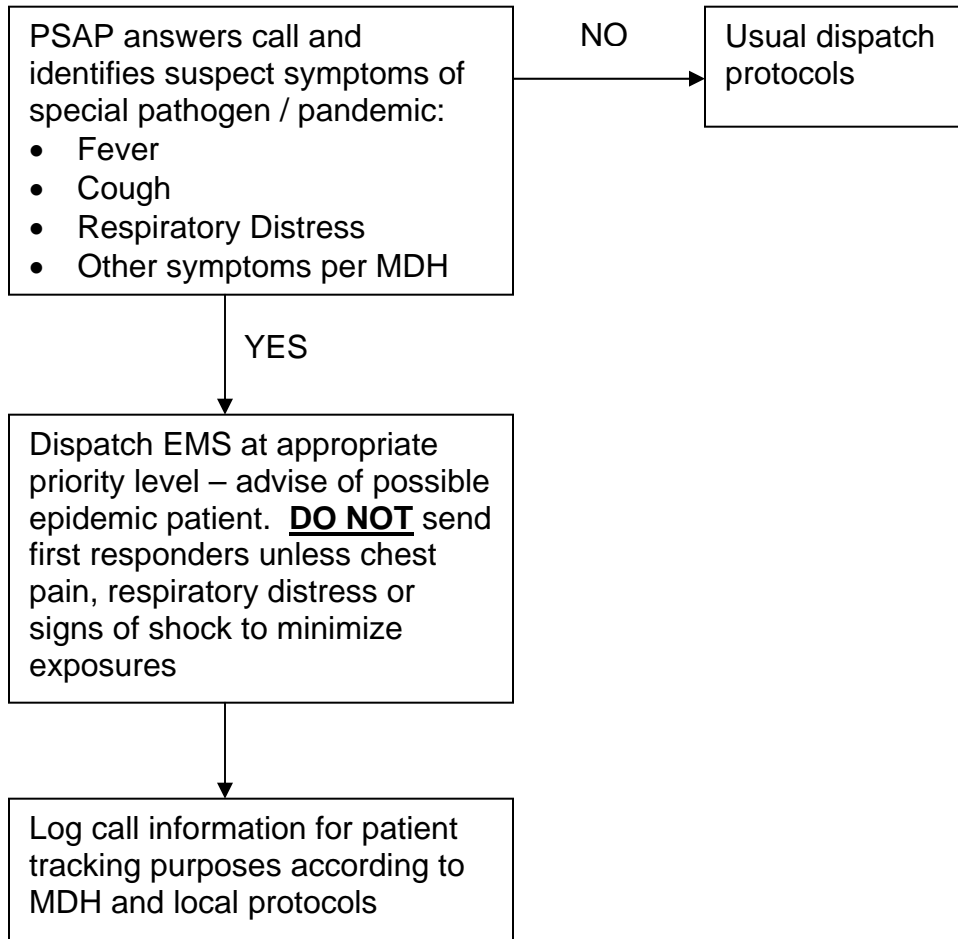
The following **EMS Dispatch Guideline** algorithm has three (3) phases for consideration during a pandemic flu outbreak. They include **GREEN PHASE – Resources Adequate** ; **YELLOW PHASE – Resources Inadequate (over capacity, but not overwhelmed)** ; **RED PHASE – Resources Overwhelmed**.

The Algorithm is on the following 3 pages.



EMS Pandemic Dispatch Guidelines / Algorithm

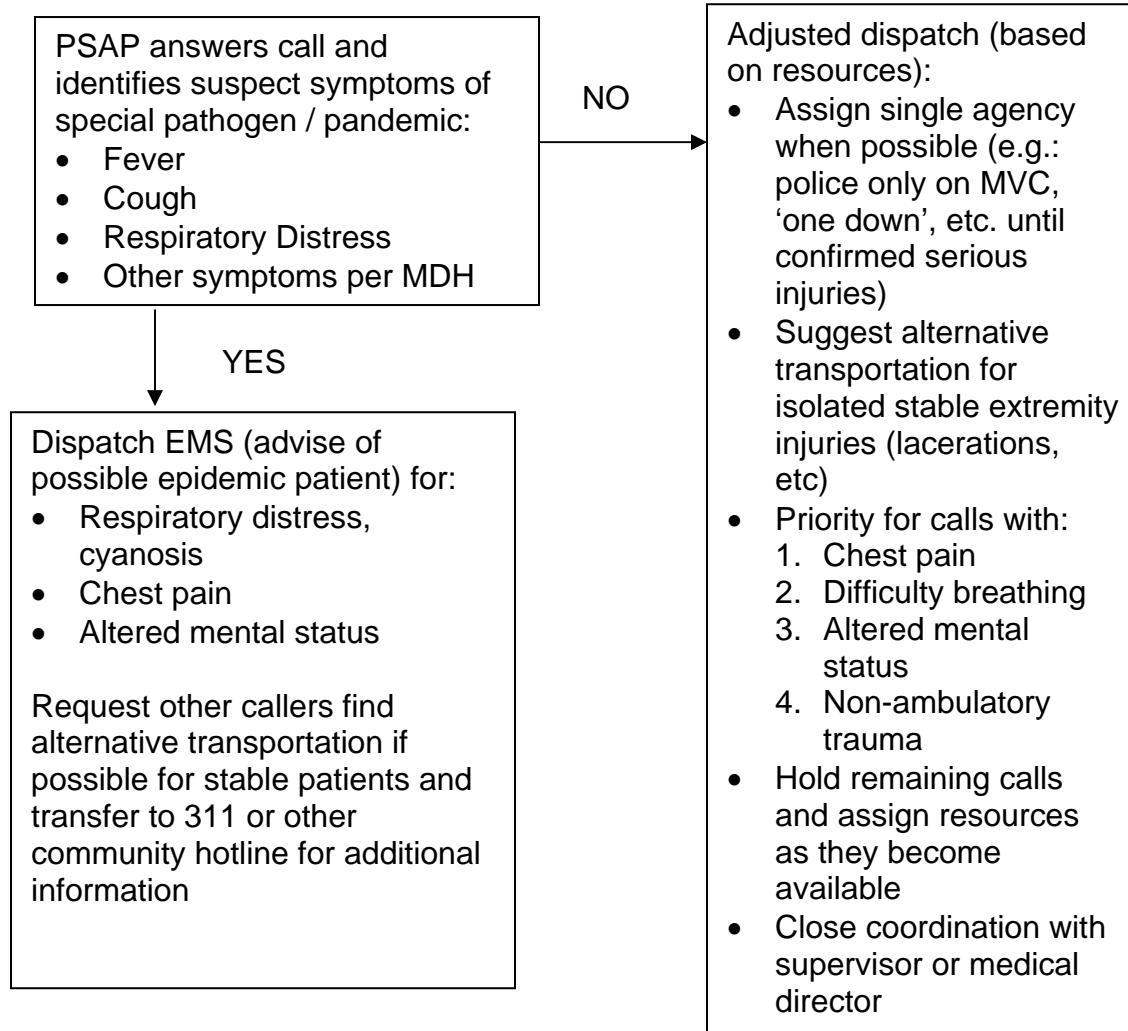
GREEN PHASE – Resources Adequate



Next Phases

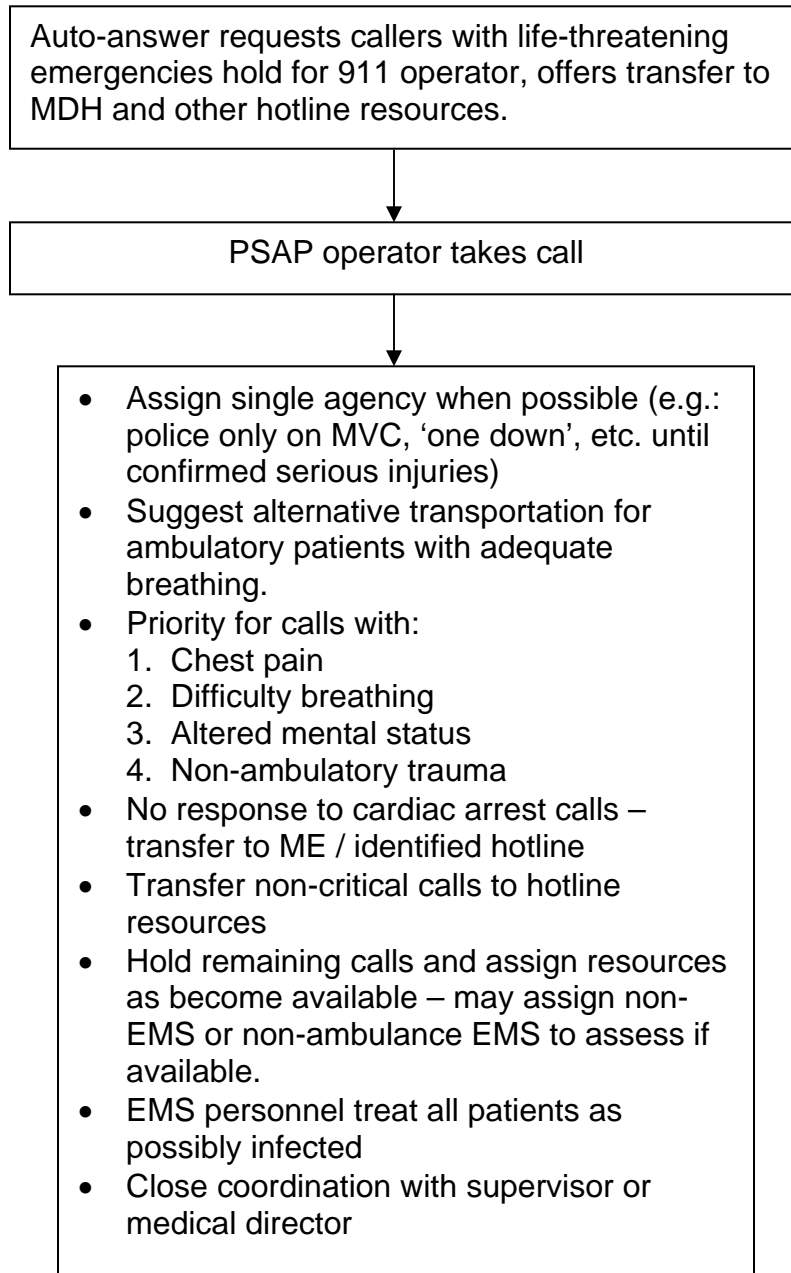
EMS Pandemic Dispatch Guidelines / Algorithm

YELLOW PHASE – Resources Inadequate (over capacity, but not overwhelmed)



EMS Pandemic Dispatch Guidelines / Algorithm

RED PHASE – Resources Overwhelmed



Response:

- EMS units may use atypical staffing configurations (single medical provider) on ambulances
- EMS personnel may staff non-ambulance transport
- Responses and transports may be ‘batched’ – that is a single rig may continue to respond to calls in a geographic area until at maximum capacity
- Transport to ‘Closest hospital’ should apply
- EMS NIMS compliant Strike Teams may be implemented in affected areas to assist local and regional resources with triage, treatment and transportation coordination. See planning information for **Regional EMS Strike Teams** in this document.

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Patient Care / Transport:

- EMS may have broad discretion during a pandemic to deny transportation if not medically necessary or refer patient to other sources of transportation – these criteria must be authorized by the medical director and used in conjunction with demand on the EMS system at the time.
- Patients with cough and fever should routinely be masked (daily operations).
- Nebulizer treatments should be reduced for these patients and during a pandemic would be replaced with use of metered dose inhalers due to aerosol generation.
- Airway suctioning and intubation / use of CPAP would be discouraged unless absolutely necessary.
- Ambulances may be authorized to transport to non-hospital facilities / clinics / screening centers based on availability / capacity.

Personal Protective Equipment (PPE)/ Anti-Virals / Vaccine:

- Stocks of N95 masks have been purchased for services for a possible pandemic, SARS, or other event. However, these stocks are not likely to last for the duration of the pandemic. Simple masks may be used at all times during the peak of a pandemic with N95 for high-risk patient care and airway procedures.
- Many services have powered air-purifying respirators (PAPRs) that filter at the N95 level and may be particularly effective for protection during airway procedures.
- EMS personnel are included in ‘essential personnel’ pools that will have priority for receipt of pandemic influenza vaccine as it becomes available.
- The State of Minnesota has anti-viral medication supplies. EMS providers who become ill despite use of PPE may benefit from treatment with anti-viral medications such as oseltamivir.

Part of the MDH-OEP pandemic flu plan is to provide vaccinations or antiviral medications to ambulance service providers if such medications are available and would be of use in protecting the workforce. The model for administration is through locally assembled clinics established in each of the MDH health regions. Information on clinics and vaccination or antiviral indications will be communicated in real time via the MNSTAR Emergency Alert System and Knowledge Base, MNTRAC and HAN.

Continuity of Operations / Resource-Poor Situation:

- Pandemics vary widely in severity. During a severe pandemic, supply chains may be disrupted, affecting ability of services to maintain patient care supplies or operate their ambulances. Regional decisions would be made in this circumstance to determine appropriate adaptive strategies. Services must attempt to conserve supplies and consider re-using other supplies as possible.
- MN Dept. of Health has developed and is refining guidance which assists caregivers in resource-poor situations to determine how they can adapt to the lack of certain medications, oxygen, or staff resources. These resources are available at www.health.state.mn.us

Additional information on regional planning for EMS triage, treatment and transport when a Resource-Poor Situation is occurring related to a pandemic or other man-made or natural disaster is on the following two (2) pages.

Recommendations for Resource-Poor Situations

Guidance Provided by John Hick, M.D. – Medical Director for MDH-OEP and Hennepin County EMS System and Hennepin County Public Health.

DRAFT March 2, 2008

Conditions: may be used by services to trigger changes to operations and between services to compare level of demand:

1. **Green** – usual operations
2. **Yellow** – EMS services are pending or not answering calls that normally would warrant a Code 3 response
3. **Red** – EMS services are pending or not answering calls for which there is a significant risk of death for the patient.

Function	Green	Yellow	Red (1)
Call Answering	Daily Operations	May use automated screening system prompting callers to use other transportation if non-life threatening injury / illness (2)	Use automated screening system to identify key symptoms (altered mental status, chest pain < 3 hours duration, difficulty breathing, inability to ambulate) for EMS response, pass other calls to health helpline(3)
Dispatch	Daily Operations	<ul style="list-style-type: none"> ▪ May use Clawson Priority Dispatch (or other system – use of PD at all PSAPs is recommended by the Hennepin County EMS Medical Directors) to prioritize calls. May have to pass some calls from PSAP to EMS dispatch center. ▪ Single Agency Status (SAS) - single agency is dispatched to calls that normally would require multi-agency response (for example: law enforcement only on 'one down', fire only on personal injury accidents, EMS only for short of breath)(4) 	<ul style="list-style-type: none"> ▪ Calls screened as above. Dispatch algorithm utilized (see separate document). Clawson or other system used to prioritize calls. No response to cardiac arrests. ▪ Consider sending non-EMS transport (5) ▪ Recommend personal transportation when possible / appropriate.
Dispatch Life Support / Pre-Arrival	Daily Operations	No pre-arrival instructions given.	No dispatch life support given (discretionary exceptions may be made for choking or similar situation)
Staffing	Daily Operations	Change provider shift length if appropriate (may be detrimental in infectious disease events due to decreasing compliance with PPE over time)	Change crew configuration as necessary to maintain maximal ambulances available: (note in some configurations would require EMSRB / governor's executive order to waive EMSRB regulations) – for example other public safety personnel, national guard, or public works drivers for ambulances.
Transport		<ul style="list-style-type: none"> ▪ Transport patients to closest hospital ▪ Batch transports – ambulances collect patients until a critical patient is collected or the ambulance is full. 	EMS crew has discretion <i>not</i> to provide transport when either: <ul style="list-style-type: none"> ▪ Patient condition does not warrant transport (relative to hospital ability to provide care) ▪ Patient is stable and has alternative transportation.

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Notes:

1. Note that implementation of Red strategies generally require the Governor to declare a Public Health Emergency to ensure legal protections from liability.
2. **Recommendation:** Identification of auto-answer technologies which may be used by multiple PSAPs is a high priority.
3. **Recommendation:** Development of an operational model for a regional health helpline (technology for forwarding to multiple healthlines plus/minus setting up a regional healthline in conjunction with state and local public health) is identified as a high priority.
4. **Recommendation:** all services should identify call types which are candidates for SAS and work with their public safety answering points (PSAP) and medical director to include this language in their dispatch scripts. PSAP supervisor would enable SAS when conditions warrant.
5. **Recommendation:** Hennepin County Public Health EMS Division (and other local Public Health Departments) should explore non-EMS transportation operational agreements with service medical directors (potentially agreements with taxi / wheelchair / other services).

These recommendations and action items were generated for pandemic influenza but have applications for all-hazard response to a disaster that places inordinate demands on the EMS system. These recommendations are not operational policy. Medical Directors should work with their service and PSAPs to determine how to implement these recommendations.

Multi-Agency Coordination: during a major disaster, EMS agencies should utilize mutual aid per usual agreements. If these are insufficient, or a disaster is large enough to require mutual aid the Emergency Medical Services Regulatory Board (EMSRB) should be notified (EMSRB can be notified via State Duty Officer) and the Regional EMS Program to assist with coordination of EMS resource request and allocation. During a resource-poor situation the EMSRB and Regional EMS Programs will work with medical directors and service operations personnel to implement adaptive policies.

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Additional EMSRB Roles and Responsibilities during Pandemic Outbreak:

Disease Surveillance:

The Minnesota Department of Health (MDH) is the lead agency for disease surveillance during a pandemic outbreak. The EMSRB will assist and support MDH in surveillance needs during a pandemic. The Minnesota State Ambulance Reporting (MNSTAR) system could provide a limited amount of capability for EMS disease surveillance. Limited surveillance could occur through patient care information submitted to MNSTAR by EMS providers statewide.

EMS Resource Coordination:

The EMSRB maintains databases with information related to ambulance services statewide and within each region of the state. To enhance locating and obtaining needed resources during a pandemic or other man-made or natural disaster the EMSRB will call on its EMS Specialists located in field offices in each region. In addition to the information maintained in state databases on EMS resources, the EMS Specialists have access to regional databases and other EMS equipment caches that are maintained and available in each of the eight (8) regions. Additionally, the EMSRB will be working with each of the eight (8) regional programs to coordinate resources for a disaster in the region or if regional resources are needed for an event statewide. The regional programs maintain important information about non-licensed / non-transport first responder agencies and EMS equipment that may be available through those agencies statewide. Collaboration between the EMSRB and the Regional Programs will be vital to coordinate and appropriately allocate EMS resources during a pandemic outbreak.

Coordination of Critical Incident Stress Management (CISM):

The EMSRB maintains a resource list for CISM teams statewide. CISM teams are organized and dispatched through the Regional EMS Programs and are self-sufficient in preparation and response to requests for service. As requested, the EMSRB will make CISM contact from the following contact list.

Regional CISM Team Dispatch Numbers:

Central Minnesota CISM Team

24 hour access number

(800) 556-4911

General Program & Training Information

(320) 656-6122

Head of the Lakes CISM Team

24 hour access number

(218) 727-8770

General Program & Training Information

(218) 726-0070

(800) 247-1283

Metro Region CISM Team

24 hour access number

(612) 347-5710

General Program & Training Information

(612) 228-0296

Website: www.metrocism.org

Northwest/West Central CISM Team

24 hour access number

(218) 281-0431

South Central MN EMS CISM Team

24 hour access number

(507) 387-8744

General Program & Training Information

(800) 767-7139 ext. 451 or 445

Southwest MN CISM Team

24 hour access number

(507) 537-7666

General Program & Training Information

(507) 537-9677

Southeast Minnesota CISM Team

24 hour access number

(800) 237-6822

General Program & Training Information

(800) 850-3397, (507) 536-9333

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Mitigation Strategies:

The Minnesota Department of Health (MDH) is the lead agency for mitigation strategies during a pandemic outbreak. The EMSRB will follow guidance and direction provided by MDH to support mitigation strategies during a pandemic outbreak.

Isolation and Quarantine of EMS Personnel:

The Minnesota Department of Health (MDH) is the lead agency for isolation and quarantine during a pandemic outbreak. The EMSRB will follow guidance and direction provided by MDH if there is a need to consider isolation and quarantine of EMS personnel.

Recommended Pandemic Preparedness Information for EMS Providers:

Recommendations for Regional and Local Planning for Response to Pandemic Flu:

The EMSRB recommends that all EMS providers use the HHS EMS planning checklist to preparing for a possible pandemic flu outbreak. The check list identifies key areas for pandemic influenza planning.

EMS and non-emergent (medical) transport organizations can use this tool to self-assess and identify the strengths and weakness of current planning. Links to websites with information are provided throughout the document. However, actively seeking information that is available locally or at the state level will be necessary to complete the development of the plan.

The planning checklist can be viewed and downloaded from the following link.
http://www.emsrb.state.mn.us/docs/HHS_Emergency_Medical_Service_and_Non-Emergency_Transport_Checklist-193.pdf

Recommendations for Hygiene and Full Barrier Protection:

The EMSRB, in cooperation with MDH-OEP infection control unit have developed the following information related to recommendations for EMS Special Precautions and Full Barrier Precautions during response to a pandemic, man-made or natural disaster event. These guidelines have been provided to EMS providers and will be provided again in the event of start of a pandemic flu outbreak.

Standard Precautions information can be viewed and downloaded at the following link:
http://www.emsrb.state.mn.us/docs/EMS_-_Standard_Precautions_Checklist_FINAL_-_4-2008-193.pdf

Full Barrier Precautions information can be viewed at the following link:
http://www.emsrb.state.mn.us/docs/EMS_-_Full_Barrier_Protection_Checklist_FINAL_-_4-2008-193.pdf

EMS Exposure/Special Pathogen Situation Response Guidelines:

The EMSRB, in cooperation with MDH-OEP infection control unit have developed the following EMS guidelines for interaction with patients suspected of a variety of special pathogen issues. These guidelines have been provided to EMS providers and will be provided again in the event of start of a pandemic flu outbreak.

The EMS Special Pathogen Guideline can be viewed and downloaded from the following link:
http://www.emsrb.state.mn.us/docs/EMS_-_Special_Pathogen_Guidelines_FINAL_-_4-2008-193.pdf

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Chemical, Biological, Radiological, Nuclear, Explosive (CBRNE) – EMS Response Guidance:

In coordination and collaboration with MDH-OEP the EMSRB has provided all EMS response agencies statewide with guidance on response to CBRNE events.

The EMS - CBRNE guidance information can be found at the following links:

Page 1 - http://www.emsrb.state.mn.us/docs/CBRNE_EMS_Guide_Page_1-193.pdf

Page 2 - http://www.emsrb.state.mn.us/docs/CBRNE_EMS_Guide_Page_2-193.pdf

Statewide Pandemic Education for EMS Providers and their Families:

The following information has been developed for educating EMS and their families about pandemic and with additional information and measures to protect themselves and be self-sustaining during a pandemic outbreak. **Note: Power-Point for provider training is a separate document at this time.**

Exercise Evaluation and After Action Reports:

The Homeland Security Exercise and Evaluation Program (HSEEP) is a capabilities and performance-based exercise program which provides a standardized policy, methodology, and terminology for exercise design, development, conduct, evaluation, and improvement planning. The HSEEP Policy and Guidance is presented in detail in HSEEP Volumes I-III. Adherence to the policy and guidance presented in the HSEEP Volumes ensures that exercise programs conform to established best practices, and helps provide unity and consistency of effort for exercises at all levels of government.

The Homeland Security Exercise and Evaluation Program (HSEEP) constitute a national standard for all exercises. Through exercises, the National Exercise Program, supports organizations to achieve objective assessments of their capabilities so that strengths, and areas for improvement are identified, corrected and shared as appropriate prior to a real incident.