

2013



Medical Surge Systems



PA DOH Medical Surge Systems Overview

Medical Surge Equipment Cache (MSEC)	Casualty Collection Point (CCP)	Mobile Medical Surge System (MMSS)	State Medical Assistance Team (SMAT)
<u>Purpose:</u> Mobile hospital for non-critical patients	<u>Purpose:</u> Versatile, multi-function shelter system	<u>Purpose:</u> Versatile, multi-function shelter system	<u>Purpose:</u> Stand-alone, rapid medical response team
<u>How used:</u> To augment existing hospitals during major emergencies or as a holding shelter for patients evacuated from a medical/nursing facility or create an alternate care site	<u>How used:</u> For secondary triage/ short- term medical stabilization and transport to medical facilities. It can also be used for temporary aid stations, pharmaceutical dispensing stations, etc.	<u>How used:</u> To support uses ranging from a shelter to a portable hospital	<u>How used:</u> For more advanced triage/ stabilization and transport during disasters and other events
<u>Specifications:</u> <ul style="list-style-type: none"> • Can provide triage/ stabilization for those with minor illnesses/injuries • 46-bed surge ward • Stored unassembled in trailers • 18 total systems (at least one trailer is strategically located in each of the state's 16 regional EMS councils) 	<u>Specifications:</u> <ul style="list-style-type: none"> • Can provide general medical care through limited critical care • 17-102-bed complete sheltering system • Can be deployed/ demobilized in less than 30 minutes with minimal staff • Climate-controlled with power generators • Six total systems strategically located throughout PA 	<u>Specifications:</u> <ul style="list-style-type: none"> • Can provide general medical care through limited critical care • 50 total beds • Climate-controlled with power generators • Six total systems strategically located throughout PA 	<u>Specifications:</u> <ul style="list-style-type: none"> • Can provide community or hospital triage, hospital emergency, critical/ preoperative care and medical surgical care • 24-50 beds • Patients with minor illness or injury can be treated and released from the SMAT • Three total systems strategically located throughout PA
<u>NOTE:</u> Any and all of these systems (or any part from within these systems) can be combined,			

deployed or otherwise made operational for an incident or event, to supplement and support the others in any way possible to ease the stress of any surge type occurrence.

Medical Surge Equipment Cache (MSEC)

The Medical Surge Equipment Cache (MSEC) is a 46-bed surge ward that can be deployed and fully operational in less than one hour to enhance existing hospital operations or to shelter medical/nursing facility patients with mild injury or illness and moderate level of care. Typically, MSECs are used during a major incident that results in or has the potential to result in a medical surge situation where hospitals are overwhelmed with patients or where conditions have impeded the ability for a patient to reach a definitive care facility. These systems are designed to be placed at alternate care sites or other structures (such as a school gymnasium) with suitable accommodations to sustain this type of operation. Ideally, whenever possible, the use of a pre-identified alternate site should be used.

All patients arriving at an MSEC will be triaged (assessed of their need for care) and stabilized. This system is designed to care for those with minor illness or injury for up to three days. Therefore, patients who are moderately or critically ill or injured will only be cared for until they can be transported to an appropriate medical facility. As many patients as possible will be discharged from the MSEC as soon as possible.

Disposable medical supplies such as intravenous (IV) fluids and associated supplies, wound dressings, oxygen, etc. will need to be obtained from local facilities and vendors on a “just-in-time” basis, depending on the evolving emergency.

The MSEC systems are disassembled and stored in trailers. There is a minimum of one MSEC staged at each of the state’s 16 Regional EMS Councils, with a total of 18 MSECs available for deployment. These systems can also be combined if a larger capacity is needed – up to 828 beds.



Casualty Collection Point (CCP)

The Casualty Collection Point (CCP) is a complete 17-bed sheltering system that can be deployed and fully operational in less than 30 minutes with minimal staff. It can also be demobilized and repacked in approximately the same amount of time. This allows the CCP system to quickly be ready for redeployment and use at another location.

The actual use of the CCP system is dictated by the circumstances of each emergency or disaster. The system's main purpose is to assess the medical needs of patients and stabilize them until they can be transported to other medical facilities, such as the Pennsylvania Department of Health's Mobile Medical Surge System, State Medical Assistance Team or a suitable building.

The CCP systems can also be used as temporary aid stations, pharmaceutical dispensing stations, forward operations locations, etc. The versatility of this system allows for a wide range of initial uses as well as transitional functions as the incident escalates, de-escalates or as other needs arise.

They are climate controlled, have their own power generator and can provide general medical care through limited critical care depending on incident needs and available staffing.

There are six total CCP systems strategically located throughout Pennsylvania. The CCPs can be combined to form a system with as few as 17 beds or as many as 102 beds when needed.



Casualty Collection Point (CCP)

Mobile Medical Surge System (MMSS)

The Mobile Medical Surge System (MMSS) is a 50-bed sheltering system that can be deployed and operational in approximately two hours, depending on the number of personnel available to set up the system. The system can provide general medical care through limited critical care depending on incident needs and available licensed medical staff.

The actual use of the MMSS is dictated by the circumstances of each emergency or disaster. The system can be used in a variety of support functions ranging from a shelter to a portable hospital. Although the system has much of the equipment needed to be used as a portable hospital, additional medical equipment and medications would be required for it to operate in that capacity.

Each MMSS is climate controlled, has its own power generator and heating and cooling systems. The versatility of the MMSS allows for a wide variety of uses including transitional uses as the incident escalates, de-escalates or as other needs arise.

The MMSS and the Causality Collection Point (CCP) shelter systems are basically the same. Each MMSS is made up of three complete CCP systems, so the MMSS could be used as a CCP in any situation. Likewise, if three CCPs are combined they would have the same capability as an MMSS.

There are six Mobile Medical Surge Systems strategically located throughout Pennsylvania. The systems can be combined to form a system with as few as 50 beds or as many as 300 beds when needed.



Mobile Medical Surge System (MMSS)

State Medical Assistance Team (SMAT)

The State Medical Assistance Team (SMAT) is a stand-alone rapid medical response team available for deployment to sites within Pennsylvania during and after disasters and other events. When requested, the SMAT can be deployed within four to six hours and provide 24-50 beds for community or hospital triage, hospital emergency, and critical/preoperative and medical surgical care until other response teams can be mobilized to support regional assets.

All patients who arrive at an SMAT will be triaged, stabilized and cared for until they are transported to a medical facility. Some patients with milder illnesses or injuries can be treated and released directly from the SMAT.

The medical supplies and equipment accompanying the SMAT includes: IV fluids, pharmaceuticals, wound dressings and oxygen. Monitoring, resuscitation and diagnostic equipment are also available. The SMAT units can operate for up to 72 hours before supplies will need to be restocked from outside agencies.

The Three SMAT units are stored unassembled in trucks/trailers that are strategically located throughout Pennsylvania.



State Medical Assistance Team (SMAT)