"Health Care Surge Capacity: Is California ready for disaster and disease treatment?"

Wednesday, May 27, at 9:30 am
State Capitol, Room 126, Sacramento, California 95814

BACKGROUND

The Joint Legislative Committee on Emergency Management hearing on, "Health Care Surge Capacity: Is California ready for disaster and disease treatment?” will take place on Wednesday, May 27th at 9:30 a.m. in room 126 in the State Capitol.

The Committee will examine how a natural disaster or a widespread infectious disease such as Ebola, influenza or measles might cause our health system to overload. Recent concerns about measles, flu, Ebola, other diseases and earthquakes have placed a focus on state planning for capacity response and our need to be prepared.

“Surge capacity” is the ability of our health care system to respond to widespread disease or mass casualty events and to adequately care for a sudden influx of patients with common or unusual medical needs. It refers to the ability to evaluate and care for a markedly increased volume of patients—one that challenges or exceeds normal operating capacity. The surge requirements may extend beyond direct patient care to include such tasks as extensive laboratory studies or epidemiological investigations.

Medical surge also describes the ability to provide adequate medical evaluation and care during events that exceed the limits of the normal medical infrastructure of an affected community. It encompasses the ability of our health care system to survive a hazard impact and maintain or rapidly recover operations that were compromised.

The purpose of this hearing is to provide the legislature with an assessment of the state’s ability to respond to large health disasters (infectious disease, earthquake, flood, bioterrorism, and other issues) that could lead to surge capacity. The Committee wants to know where there may be gaps, and recommendations on where we can improve.
Recent news events or reports that might affect surge capacity in California include:

- A poll released recently by the American College of Emergency Physicians shows that 28% of 2,099 doctors surveyed nationally saw large increases in emergency department volume, while 47% saw slight increases. Will increased use of emergency departments by patients exacerbate issues surrounding surge capacity? The study mentions that 7 in 10 doctors say their emergency departments aren't ready for continuing, and potentially significant, increases in volume.

- In January of this year a spike in the number of patients seeking emergency room care for flu-like symptoms forced several hospitals in Southern Nevada to close their hospitals to ambulances and new ED patients. The surge in emergency department patients caused these hospitals to declare states of “internal disaster.” Patients had to be diverted to other area hospitals.

- Seismologists have indicated that 7.5-magnitude event or greater in the Los Angeles area would be "the quake from hell" and have estimated that it could kill 1,800 people and injure another 50,000, make several million homeless, severely damage our health care infrastructure, and cause up to $250 billion in damage.

- Last winter’s Ebola scare saw state agencies scramble to adopt emergency procedures for the disease should it appear in California. From safety precautions such as personal protective equipment to hospital isolation safety protocols, the state had to rethink how to address transport and treatment of patients while maintaining the safety of professionals and health care staff.

- The ongoing outbreak of avian flu has prompted four states to declare a state of emergency with 40 million birds being either infected or culled as a result. There are multiple strains of the virus affecting the birds. Although avian influenza viruses usually do not infect humans, rare cases of human infection have been reported. Although unlikely, mutations could affect human infection rates.

- A 2012 study reported that hospitals in areas with large minority populations are more likely to be overcrowded and to divert ambulances, delaying timely emergency care. The researchers examined ambulance diversion in more than 200 hospitals around the state to assess whether overcrowding in emergency rooms disproportionately affects racial and ethnic minorities. They found that minorities are more at risk of being impacted by ER crowding and by diversion than non-minorities.
It should be noted that although many problems surrounding emergency department overcrowding are generally separate from issues associated with surge capacity, the causes of ED overcrowding can impact the ability of the health care system to provide treatment during surges in capacity.

With the California Department of Public Health taking the lead, California state agencies and departments, in cooperation with hospitals, medical providers, clinics, laboratories doctors, local governments, emergency personnel and others, have over the past decade developed a comprehensive plan to address surges in health care demand. The CDPH reported:

In December 2005, CDPH established a Surge Capacity Data Workgroup to collect consistent preparedness data from its local Healthcare provider partners. In February 2006, CDPH conducted a statewide assessment of surge capacity based on standardized definitions. CDPH measured current surge capacity against HRSA benchmarks for a moderate event and against a model pandemic influenza scenario using CDC’s FluSurge 2.0 software. A gap analysis was completed and CDPH proposed a $400 million (state funds) Surge Initiative to mitigate surge gaps for both moderate and catastrophic events.

The 2006-07 State budget awarded $214 million to build surge capacity including the purchase of the state’s share of antivirals (3.7 million courses), 2400 ventilators, 50 million N95 respirators, three 200-bed mobile field hospitals, and supplies and equipment for 21,000 alternate care site beds; the development of standards and guidelines for healthcare delivery during surge events; and updating hospital emergency and infection control regulations.

Since the start of the project, the CDPH has established programs for surge capacity for hospitals, alternative care sites, payers, community care clinics and others. This has included comprehensive planning for diseases, natural disasters, terrorist activities and other calamities that will create a surge in health care utilization.

The concept of medical surge forms the cornerstone of preparedness planning efforts for major medical incidents. It is important, therefore, to continually refine and analyze solutions for the overall needs of mass casualty or mass effect incidents.

Medical surge capability refers to the ability to manage patients requiring unusual or very specialized medical evaluation and care. Surge requirements span the range of specialized medical services (expertise, information, procedures, equipment, or personnel) that are not normally available at the location where they are needed (e.g., pediatric care provided at non-pediatric facilities).

Surge capability also includes patient problems that require special intervention to protect medical providers, other patients, and the integrity of the health care organization.

Example: In the past, some hospitals encountered difficulties with the arrival of patients with symptoms of severe acute respiratory syndrome (SARS). The challenge wasn’t a high volume of patients, but the specialty requirements of caring for a few patients with a highly contagious illness that demonstrated particular transmissibility in the healthcare setting. Protection of staff and other patients was a high priority, as was screening incoming patients and staff for illness, preventing undue concerns among staff, and avoiding publicity that could adversely affect the hospital's business. Coordination with public health, emergency management, and other response assets was critical. The recent effort to adopt procedures for Ebola presented similar challenges.
Medical Surge also encompasses the capability to rapidly expand the capacity of the existing healthcare system in order to provide triage and subsequent medical care in times of increased need for services.

The goal of surge capacity is rapid and appropriate care for the injured or ill from the event and the maintenance of continuity of care for non-incident related illness or injury.

This capability identifies the critical resources needed to ensure that healthcare workers are protected from all hazards. The goal is to assist healthcare organizations ensure no illnesses or injury to any first receiver, medical facility staff member, or other skilled support personnel as a result of preventable exposure to secondary trauma, chemical/radiological release, infectious disease, or physical and emotional stress after the initial incident or during decontamination and incident follow-up.

Disasters and infectious disease outbreaks over the last several years have demonstrated the importance of emergency preparedness for large-scale events affecting many people. The ability to respond medically to events that will produce a massive influx of patients in our health care system and that disrupt daily operations will require surge capacity. Key components of surge capacity planning include ‘staff,’ ‘equipment and supplies,’ ‘structures and facilities,’ and ‘systems.’

This hearing will inform members on the plan and provide an assessment of the state’s ability and readiness to respond to large scale health disasters. It will tell us where there may be gaps and provide us with recommendations on where we can improve to help California be better prepared.

Some of the issues the Committee hearing will investigate include:

• For state-level agencies, what processes are in place to respond? What are the various public health disaster “plans” and how do the various state entities coordinate and “rehearse” disasters? Are there lessons from recent outbreaks, threats, etc?

• Where are the gaps in readiness to respond to large-scale public health threats? How do local responders know where to send patients when there is no capacity in local hospitals?

• Hospitals. How do the hospitals plan for surge capacity? What are the limitations (personnel, equipment, building damage, etc). How are hospitals preparing?

• What plans are in place to deal with special populations? (eg. seniors, disabled, children/infants, etc).