

Emergency Management Challenges and Planning Collaboration at Texas Medical Center

Angela N. Smith

Emergency Management Planner
Texas Medical Center
John P. McGovern Campus
2450 Holcombe Boulevard, Suite 1
Houston, Texas 77021-2040

ABSTRACT

Chartered in 1945, the renowned Texas Medical Center has grown to the largest concentration of medical assets in the world. Its campuses include 290 buildings on 1,345 acres where it ranks as the eighth largest business district in the United States. In 2012, Texas Medical Center reported 7.2 million patient visits, 106,000 employees and 49,000 students. Some of Texas Medical Center's critical assets include 7,000 patient beds, 19 hospitals, and all five Level One Trauma Centers in the region. The inability of even one trauma center to provide services, due to a man-made or natural disaster, would have devastating effects on the delivery of emergency healthcare for the Southeast Texas region. The Texas Medical Center campuses are vulnerable to many natural and man-made hazards, and suffered \$2 billion in damages from Tropical Storm Allison in 2001. This presentation will share Texas Medical Center's history, unique emergency management challenges, and the collaboration of its 54 member institutions and emergency management partners to plan for effective emergency response to these challenges.

INTRODUCTION AND HISTORY

On October 20, 1945, the Texas Medical Center started as a dream to create a medical center where people from all walks of life could access the best healthcare anywhere. The largest employer in Houston, its 54 member institutions are dedicated to the highest standards of patient care, research, and education. Either not-for-profit or government, these institutions include 19 renowned hospitals; three public health organizations; two universities; three medical schools; six nursing programs; two pharmacy schools; a dental school; eight academic and research institutions; and 13 support organizations. The Texas Medical Center Corporation was formed and exists today exclusively for benevolent, charitable, and educational purposes to form the foundation and continuing support for a "City of Medicine." Since its inception, the Texas Medical Center Corporation has sought to attract academically oriented institutions dedicated to medical care, education, innovation, and research. The Texas Medical Center Corporation acts as a "municipal government," enforcing covenants and restrictions, and coordinating activities among member institutions. It serves as a moderator of campus-wide issues and concerns through 21 advisory councils comprised of representatives from member institutions; oversees emergency preparedness planning; and is responsible for land management, real estate, and master planning for long-term growth and development.

UNIQUE EMERGENCY MANAGEMENT CHALLENGES

With the growth of Texas Medical Center, emergency management challenges have multiplied. Over half of the Southeast Texas region's medical assets are owned and operated by Texas Medical Center member institutions, including all five of the region's Level One Trauma Centers and nearly half of the patient beds. The citizens of the entire region depend on the highly specialized medical care that Texas Medical Center member institutions provide. These highly specialized beds and services are

not duplicated in the near vicinity and are even more vital during and following disasters. Consequently, the assets of Texas Medical Center are essential to the region and must be protected and hardened to make sure they can be utilized during and after a disaster. The Texas Medical Center campus is vulnerable to numerous natural and man-made hazards. Most buildings have open access with frequent international and high-profile patients and visitors. The campus was built on top of the Harris Gully Watershed and is prone to flooding. During Tropical Storm Allison in 2001, the campus suffered \$2 billion in damages, several hundred patients had to be relocated and recovery took many months. With these devastating lessons learned, intense hazard mitigation planning followed and Texas Medical Center's first hazard mitigation plan, including 112 projects, was approved by the Federal Emergency Management Agency in 2005. Over half of these projects have since been completed and Texas Medical Center's current list of 51 projects is included in the Harris County and City of Houston's Hazard Mitigation Plans.

EMERGENCY MANAGEMENT PLANNING COLLABORATION

To mitigate Texas Medical Center's unique vulnerabilities, emergency management planning is continual through collaborative institutional councils and regional planning efforts. Texas Medical Center's Security Directors, Emergency Directors, Flood Management Group and Flu Advisory Councils meet regularly to identify concerns and share best practices. Texas Medical Center staff's participation in over a dozen regional emergency planning groups such as the Regional Healthcare Preparedness Coalition, the Regional Catastrophic Preparedness Initiative, the Department of Homeland Security Regional Resiliency Assessment Program, and the Urban Area Security Initiative Critical Infrastructure and Key Resources Committee improve readiness to respond to mass casualties, pandemic flu outbreaks, terrorism acts, hurricanes and other disasters. An annual Hazard Mitigation Advisory Group meeting is held with Texas Medical Center's member institutions and other governmental and private vulnerability partners to identify new hazards and solutions. Annual trainings are also hosted by Texas Medical Center including the Healthcare Hurricane Preparedness Workshop for regional healthcare providers and the Flood Alert System training for the Texas Medical Center Flood Management Group.

CONCLUSION

Texas Medical Center is the world's largest medical center which is vulnerable to numerous natural and man-made hazards. Over half of the Southeast Texas region's medical assets are owned and operated by Texas Medical Center member institutions, including all five of the region's Level One Trauma Centers and nearly half of the patient beds. The citizens of the entire region depend on the highly specialized medical care that Texas Medical Center member institutions provide. These assets are essential to the region and must be protected and hardened to make sure they can be utilized during and after a disaster. Although the vulnerabilities of Texas Medical Center present unique emergency management challenges, collaborative emergency management planning with the Texas Medical Center member institutions and regional partners is phenomenal. Collaboration is the key to effective emergency management planning success!