

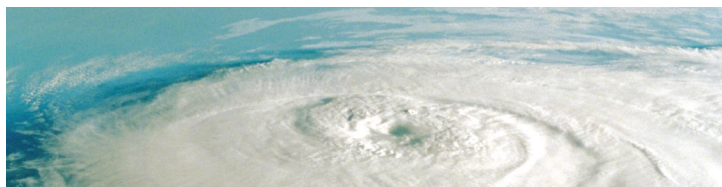
Thank You!

For Taking Care of Texans When Disaster Strikes



Thanks to the foresight of Texas legislators, when disaster strikes, Texans have a world-class trauma and emergency healthcare system that springs into action. Because of leadership, planning, training, communication and coordination, Texas has the infrastructure to respond to disasters and events with multiple victims, as well as routine illnesses and injuries, ranging from a flu epidemic to multi-vehicle Interstate pile-ups.

In 2017, Texas faced major challenges with Hurricane Harvey and the tragic mass shooting incident in Sutherland Springs. Thanks to the work of thousands of dedicated professionals who staff our Trauma and Emergency Healthcare System, Texans received timely, appropriate healthcare,



and many survived unbelievable adversities. The Texas EMS, Trauma & Acute Care Foundation (TETAF) salutes the men and women who tirelessly give of themselves to help others, especially when adversity strikes. **Thank you for saving lives 24/7.**

TETAF also recognizes and applauds the Texas Legislature for its foresight in creating the infrastructure of an emergency health system that supports disaster and emergency response. In its wisdom, the Texas Legislature divided the state into 22 trauma regions, each coordinating emergency response and care through a Regional Advisory Council (RAC). From heart attacks and motor vehicle accidents to natural disasters and mass shootings, the Texas Trauma and Emergency Healthcare System is ever-ready.



The RACs work hand-in-hand with the Emergency Medical Task Force (EMTF) during large scale incidents to provide a well-coordinated response. Eight of the RACs employ EMTF regional coordinators, and all RACs work with hospitals and emergency responders in their areas on disaster preparedness. The EMTF has created state-deployable medical teams, regionalized for rapid mobilization and readiness to respond to large scale incidents, and the RACs direct and support their activation. Because of Texas legislators, Texas has a system that allows all its emergency equipment and personnel resources to be harnessed to meet needs anywhere in the state. **TETAF commends the Texas Legislature on envisioning the RAC structure which so recently demonstrated its abilities and effectiveness in responding to 2017's disaster challenges.**

Hurricane Harvey

With Hurricane Harvey heading toward the Texas Gulf Coast, RACs across the state began organizing ambulances and emergency response personnel for deployment to coastal areas. Timely communication and coordination among RACs ensured that the needed resources – both



ambulances and EMTs – followed the path of the storm. RACs within the affected areas worked with hospitals to evacuate and transfer patients to other parts of the state, where those RACs coordinated bed availability to facilitate acceptance of evacuated patients.

RACs along the coast and inland played a significant role in the immediate response. Harvey made landfall north of Corpus Christi as a Category IV hurricane, and the fierce storm resulted in states of emergency being declared in 40 counties. The storm moved inland and stalled before reaching San Antonio, and then reversed course, regained strength over the Gulf and moved ashore north of Houston. Several days of unprecedented rain and flooding followed.

The stories below illustrate the important roles RACs played in responding to this record-breaking hurricane.

Southwest Texas Regional Advisory Council

The Southwest Texas Regional Advisory Council (STRAC) in San Antonio is one of the state's Emergency Medical Task Force contractors, and was activated two days before Harvey made landfall in Rockport. Working through the EMTF, STRAC deployed various state resources to



the area affected by Hurricane Harvey, including Mobile Medical Units (field hospitals) and Medical Incident Support Teams (MIST) who worked with local government and RACs to move patients. Led by an Emergency Medical Coordinator, the MIST paramedics and nurses picked up patients and provided care during the transfer to a safe location.

Ambulance Staging Management Teams (ASMTs) supported Ambulance Strike Teams, comprised of five ambulances and an operational unit leader. The ASMTs took care of 300 ambulances moved to the affected area, providing gasoline, food and lodging for personnel. They also ensured that the right ambulance was dispatched to each situation. If transfer agreements for hospitals and nursing homes were not in place, then the Regional Medical Operations Center operated by the Trauma Regional Advisory Council, determined where to transfer patients. Constant communication with the EMTF allowed patients to be tracked so that families could be reunited.



San Antonio was a receiving/sheltering area. Thousands of people from the Gulf Coast region descended on San Antonio, some associated with the state evacuation and others not. STRAC ensured that everyone went through a central triage area to determine where they would go: general population shelter, medical shelter, hospitals or nursing home. Some individuals had left their homes without their medications, and STRAC helped ensure that medical supplies and pharmaceuticals were available to the shelters. STRAC also worked with public health authorities to monitor shelters for illness, and ensured that injured or ill evacuees were treated and returned to their families at the shelter.



STRAC helped Victoria with patient evacuation, including maintaining rosters of patients needing medical care, and where they were transferred. Patient tracking was a major focus, and was very beneficial to San Antonio hospitals as they returned patients to the facilities from which they came, or notified the transferring hospital that the patient had been discharged.

STRAC was a liaison with the providers within its region as well as with the State Medical Operations Center. Like all RACs, STRAC ensures that disaster response plans use resources wisely and appropriately, and that the state is informed and involved. Getting competing providers to work together on a coordinated, comprehensive plan ensures that all needs are met and not duplicated.

STRAC serves a mixture of urban, suburban, rural and frontier areas, from the 7th largest city in the U.S. to the Mexican border, encompassing more than 26,000 square miles in southwest Texas. There are 74 general and specialty hospitals in the area, including two Level I trauma centers, 16 hospitals that perform coronary angioplasty for blocked blood vessels in the heart, 12 stroke centers, air medical providers and more than 70 EMS agencies.

SouthEast Texas Regional Advisory Council

Also an Emergency Medical Task Force contractor, the SouthEast Texas Regional Advisory Council (SETRAC) in Houston activated its Catastrophic Medical Operations Center (CMOC) in advance of Harvey's landfall and operated for 17 days, coordinating the provision of emergency medical services for the 9.3 million residents of the 25-county region. The region includes 180 hospitals and nearly 1,000 extended care facilities, as well as thousands living at home with serious medical needs. Ultimately, 24 hospitals and 20 nursing homes/assisted living centers required emergency support from the CMOC. In total, each of the 1,500 evacuees survived and within two weeks following the storm, approximately 90 percent of the medical facilities were operational.



SETRAC's Catastrophic Medical Operations Center linked with all the 70+ EMS agencies and their 400 ambulances in the region. As planned and rehearsed, more than 400 additional ambulances and in excess of 1,000 medical personnel from across the state moved to Houston to assist and were deployed by SETRAC's CMOC. SETRAC's CMOC managed both physical and human resources.

SETRAC participated in daily conference calls with the state, county and city, and held daily conference calls with emergency management teams at hospitals and extended care facilities. Hospital systems held similar



calls with their facilities. For example, based on needs identified, a call for clinical volunteers was issued, and produced some 1,400 inquiries in less than 48 hours.

Hospitals throughout Texas acted to receive evacuees. Bed availability reports were provided electronically to SETRAC's CMOC staff throughout each day to assist with movement of patients, ensuring the patient was moved to the right facility that had the capability and capacity to provide the needed level of care. Competing facilities worked together, sharing

supplies and equipment. Prearranged working relationship between and among hospitals, nursing homes and ambulance agencies resulted in orderly movement of patients without burdening the safety net system.

The CMOC led by SETRAC enabled all medical agencies and institutions to function like a team across jurisdictional boundaries. Not only has SETRAC built effective working relationships with each group of responders, but also has facilitated the development of working relationships among each group. SETRAC's active coordination of the response to Harvey reinforces the value of RACs to their regions, and for their planning, preparedness and exercising/training.

Coastal Bend Regional Advisory Council

Another of the eight lead RACs for the Emergency Medical Task Force, the Coastal Bend RAC (CBRAC) provided front-line coordination in dealing with the wrath of Harvey. For six days straight, the dedicated Coastal Bend RAC executive director worked with the local Disaster District Committee, which directs local government disaster response in conjunction with the State's Emergency Management Division. CBRAC provided liaison and coordination with local medical facilities and providers to transfer patients from hospitals along the central Gulf Coast, the 12-county region that includes Corpus Christi and Rockport/Fulton where Harvey made land. Working with



EMTF Medical Incident Support Teams deployed to the area, Coastal Bend RAC directed where ambulances, paramedics and nurses should go to pick up patients as well as to which cities they were to be taken.

Neonatal intensive care units in Corpus Christi transferred their most severely ill babies whose care depended on electricity to San Antonio. Other sick babies were transferred to Dallas and Austin, and staff at Driscoll Children's Hospital in Corpus Christi sheltered some 16 infants in place through the storm's landfall.

During the immediate aftermath of the storm, it was critical that all non-damaged hospitals remain open, especially their emergency rooms to treat injuries and illness in people remaining in the impacted area. CBRAC's EMTF Coordinator worked with the EMTF teams arriving in the worst affected area to determine a location for and obtain permission to set up a Mobile Medical Unit. This valuable resource was put in Aransas County to address the needs from the area, which was critical since the Aransas Pass Hospital was closed due to damage.



Upon completion of this assignment, CBRAC's EMTF Coordinator was deployed to the State Operations Center in Austin to assist there.

For a total of 17 days, the Coastal Bend RAC coordinated local resources (hospitals, ambulances, emergency medical systems) with teams sent in to provide assistance where needed. Knowledge of local providers' capabilities and relationships built through regular interaction helped CBRAC manage resources appropriately. In addition, the skills learned and practiced through drills helped local providers know how to work together since they all knew the plans and protocols.

Lack of resources made it impossible to keep up a roster of where individual patients were sent, which would have been valuable to families as well as to the receiving areas. As an example, a Rockport family was evacuated to a Dallas shelter except for the husband who was evacuated by EMS and his location was unknown. His distraught wife had been calling various cities looking for him, and finally contacted CBRAC. A photo was obtained, and with the help of a nurse at the local emergency shelter, CBRAC located the husband and communicated his safety to his wife.

Coastal Bend RAC serves a 12,424 square-mile area with a population of just less than 600,000 people. The area has 18 hospitals, of which nine are designated trauma centers. There is one Level II trauma center, a Level III children's trauma center and seven Level IVs. Specialty and non-designated hospitals comprise the remainder. Getting these competing healthcare entities to work together in a disaster would not happen without the RAC, its infrastructure and regular meetings.

East Texas Gulf Coast Regional Trauma Advisory Council

The East Texas Gulf Coast Regional Trauma Advisory Council serves some 1.2 million people in a nine-county region that includes 17 hospitals and 36 ambulance providers. Many of the communities in this RAC were devastated by Hurricane Harvey and its unprecedented rainfall/flooding. The East Texas Gulf Coast RAC worked around-the-clock for 14 days, coordinating evacuations, transfers and medical service delivery with its Emergency Operations Center. Hospitals in the region quickly transferred critically ill patients and infants to appropriate facilities in other parts of the state. Because of changes implemented after previous hurricanes, most hospitals were able to stay open, including performing surgery and delivering babies, and providing intensive care when needed.

EMS and first responders were very effective because they have adopted high water vehicles. With RAC coordination, EMS, first responders and hospitals worked together smoothly, saving lives. Despite best efforts, a number of people in the nine-county region died in the storm and its aftermath. However, without a coordinated response effort, more lives would have been lost.



Some of the challenging issues faced by EMS and hospitals included:

- Dialysis capabilities were limited by availability of potable water; waterless dialysis machines are needed.
- There was lack of mental health personnel to help with the crisis situations patients had; mental health personnel must be mandatory in disaster response.
- Access to pharmaceuticals was jeopardized as retail pharmacies shut down and hospitals were not able to provide medications for an entire community. Retail pharmacies must be encouraged to stay open to meet medication needs, especially for those patients who take drugs essential to survival, like insulin and heart medications. Mental health medications also should be readily available.
- Oxygen availability was compromised by suppliers who evacuated.
- With extreme flooding, snake bites were more prevalent than anticipated, and the ability to access needed anti-venom from the state needs to be improved.
- Due to the length of the storm, shelters ran out of supplies. More state or federally recognized shelters with a cache of supplies for at least a week of care were needed.
- Free-standing Emergency Departments and free-standing surgical hospitals are not part of the disaster response team. Their participation was needed and would have lessened the burden on hospitals.
- Many nursing homes still did not evacuate their residents. Nursing homes need to be part of the RAC to train and rehearse disaster scenarios.
- The deployment of air ambulance assets had problems, and maintaining and using local assets should be a priority. They should be supplemented with additional resources from non-affected areas as needed.
- The RAC plans to host a meeting among hospitals and military assets to establish contacts, and set up a landing zone.
- The RAC also plans to stage more drills involving water/flooding rescue, including landing multiple aircraft in one area and transferring patients from these aircraft to hospitals. The training also will use boats to provide rescue/care in different situations.

Hurricane Harvey reinforced the importance of preparedness and training. It also highlighted the need to broaden the healthcare providers who participate in RAC training events.

Mass Shooting in Sutherland Springs

When a gunman opened fire on church-goers in Sutherland Springs, STRAC immediately dispatched ambulances and EMTs to stabilize and transport the expected large number of injured. Sutherland Springs is a small community in Wilson County about 25 minutes south of San Antonio. Fortunately, STRAC had planned for how to respond to an



event that produced mass casualties in a rural area with limited medical resources. Using Ambulance Strike Teams, on-duty ambulance personnel were immediately dispatched, and were coordinated with air medical resources.

The number of dead victims exceeded STRAC's expectation, and many survivors of the attack had critical head, chest and organ injuries; San Antonio Level I trauma hospitals were notified and immediately began to call in staff and prepare operating rooms and intensive care units. STRAC worked with the Ambulance Strike Teams to stabilize and transfer the critically injured who ranged in age from four to 77.

Again, an important role for STRAC was to track patients, keeping a record of who took whom to where and when. Knowing who was where helped reunite families and assisted with the investigation.



STRAC established a portable morgue at the site; as investigators finished gathering evidence, bodies could be moved into the portable morgue and kept cool until positively identified. An ambus, which can transport 20 patients, was used to transfer bodies from the make-shift morgue to the medical examiner's office in San Antonio in a respectful way.

FBI, State Police and Texas Rangers were housed in a Mobile Medical Unit deployed by STRAC. This provided air conditioning, Internet access and privacy in which all the law enforcement agencies could work cooperatively.

Countless Unsung Heroes

Thousands of men and women helped their fellow man in the aftermath of two horrific disasters in 2017 – one natural and one man-made. Some of these life-savers worked diligently despite not knowing if their own homes and loved ones had been spared. "Thank you" is inadequate to express the deep appreciation Texans have for the medical professionals who worked around-the-clock in often dangerous settings to rescue, treat and transfer injured individuals as well as those who had existing medical conditions or were hospitalized when the storm hit.

Texas has the premier trauma and emergency healthcare system in the nation, thanks to the dedication and expertise of thousands of empathetic caregivers across the state. Regardless of your role, each of you makes this incredible system work. Thanks to each of you for taking care of Texans.



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