



CASE STUDY:

West Virginia Hospital Uses Satellite Communications for Emergency Situations

The Situation

Because cell phone coverage can be limited in remote areas, rural communities across North America often struggle to stay connected. This problem is especially challenging for community institutions and government agencies that rely on wireless communications to protect the public.

Like any medical institution, Preston (County) Memorial Hospital, located in Kingwood, West Virginia and a leader in rural healthcare, must deal with emergencies on a daily basis. However, since Preston Memorial is located in a remote area, cell phone service can be sporadic.

The ability to communicate with Preston Memorial health care staff in the field, other local hospitals, as well as federal, state and local public safety agencies is critical to ensuring patients' safety.

The Challenge

Preston Memorial needed a reliable communications solution that it could depend on during an emergency situation, even when terrestrial service is unavailable.

The Solution

The hospital realized the value of satellite communications during a severe thunderstorm that caused a power outage and erratic cellular service. At the time of the storm, a pregnant patient needed an immediate caesarean section, but the hospital's phones were out and staff could not get a cell phone signal in order to contact her surgeon. Fortunately, a satellite phone was available and enabled the attending physician to consult with the surgeon enroute.



Preston County Memorial Hospital in Kingwood, West Virginia

"Thanks in great part to the information passed via satellite communications, the mother's needs were attended to and the baby was delivered safely," said Dr. Frederick Conley, threat preparedness director and emergency department physician at Preston Memorial Hospital. In order to properly prepare for future emergencies the hospital has now installed SkyTerra's MSAT-G2 push-to-talk satellite phone in its Emergency Department.

"Communication is the number one problem that plagues first responders in a disaster situation, particularly in rural areas of the U.S.," Dr. Conley notes. "When road conditions are poor and dangerous and both emergency medical services and law enforcement are limited, any time lost due to lack of communication can result in the loss of lives of our county citizens. To know that satellite communications are available during an emergency gives us an added level of assurance."

SkyTerra Communications Inc.

10802 Parkridge Boulevard, Reston, VA 20191-4334

T: +1 703 390 2700

info@skyterra.com www.skyterra.com

Preston Memorial has trained eight personnel who work in the Emergency Department on how to use the phone — ensuring that at least one staff member during each shift is familiar with the MSAT-G2 phone and can operate it in an emergency. In addition to the satellite phone located in the hospital Emergency Room area, the county's Emergency Manager has a MSAT-G2 phone in his truck, so that he can stay connected in the field. The Preston County 9-1-1 emergency operations center also has a MSAT-G2 phone that it can use to communicate with other officials in the community.



Dr. Frederick Conley making a call over the MSAT-G2 from the Preston Memorial Hospital emergency room

The hospital is also a member of the Mid-Atlantic and Southeastern States Satellite Mutual Aid Radio Talkgroups (SMART™), which allows it to listen to and communicate with federal, state, local, and private sector public safety agencies located throughout 15 eastern states - from Pennsylvania to Florida and the District of Columbia - at the push of a button.

In addition, the hospital has joined several nationwide talkgroups including J-SMART, a talkgroup managed by the FBI and Department of Justice, and one of the two National Public Health Satellite Talkgroups (NPSHST-2).

“Both the regional and nationwide talkgroups would prove to be invaluable in several disaster situations, including the outbreak of a pandemic flu, a toxic spill or looting from a disaster,” said Dr. Conley. “It is important that the hospital is on top of an incident like that immediately, and being able to communicate with the surrounding states as well as the FBI and DOJ at the push of a button is indispensable.”

Satellite Communications in the Future

Like any hospital, Preston Memorial faces emergencies every day, and time is of the essence.

“Having the MSAT-G2 phone available is a great backup that provides easy and quick communications in times of emergency,” said Dr. Conley. “Since cellular service in the area is sporadic, the satellite phone truly saves lives, and we plan to utilize it in any type of emergency situation in which we need to contact someone immediately.”