

# Mitigation best practices



FEMA

## Mitigation Measures Keep Hospital Afloat During Storm

Rebuilding stronger, safer, smarter

Trey Rozelle - FEMA



Memorial Hermann Baptist Hospital in Beaumont, Texas.

**BEAUMONT, Texas** — In September 2005, Hurricane Rita hit the Texas-Louisiana coast as a Category 3 storm, leaving behind catastrophic damage. Damage to Memorial Hermann Baptist Hospital-Beaumont alone reached an astounding \$58 million.

“We had water infiltration on the first floor of our buildings and in the towers,” said Jay DeVille, the hospital’s director of facility management. “With wind gusts at 95 miles per hour, the roofs of our fifth floor and Day Surgery Unit were also heavily damaged.”

To minimize the effects of future storms, Memorial Hermann Baptist has successfully initiated mitigation measures.

The hospital received a \$2.6 million grant from the Federal Emergency Management Agency (FEMA) through the agency’s Hazard Mitigation Grant Program (HMGP) to invest in mitigation measures. HMGP assists states and local communities in implementing long-term mitigation measures following a major disaster declaration. It provides up to 75 percent of a project’s total cost and can be used to fund projects to protect either public or private property.

DeVille said the hospital was able to undertake several mitigation projects thanks to funding from FEMA. “We installed hurricane shutters on entry doors and on all

windows on the first and second floors of our buildings. We added a water well and two quick-connect systems, one for each of our buildings,” he said.

DeVille said the hospital also water-proofed all the exterior walls, added thru-wall flashing and replaced roofs with the roofing material recommended by the facility’s insurance company.

All that work paid off. By the time Hurricane Ike drilled in with 100-mph winds on Sept. 13, 2008, the 400,000-square-foot facility was prepared to weather it. In fact, the hospital remained virtually unscathed.

“We escaped the storm with minimal damage to our facility,” said DeVille. “We got a little water resulting from wind-driven rain in a few areas. The water-proof sealant was not as effective as we thought it would be. However, our hurricane shutters protected our entrances and our windows.”

DeVille said Hurricane Rita was a major business interruption for the hospital, forcing it to utilize temporary power for 12 days. “With Hurricane Ike, we were better prepared. We had two large generators and all of our electrical equipment functioned at capacity,” he said.

The mitigation measures taken by the hospital and supported by the State of Texas and FEMA helped Memorial Hermann Baptist Hospital avoid losses that could have occurred again with Hurricane Ike and future storms.

The hospital chose to rebuild after Hurricane Rita — stronger, safer and smarter.

Story by Bonnie Hanchett - FEMA