



Clara Barton Hospital Shelter Full Mitigation Best Practice Story

Barton County, Kansas

Hoisington, KS - On April 21, 2001, an F4 tornado struck Hoisington, Kansas (population 2,975), severely damaging 230 homes and businesses and leaving one person dead. The sirens in town did not sound that night because the poles they were mounted on snapped during the first few moments of the storm. The Clara Barton Hospital sustained extensive damage estimated at nearly 1.5 million dollars. The destruction was an alarming wake-up call for the region.



Soon thereafter, Kansas State and Hospital administrators decided to build a shelter at the hospital to ensure the safety of the patients and staff in the event of another tornado. It would be the first hospital shelter in the State to meet the criteria presented in FEMA 361, Design and Construction Guidance for Community Shelters.

Funds for the shelter were obtained through the FEMA Public Assistance Program. Following a Federally Declared Disaster, this program provides supplemental grant assistance for the repair, replacement, or restoration of disaster-damaged facilities that either are publicly owned or are certain Private Non-Profit (PNP) organizations. FEMA modified the Public Assistance Program in Aug. 1998, to provide more flexibility in funding mitigation measures under Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. Clara Barton Hospital qualified for the funds because it is a PNP organization and provides a critical service to the community. The Public Assistance Program funded 75 percent of the shelter cost, the State of Kansas provided 15 percent, and the hospital covered the remaining 10 percent.

The new shelter is located between the main hospital building and the clinic building to facilitate easy access from both areas through interior doors, and it has one exterior door (meets the FEMA 361 criteria) and no windows. The layout includes one large open area, two restrooms, a mechanical room, and a storage room. With 1,026 square feet of finished area, the shelter can accommodate 14 patients (six seated, six in wheelchairs and two bedridden) and 30 standing staff members, with space for an additional 67 evacuees. The design allows a maximum of 111 occupants.

Although the shelter adjoins the hospital and clinic, it is designed as a stand-alone structure; therefore, it does not rely on the walls of the hospital building or clinic building to resist the extreme wind loads. This design helps ensure the safety of the occupants in case the hospital or clinic buildings are damaged extensively or destroyed.

The shelter is available for community use by the town government, schools, clubs, and other non-profit groups. Because the shelter space is used by a number of groups, it is an ideal location for providing information, educating the public on safety issues related to tornadoes, and promoting shelter and safe room construction. The famous Kansas "Can Do" attitude is well represented by Hoisington's recovery, resulting in securing a safe place for the patients and staff of Clara Barton Hospital as well as an additional peace of mind for the community.

Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region VII**

State: **Kansas**

County: **Barton County**

Key Activity/Project Information

Sector: **Public**
Hazard Type: **Tornado**
Activity/Project Type: **Safe Rooms/Community Shelters**
Structure Type: **Safe Room/Community Shelter**
Activity/Project Start Date: **06/2001**
Activity/Project End Date: **06/2003**
Funding Source: **Hazard Mitigation Grant Program (HMGP); Non-profit organization (NPO)**
Funding Recipient: **Critical Facility - Medical**
Funding Recipient Name: **Clara Barton Hospital**

Activity/Project Economic Analysis

Cost: **Amount Not Available**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **Yes**
Federal Disaster #: **1366 , 04/27/2001**
Value Tested By Disaster? **Unknown**
Repetitive Loss Property? **Unknown**

Reference URLs

Reference URL 1: http://www.fema.gov/pdf/plan/prevent/bestpractices/ks_hospital_cs.pdf
Reference URL 2: <http://www.fema.gov/government/grant/pa/overview.shtm>

Main Points

- FEMA's Public Assistance Program funded 75 percent of the Clara Barton Hospital shelter cost, the State of Kansas provided 15 percent, and the hospital covered the remaining 10 percent
- An F4 Tornado caused \$1.5 million in damage to the Clara Barton Hospital. The new shelter will protect patients and staff.
- With 1,026 square feet of finished area, the shelter can accommodate 14 patients (6 seated, 6 in wheelchairs, and 2 bedridden) and 30 standing staff members, with space for an additional 67 evacuees. The design allows a maximum of 111 occupants.



A view of the completed shelter.



Clara Barton Hospital Complex