Texas Center for Proton Therapy Fast Facts

Texas Center for Proton Therapy

- Texas Center for Proton Therapy is dedicated to current and future cancer survivors and brings advanced, latest-generation proton therapy to North Texas.
- The center brings proton therapy to the 6.5 million residents of Dallas-Fort Worth, the largest U.S. metropolitan area without a proton therapy center.
- The center's advanced technology includes pencil-beam scanning for intensity modulated proton therapy and cone beam CT imaging – designed to treat tumors with pinpoint precision.
- The center has two isocentric gantry treatment rooms, each containing a machine that rotates to treat tumors with pinpoint accuracy, and a fixed beam treatment room.
- It features some of the most advanced PET/CT and 3-Tesla MRI scanning and imaging technology.
- An on-site lab provides comprehensive, timely, and convenient lab work.
- The center offers telemedicine consultations via other Texas Oncology locations throughout the state.
- The center is designed to promote patient and caregiver comfort and facilitate clinical efficiency.
- A full range of patient support services and activities supports patients and families.
- A community room features the HOPE Wall inscribed with words of encouragement and hosts weekly seminars, luncheons, and other activities.
- Texas Center for Proton Therapy has the capacity to treat approximately 100 patients per day.

The Cyclotron

- Proton therapy is delivered through a cyclotron, a magnet-packed particle accelerator.
- It weighs 220 tons, more than seven school busses.
- The cyclotron is surrounded by walls up to 12 feet thick and by a ceiling up to 10 feet thick.
- Proton particles accelerate through a 143-foot beamline – nearly half the length of a football field – as they travel from the cyclotron to the patient's tumor with pinpoint accuracy.

Building the Facility

- The 63,000-square-foot building is constructed with 14,500 cubic yards of concrete – enough concrete to build an eight-story parking garage or fill four and a half Olympic-sized swimming pools.
- If parked end-to-end, the 1,600 concrete trucks required to deliver the center's concrete would stretch eight miles.
- Approximately 21 miles of electrical conduit runs through the center.
- The building is set on 287 concrete piers to ensure maximum stability for the cyclotron.

LEED Certification

- Texas Center for Proton Therapy is the first stand-alone LEED-Certified (Leadership in Energy and Environmental Design) proton therapy center in the U.S.
- The facility diverts more than 75 percent of its waste from landfills and implemented a recycling program.
- Twenty percent of materials are sourced from within 500 miles of the center.
- Automatic light, faucet, and restroom features and highly efficient heating and air conditioning equipment reduces water use by 35 percent and energy use by 20 percent.
- Installation of materials that emit less contaminants and using sustainable cleaning products improve air quality and reduce overall contaminants.

TEXAS CENTER *for* PROTON THERAPY

Targeting Cancer, Precisely

Updated 06/21/19