

## CARE AND CONVENIENCE

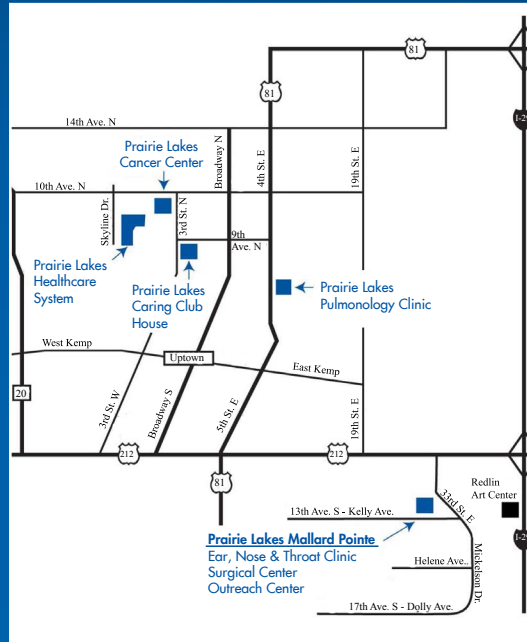
At the Prairie Lakes Cancer Center, patients receive the most advanced oncology treatments available in our region. These services are provided in the comfort of beautiful surroundings and a tranquil atmosphere.

The Prairie Lakes Cancer Center's Watertown location allows patients and their families the convenience of receiving oncology treatments close to home. This provides patients more valuable time at home with family and friends.

## SUPPORT

Support groups are available through the Cancer Center. Look Good..Feel Better, helps patients to cope with the physical changes that occur during treatment along with providing emotional support.

Social worker, dietitian, and pastoral care services are available during your time at the Prairie Lakes Cancer Center. These resources can assist you during your time of need.



Prairie Lakes Cancer Center • 605.882.6800



# TOMOTherapy AT PRAIRIE LAKES CANCER CENTER



YOUR HEALTH : OUR MISSION

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**PRAIRIE LAKES**  
Healthcare System

YOUR HEALTH : OUR MISSION

## THIS IS A RADIATION THERAPY THAT REVOLVES AROUND YOU

For more than 80 years, radiation therapy has been used in cancer care. Through the decades, the primary challenges have remained the same:

- How can doctors be sure the beam is reaching the tumor as planned?
- How can harm to healthy tissue around the tumor be minimized?

The TomoTherapy radiation unit at Prairie Lakes Cancer Center uses a fresh approach and a new design to address these needs.

## THE IMAGING ADVANTAGE

The TomoTherapy radiation unit looks like a CT scanner because it is a CT scanner. It lets clinicians efficiently acquire 3D images of every patient, with every treatment. With these images, clinicians can check the size, shape, and location of tumors before each treatment. Then, they can compare that day's image with the one used for planning, to make sure that radiation will be directed to where it should be. These CT images can also be used to analyze and, if necessary, modify a patient's treatment at any point during the treatment course.



## UNPARALLELED PRECISION

Conventional radiation therapy units deliver a wide beam of radiation from only a few angles. The TomoTherapy unit uses its unique CT scanner design to deliver radiation continuously from all angles around the patient. And, it features patented beam-modulating technology that divides a single beam into many smaller, narrow "beamlets." More angles and more precise modulation result in dose distributions that conform to tumors like never before. This, in turn, minimizes damage to surrounding healthy tissue.

## BEHIND THE SCENES

Before beginning a TomoTherapy treatment, your physician develops a plan using 3D images from a combination of scanning technologies (such as CT and MRI) and special software to establish the precise contours for each tumor and surrounding sensitive organs or tissues.

Your physician then prescribes how much radiation the tumor should receive, as well as acceptable levels for healthy tissue nearby. The TomoTherapy treatment system calculates the appropriate pattern, position, and intensity of the radiation beams to be delivered, based on the physician's prescribed dose.

## THE DAY OF TREATMENT

After checking in for a daily treatment, the patient will be taken to the TomoTherapy treatment room where a radiation therapist will help them onto the unit's couch. The patient will most likely lie on their back, and the therapist may fit them with a special device to help them hold still during treatment.

First, the couch will move the patient through the unit once for daily CT imaging. Based on these images, the therapist may fine tune the patient's position. Then, the couch will move the patient through the unit once again, this time more slowly, as the system delivers the daily radiation treatment.

## WHAT YOU CAN EXPECT

A typical course of radiation therapy involves a daily process, Monday through Friday. The number of treatments varies by case. On the average, the full daily TomoTherapy procedure takes 20 minutes from when the patient enters the treatment room until they leave. This includes about five minutes for the daily CT to be performed and another five minutes for treatment to be delivered. The remaining time is used for patient set-up and image registration for proper positioning.

TomoTherapy treatments are completely painless. The experience is similar to having a CT scan or an X-ray. You may hear a clicking noise and the hum of the unit, both of which are normal sounds the unit makes.

