

## Simulation for Radiation Treatment

Your first radiation therapy session is called a simulation and does not involve an actual treatment. The session usually takes 45 minutes to 1 hour to complete.

During the simulation:

- Your radiation oncologist locates the area to be treated, designs appropriate shielding for healthy tissue and takes measurements for your treatment plan.
- Your health team will make a customized mold for you. The mold is shaped specifically for your body and is used during each treatment to ensure consistent positioning. For example, patients who will have treatment to the head or neck area may have a mask made while other patients may have a cradle made for their body, leg or arm.
- A computerized tomography (CT) scan and x-rays will be taken. These are used to create a 3-dimensional picture of the treatment area.
- Marks will be made on your skin to ensure that the radiation is aimed at the same area during each treatment. The marking ink will stain your clothes or anything it comes in contact with. Under your clothing, wear a soft undershirt or cotton T-shirt to absorb stains from the marking fluid. These marks will be redrawn by the therapist if they fade or if your doctor wants to change them as your treatment progresses.
- Be careful not to wash off the lines when showering. Swimming or soaking in a bath tub will cause the lines to wash off. Do not wash off the marks until a member of your health care team tells you that you may do so.

Radiation treatment sessions usually begin within one week after the simulation. During this time, your health care team will design your treatment plan and make your mold.

If you have questions or concerns about your treatment or treatment schedule, please contact your radiation oncologist, therapist or nurse.

### Resources

#### **MD Anderson Cancer Center**

<http://www.mdanderson.org/patient-and-cancer-information/care-centers-and-clinics/specialty-and-treatment-centers/radiation-treatment/index.html>

#### **National Cancer Institute (NCI)**

Radiation Therapy Website

<http://www.cancer.gov/about-cancer/treatment/types/radiation-therapy>