

Let's talk about...

U.S. News
"Best Children's
Hospitals" rankings

Ranked among the
nation's best in five
pediatric specialties



Preparing for Radiation

What is a tumor?

A **tumor** forms when unhealthy cells grow and stick together. A tumor can stay in one place or sometimes spreads to other areas of the body.

What is Radiation?

Radiation is a treatment for cancer that uses energy beams to remove or slow down the growth of the unhealthy cells. The energy beams are aimed directly where the cancer is in the body. You cannot see the energy beam and it does not hurt when directed at the body. After radiation, your child may feel tired and sick to their stomach. Their skin may also feel slightly irritated, similar to a sunburn.

What to expect at the first Computed Tomography (CT) Simulation appointment?

The term "radiation mapping" is the same as CT simulation. The CT simulation appointment is to map out exactly where the radiation will go. If your child is in the hospital (inpatient), the nurses will coordinate an ambulance to transport you and your child from the hospital to the radiation department across the street to the Comprehensive Cancer Center – South Building. If coming from home, you will enter the South Building, use the elevators to go to the Ground Floor, check-in and wait until called back into the CT room.

If your child has a tumor located anywhere but the brain, your child will lay on the CT table on top of a bag. This bag feels squishy, like a beanbag.

A vacuum tube will remove air from the bag, so the bag hardens and molds around the body to keep it in the correct position for when your child begins radiation.

- Once the body mold hardens, the therapist will use stickers or a permanent pen to mark on the body where the radiation needs to go.
- Next, your child will go into the CT scanner to confirm the marks are in the correct spots. The therapist may bring your child in and out of the scanner to fix the location of the marks.

If your child has a brain tumor, they will require a mask to help their head stay in the correct position during radiation. Before making the mask, staff will make a mold of your child's head and neck.

- The radiation therapist will make a mold using a bag that feels squishy, like a beanbag. The bag has water in the material that dries out and hardens the bag. As it hardens, it molds around the base of the head and neck for comfort and to keep the head in the correct position for radiation.
- The next step is making your child's unique radiation mask. The mask is a flat piece of plastic with small holes, like mesh. Once they are laying on the CT table, the flat piece of plastic is put in a warming machine and sprayed with cold water to cool the material down.
- The mask will then feel warm once it touches the skin. The therapist will shape the piece of plastic over your child's face and chin. Your child can breathe through the holes in the mask. As the mask dries, it will harden to form a fitted mask for your child.

For more information or to connect
with a Child Life Specialist, please
visit: <http://ucdavis.health/childlife>

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- This mask and “bean bag” stay in Radiation Oncology and you will not need to transport these items with you. The items will have your child’s information on them and saved for future visits. At the completion of radiation therapy, your child can take their mask home. Ask your child life specialist for ideas on closure projects for the mask.

If your child requires anesthesia for the CT simulation appointment, they will be given anesthesia before the mold or mask is made. With proper preparation, most school-age children and teenagers can complete this process without anesthesia. A child life specialist may also be available for additional preparation with pictures and to create coping plans with you and your child.

What to expect at the second appointment?

- Once the CT simulation is complete, all future radiation therapy appointments will be the same. The check-in process will be determined by your child’s admission status; inpatient or coming from home.
- After checking in at the front desk, a staff person will take you and your child to the radiation therapy room. Your child can choose what music they want to listen to during radiation. They will then lay on the table in the middle of the room. If your child has a mask, the mask will be placed on their face and locked on to the table. If your child has a “bean bag,” it will already be on the table for your child to lay on.
- Once your child is set up on the table, parents/caregivers will transition out of radiation therapy room and wait in the waiting room until radiation is complete.
- For future appointments, you will be given a card to scan at the front desk. You will scan this card to check-in and check-out your child from their appointment. Parking validation is also done near the same scanner.
- ***If your child requires anesthesia***, they may be given anesthesia outside of the room (in the “recovery area”) to reduce over stimulation. Parents/caregivers can be present for anesthesia induction and recovery afterward.

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Environments

CT Stimulation Scanner



VERSA Gold Radiation Therapy Room



Anesthesia Recovery Area

