Tests and Treatments

EOS X-Ray Imaging System

What Is EOS X-Ray Imaging?

The EOS X-ray System provides weight-bearing, low dose images by scanning a child who is standing up. This specialized imaging test is different from a traditional X-ray in a few key ways:

- It offers a lower dose of radiation, which is helpful for kids who need ongoing or frequent imaging.
- The EOS head-to-toe images help health care providers get a more accurate picture of your child’s natural, weight-bearing stance and alignment.

Who Benefits from EOS X-Ray Imaging?

EOS X-ray imaging can help diagnose and treat medical conditions that affect the bones in the back, hip and leg. It’s especially beneficial for kids who have conditions such as:

- Scoliosis (idiopathic, neuromuscular and congenital).
- Developmental dysplasia of the hip (DDH).
- Hip impingement.
- Legg-Calvé-Perthes disease.
- Scheuermann’s disease.
- Slipped capital femoral epiphysis (SCFE).
- Spondylolysis and spondylolisthesis.
- Bowlegs.
- Clubfoot.
- Flatfoot.
- Knock knees.
- Limb-length discrepancy and limb differences.
- Osteochondritis dissecans.
- Patellar instability and patellofemoral pain.

What to Expect During an EOS X-Ray

Before having an EOS X-ray, your child can eat normally. Some clothing or jewelry can interfere with the X-ray
images. Depending on what part of the body needs the X-ray, your child might need to change into a gown or paper shorts.

Your child must remain still while the EOS X-ray is being taken. To capture the image, your child stands in the EOS X-ray machine for less than a minute. The EOS equipment makes a noise before and during the scan.

The EOS X-ray procedure offers a very low dose of radiation, so your child doesn’t need to wear a protective lead apron.

**After an EOS X-Ray**

A specially trained pediatric radiologist interprets the X-ray images. We’ll send the results to the doctor who ordered the exam—usually within 48 hours. If the results are urgent, we’ll contact the doctor immediately. To receive the results, contact the doctor who ordered the scan.

**Integrated Care**

Gillette Children's Specialty Healthcare is the only hospital in the Twin Cities to offer an EOS machine, and the only hospital in the state of Minnesota to offer it specifically for children.

Gillette is accredited by the [American College of Radiology](https://www.acr.org) and collaborates with [St. Paul Radiology](https://www.stpaulradiology.com) to provide expert reading of pediatric imaging studies. St. Paul Radiology is nationally known for its specialized expertise in interpreting radiological studies of children.

**Locations**

All radiology and imaging tests, including EOS X-ray scans are available at our St. Paul Campus.

- [St. Paul Campus](https://www.gillette.org)

Make An Appointment  
651-290-8707
Refer a Patient  
651-325-2200

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at 651-229-3890.

© Gillette Children's Specialty Healthcare