

What are the different circumstances where a child might need a prosthesis?

- If a child is severely hurt and must have an amputation: the Scottish Rite team makes a custom, full functioning prosthesis for the child to return to his or her daily activities.
- Children born with missing limbs.

What is process when you come to Scottish Rite:

- If a child is born with a certain condition and is needing a prosthesis, your doctor and the clinical team will see the patient around six weeks old to explain options.
- We have a community of families whose children have prostheses, and we introduce families to each other as a support group so they can ask questions and better understand the process.
- Around the time a child begins to walk, the team will evaluate the patient's limb to begin the creation of their custom prosthesis.

Who will be a part of your child's treatment if he or she is needing a prosthesis?

- Orthopedists
- Prosthetists
- Psychologist
- Physical Therapists
- Occupational Therapists
- Child Life Specialists
- Nurses

As a child grows, how often is the prosthesis needing to be refitted or changed?

- About every 15 months the child is needing to have their prosthesis refit or remade.
- The prosthesis is built to enable adjustments to allow them to grow into it.
- Once or twice a year the child comes back to clinic to make sure it fits correctly.

How is a prosthetic made?

- A mold is made based off the residual limb.
- The child will start out in a test socket so our team of experts can evaluate the initial fitting.
- Physical therapy is started to help train the child in using and functioning with the prosthesis.
- Once the prosthesis fits correctly, it is finished off by the child choosing the color and design.

What is an activity specific prosthesis?

- This is a prosthesis made specifically for a child when he or she is performing a certain activity, i.e. riding a bike.
- This custom adapter helps the child do the activities they love.

What is the most common age group seen in the prosthetic clinic?

- Wide age range: 11 months old, when the baby is beginning to walk all the way until the patient turns 18 years old.
- As the patients grow, the prosthetics team can work with them as their needs change to help make those adjustments easy for them.

How long do prostheses usually last?

- Nine months to a year life span.
- Once the child has grown out of the prosthesis, they come back to the Scottish Rite to receive a new one.
- The design of the prosthesis stays the same, but the size changes.

Various activities our team has created prostheses for:

- Golf
- Baseball
- Horseback riding
- Bicycle riding
- Guitar
- Playing an instrument

What is the process of receiving a prosthesis?

- From creation to fitting, receiving your prosthesis is a six to eight-week process.
- The patient will be seen by one of our orthopedic doctors in the prosthetic clinic.
- The need for a prosthesis is determined in clinic. The process does not happen overnight. The patient and family will meet with various Scottish Rite staff including orthopedic doctors, psychology, prosthetics and physical therapy to make sure everyone is on the same page.
- Once the decision for the patient to receive a prosthesis has been made, the patient's residual limb will be casted.
- Two weeks later, the cast will be filled with liquid plaster to create a positive model for the prosthesis to be made from.
- Two weeks after the positive model is made, the patient will come in for their test socket fitting. This fitting will determine any problems with the socket. The patient will

be asked to weight-bear while wearing the test socket to make sure it is comfortable in a standing position.

- The final step is the dynamic alignment. The patient will walk while wearing the prosthesis to make sure it fits correctly and is comfortable.

WHAT CAN PATIENTS EXPECT DURING A PROSTHETICS VISIT?

Our staff prosthetists create a custom-made prosthesis for each patient. It takes approximately four to six weeks to complete the first three stages of developing a prosthesis. When required, physical or occupational therapy is provided on-site, usually over a one- to two-week period. If ongoing outside physical therapy is required, the Physical Therapy department can help you make those arrangements. The steps to make a prosthesis include:

- Evaluation, Measurement and Molding (Casting): 1-2 hours
- Test Socket Fitting: 1-2 hours
- Alignment/Wearing Trial: 2-4 hours
- Delivery: 1-2 hours
- Training (Physical or Occupational Therapy, If Needed): Usually 1-2 hours per day, over several weeks

Prosthetics staff members also work closely with therapists who train patients to use their prostheses in everyday activities. Physical therapy or occupational therapy is usually required for first-time prosthetic fittings and when a major change in prosthetic design or patient goals requires further training. Patients should bring their most recent prosthesis to each appointment and wear clothes appropriate for being casted or measured.

WHAT ARE THE STAGES OF MAKING A PROSTHETIC DEVICE?

- Impression/Measurement Stage: Prosthetists make a plaster mold of the child's residual limb that will be fitted.
- Test Fitting: The child is fitted with a clear plastic socket.
- Alignment: Components such as feet and knees are added. The child is given some initial training and a chance to try out the system. Usually, temporary, adjustable components are used so that changes to the position, height and angle of the prosthesis can be made.
- Physical Therapy: The child receives in-depth training on how to use the device, how to gradually apply more weight onto the prosthesis and how to do other routine activities, such as climb stairs.
- Delivery: After the child goes through alignment and training, the prosthetic components are attached in a more permanent, durable way. The device is then completed with a cosmetic finish. Each child determines how their prosthesis looks. Some are skin-toned and natural looking, some are sporty and brightly colored, while

others may not have a cover at all, looking a bit more “high tech.” These choices reflect the needs and preferences of the person wearing the device.

- Follow-up: Because children grow quickly, they are usually seen at least four times per year for adjustments to the prosthesis. On average, prostheses need to be replaced about every 15 months.