

# Surgery

[bostonchildrens.org/surgery](http://bostonchildrens.org/surgery)



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Chief

Boston Children's Hospital's Department of Surgery provides both general and specialized surgical services to infants, children and adolescents living with a wide range of congenital and acquired conditions. Over the last decade, the use of minimally invasive surgery has redefined pediatric operations, combining safety, reduced post-operative pain and faster recovery. From tumors to transplants, hernias to hydroceles, we specialize in the timely evaluation and resolution of all pediatric surgical concerns.

## Highlights

### Surgical care firsts:

- Successful infant lung transplant in New England
- Use of the combination of a peripartum *ex utero* intrapartum treatment procedure and extracorporeal membrane oxygenation to treat an infant with critical airway obstruction
- Organized training program for trainees in pediatric surgery
- Published textbook in pediatric surgery in the Western world: Ladd and Gross's *Abdominal Surgery of Childhood*
- Definition of the research field of angiogenesis
- Successful application of angiogenesis inhibitors to treat a childhood tumor
- Description of tracheal occlusion to facilitate development of the "hypoplastic" lung
- Development and use of the serial transverse enteroplasty procedure as a treatment for short bowel syndrome

## Areas of expertise

Our team treats a wide range of conditions and performs a variety of procedures:

- Abdominal masses
- Appendicitis
- Branchial cleft cyst
- Bariatric (adolescent) weight loss surgery
- Chest wall masses
- Choledochal cyst
- Circumcision
- Congenital cystic adenomatoid malformation
- Crohn's disease
- Esophageal atresia
- Ewing sarcoma
- Familial adenomatous polyposis
- Foreign bodies
- Gallstones
- Gastroesophageal reflux
- Gynecomastia
- Hernia (inguinal, umbilical and epigastric)
- Hirschsprung's disease
- Hydrocele
- Hypospadias
- Imperforate anus
- Inguinal hernia
- Liver injuries
- Lumps, bumps and lesions
- Mid-aortic syndrome
- Morbid obesity
- Motility disorders
- Pectus carinatum
- Pectus excavatum
- Phimosis
- Pilonidal cyst
- Renal artery stenosis
- Short bowel syndrome
- Soft tissue lesions
- Spleen injuries
- Splenectomy and spherocytosis
- Thoracic outlet syndrome
- Thyroglossal duct cyst
- Thyroid nodules
- Ulcerative colitis
- Undescended testes
- Vascular anomalies
- Wilms' tumor

## Clinic Locations

**Boston Children's Hospital**  
300 Longwood Avenue, Fegan 3  
Boston, MA 02115  
617-355-7800  
[bostonchildrens.org/surgery](http://bostonchildrens.org/surgery)

**Boston Children's at Lexington**  
482 Bedford Street  
Lexington, MA 02420  
781-672-2100

**Boston Children's at Peabody**  
10 Centennial Drive  
Peabody, MA 01960  
978-538-3600

**Boston Children's at Waltham**  
9 Hope Avenue  
Waltham, MA 02453  
617-355-7800

**Boston Children's Physicians  
Weymouth**  
Stetson Medical Center  
541 Main Street  
Weymouth, MA 02190  
617-355-6915

**Andover Surgical Associates**  
140 Haverhill Street  
Andover, MA 01810  
617-355-1838

**Boston Children's Physicians  
North Dartmouth**  
500 Faunce Corner Road  
North Dartmouth, MA 02747  
781-216-2400

**Boston Children's Norwood  
Draper Building, 1st Floor**  
800 Washington St  
Norwood, MA 02062  
781-216-2550

**Boston Children's Milford  
Regional Medical Center, 3rd floor**  
14 Prospect Street  
Milford, MA 01757  
617-355-0535

## Request an appointment online

Physicians and families may request an appointment online at [bostonchildrens.org/appointment](http://bostonchildrens.org/appointment).

## Urgent appointments

We are happy to accept urgent/same-day appointments. Physicians who urgently need a patient seen should call 617-355-7800.

# Surgery

## Programs and services

### Adolescent Bariatric Surgery Program

For teens whose weight exceeds the 99th percentile, surgery may be part of the long-term (indeed, lifelong) treatment plan. Our program provides education, nutritional planning and psychosocial support as necessary adjuncts to minimally invasive weight loss surgery.

617-355-2458 | [bostonchildrens.org/bariatric](http://bostonchildrens.org/bariatric)

### Advanced Fetal Care Center

This program is a collaborative effort between Boston Children's Hospital, its Harvard-affiliated hospital neighbors and their respective departments of Obstetrics, Maternal-Fetal Medicine and Diagnostic Imaging. The program provides evaluation, genetic and obstetrical counseling, imaging, invasive diagnostics and *in utero* or peripartum therapy to mothers carrying children with an illness diagnosed in pregnancy.

1-866-FETALCARE (1-866-338-2522) | [bostonchildrens.org/afcc](http://bostonchildrens.org/afcc)

### Center for Advanced Intestinal Rehabilitation

Specialists in gastroenterology, nutrition and surgery—together with nurses, nurse practitioners, dietitians, a social worker and a pharmacist—collaborate to provide a range of treatment options for short bowel syndrome. Care may involve nutritional management, medical services and/or surgical treatment, such as the serial transverse enteroplasty procedure for bowel lengthening.

617-355-5275 | [bostonchildrens.org/cair](http://bostonchildrens.org/cair)

### Congenital Diaphragmatic Hernia (CDH) Program

Provides multidisciplinary treatment of CDH and long-term follow-up care for children born with this complex health concern.

617-355-6019 | [bostonchildrens.org/cdh](http://bostonchildrens.org/cdh)

### Esophageal Advanced Treatment Program

Performs the Foker technique for esophageal atresia, wherein traction sutures are used to stimulate growth of truncated esophageal segments prior to anastomosis. Our program also cares for children with lye strictures and hiatal hernias.

617-355-3038 | [bostonchildrens.org/eat](http://bostonchildrens.org/eat)

### Pediatric Transplant Center

Transplantation at Boston Children's Hospital is an interdisciplinary effort between medical and surgical programs. Programs for heart, lung, kidney, liver, intestine and multivisceral, and stem cell transplant actively share knowledge and best practices to optimize outcomes for patients and their families.

1-877-TX4-PEDS (1-877-894-7337) | [bostonchildrens.org/ptc](http://bostonchildrens.org/ptc)

### Trauma Center

Cares for more infants, children and adolescents seriously injured in accidents than any other hospital in New England. Beginning at the accident scene, a multidisciplinary team of pediatric experts coordinates the trauma patient's care from emergency room through the inpatient stay and rehabilitation (when indicated). In addition, the team supports a child advocacy program for injury prevention in order to reduce the number of childhood traumatic injuries. Our center is one of the few in the nation that has received designation from the Committee on Trauma of the American College of Surgeons as a Regional Pediatric Trauma Center, the highest level awarded.

617-355-5400 (1-866-771-5437) | [bostonchildrens.org/trauma](http://bostonchildrens.org/trauma)

### Vascular Anomalies Center

Known internationally as the preeminent site for the care of individuals with vascular anomalies, which include hemangiomas, vascular malformations and other, less common vascular tumors.

617-355-5226 | [bostonchildrens.org/vac](http://bostonchildrens.org/vac)

## Research

The Department of Surgery is committed to advancing the understanding and practice of pediatric surgery through research. We are one of the largest research departments at Boston Children's. We are host to world-renowned laboratories involved in angiogenesis research and tissue engineering. Our extensive research initiatives are both laboratory- and clinic-based, providing research training opportunities to a large number of students and fellows.

Current research areas include:

- Fetal regenerative medicine
- Fetal biology and therapy
- Stem cells
- Tissue engineering
- Surgical metabolism and nutrition
- Short bowel syndrome
- Lung development
- Neonatal surgery
- Vascular anomalies
- Angiogenesis
- Oncology
- Transplantation
- Device development
- Trauma
- Clinical outcomes
- Quality improvement

## Training

Boston Children's Department of Surgery offers several training programs, including:

### Pediatric Surgery Fellowship

The department has a proud tradition of training tomorrow's leaders in pediatric surgery. This two-year fellowship offers exposure to a large volume of complex cases with liberal use of minimally invasive techniques. Our outpatient clinic is an integral component of the program, providing preoperative evaluation and postoperative care for many patients.

### Surgical Critical Care Fellowship

The fellowship is designed for individuals who are interested in obtaining formal training in pediatric surgical critical care medicine and who wish to augment this experience with a one- to two-year clinical research experience.

### Two-year positions in surgical research

Trainees will learn the latest scientific methods while working with established investigators in areas such as vascular biology, transplantation tolerance, organ regeneration, fetal therapy, tissue engineering, vascular anomalies, surgical nutrition and the treatment of short bowel syndrome.

[bostonchildrens.org/fellowship](http://bostonchildrens.org/fellowship)

## Meet our team

The Department of Pediatric Surgery strives to provide premier clinical care to children in both outpatient and inpatient settings. Caring for an average of 8,600 outpatient annually and performing more than 4,000 operative procedures each year, Boston Children's is one of the largest pediatric surgery programs in the world. Our team listens to you and your child. We work collaboratively with you to design a plan of treatment appropriate to your child's condition and unique circumstances. We're constantly engaged in clinical research designed to come up with new strategies for diagnosis and treatment.