

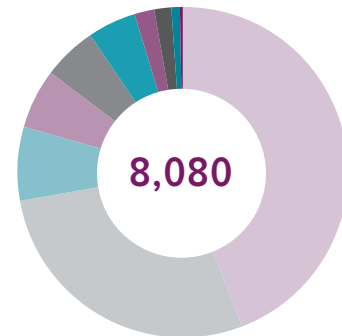
Volumes & Outcomes Summary 2022

The Fetal Care Center is one of few comprehensive fetal care centers in the world. Led by physicians from **Cincinnati Children's, TriHealth and University of Cincinnati Medical Center**, our team specializes in treating complex and rare fetal conditions and is at the forefront of innovation in fetal diagnosis and intervention therapies. Our experience and expertise is shown in our volume and outcomes.

Information in this document is based on data from fetal patients cared for by Cincinnati Children's Fetal Care Center from February 1, 2004 through June 30, 2022, except where otherwise noted.

Care for the Full Spectrum of Fetal Conditions

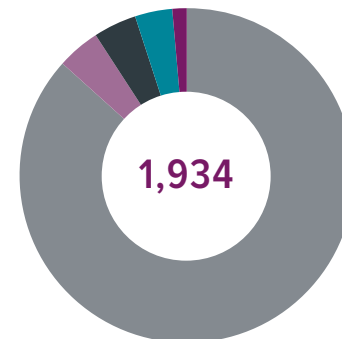
Total Evaluations	8,080
■ Twin-Twin Transfusion Syndrome (TTTS)	2,268
■ Bladder Outlet Obstruction (BOO)/Posterior Urethral Valves (PUV) ...	583
■ Myelomeningocele (MMC)/Spina Bifida	474
■ Congenital Diaphragmatic Hernia (CDH)	412
■ Congenital Pulmonary Airway Malformation (CPAM/CCAM)	391
■ Fetal Tumors	152
■ Twin Reversed Arterial Perfusion (TRAP) Sequence	136
■ Amniotic Band Syndrome (ABS)	78
■ Chorioangioma	27
■ Other	3,559



Experience When Needed Most

In addition to amnioinfusion, amnioreductions, intrauterine transfusions, amniocentesis, and shunts; we have also performed the following procedures.

Total Procedures	1,934
Surgical Procedures	
■ Fetoscopic	1,673
■ Open Fetal Surgeries (excluding EXIT)	83
Delivery Interventions	
■ Cesarean with ECMO standby	78
■ Ex-utero Intrapartum Treatment (EXIT)	72
■ Delivery with Procedures on Placental Support (POPS)	28
Special Delivery Unit Deliveries	381



Deliveries from July 2019 (SDU opening) through June 30, 2022

Our team has performed more fetoscopic procedures than most other programs in the nation.

Our Medical Center is the first of a few centers in the nation to offer the Carpediem™ Machine—a breakthrough technology providing dialysis for newborns in our NICU.

Congenital Diaphragmatic Hernia (CDH)

All patients with CDH are cared for by our dedicated CDH team of maternal-fetal medicine specialists, neonatologists, pediatric surgeons, pediatric cardiologists, ECMO specialists, nurses, nutritionists and therapists. After birth, these patients can continue their care in our CDH Program.

Total Evaluations **412**

Survival to Discharge

Low Risk CDH **approaching 100%**

Severe CDH (post FETO) **80%**

Survival data includes CDH patients with other fetal anomalies from July 1, 2016 through June 30, 2022.

Bladder Outlet Obstruction (BOO)/ Posterior Urethral Valves (PUV)

Total Evaluations **583**

Fetoscopic Interventions **27**

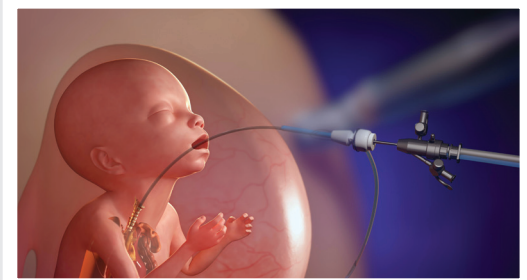
Amnioport for Serial Amnio-infusions **45***

Our team has also performed several hundreds of vesicoamniotic shunting, bladder taps, percutaneous needle amnioinfusion, and peritoneal-amniotic shunting for urinary ascites.

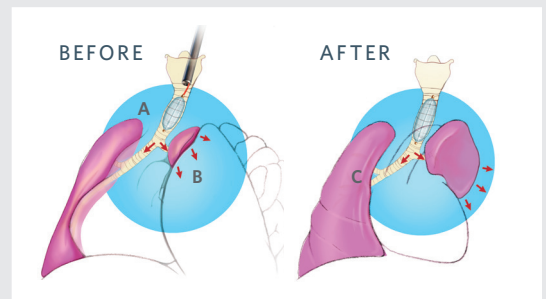
** Data includes amnioports for serial amnio-infusions from January 1, 2011 – June 30, 2022.*

Fetoscopic Endoluminal Tracheal Occlusion (FETO)

We provide **FETO intervention** for Left and Right sided CDH based on criteria and patient evaluation.



The fetoscope instrument is guided through a small incision in the mother's uterus and into the fetal trachea.



- A. Balloon inflated inside baby's trachea
- B. Pressure helps lungs to grow
- C. Balloon traps fluid inside lung and pressure helps lungs to grow

Our surgeons have performed more than 50 FETO procedures.

Our center has performed more Fetoscopic Laser Photocoagulation (FLP) procedures for TTTS than most other centers in the nation with a 91.6% survival rate of at least one twin.*

**All patients (Stage I – IV) including selective fetal growth restriction, hydrop fetalis, and patients with short cervix.*

Twin-Twin Transfusion Syndrome (TTTS)

Total Evaluations	2,268
Twins	2,166
Triplets	102
Fetoscopic Interventions	1,431

Fetoscopic Laser Photocoagulation (FLP) Procedures

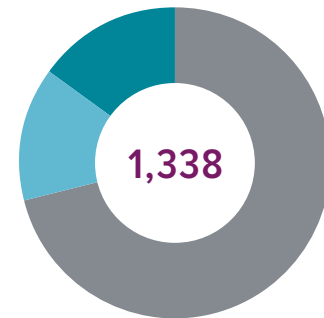
Total FLP Procedures Performed	1,338
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FLP Procedures by Type

Posterior Placenta	51%
Anterior Placenta	49%

FLP Procedures by Gestational Age

■ 16-18 Weeks	14%
■ 18-24 Weeks	71%
■ 24-28 Weeks	15%



FLP Procedures by Gestational Age

Survival Rates for Patients Undergoing FLP Procedures

Quintero Stages I, II, III

All patients including placental insufficiency/growth restriction and patients with short cervix.

Survival of at Least One Twin	92%
Survival of Both Twins	73%
Overall Survival	82%

Quintero Stage IV

All patients including placental insufficiency/growth restriction and patients with short cervix.

Survival of at Least One Twin	85%
Survival of Both Twins	69%
Overall Survival	77%

**All patients (Stage I – IV) including selective fetal growth restriction, hydrop fetalis, and patients with short cervix.
Data reflects twin gestations from July 1, 2011 to June 30, 2022.*

We are one of the largest centers in the nation for MMC evaluations and procedures performed.

Myelomeningocele (MMC)/Spina Bifida

Total Evaluations	474
Prenatal MMC Repairs	124
Fetoscopic Prenatal MMC Repairs*	66
Fetoscopic Prenatal MMC Repairs Delivered Vaginally*	41%

** Data reflects repairs starting in 2016.*

Congenital Pulmonary Airway Malformation (CPAM)

Total Evaluations	391
Procedures by Type	
Open Fetal Surgery	7
EXIT-to-Resection	11
Shunt Placement	39

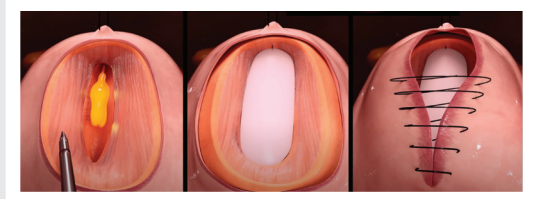
Fetal patients diagnosed with low risk CPAM and treated at our center have a 100% survival rate.

Twin Reversed Arterial Perfusion (TRAP) Sequence

Total Evaluations	136
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Fetal patients diagnosed with TRAP Sequence and treated at our center have a 98% survival rate.

Myelomeningocele (MMC)/ Spina Bifida



The exposed nerves and neural placode are carefully released from their attachment and then they are protected and covered with a double layer of neural-substitute patch, before the skin is sutured in the midline for primary repair, if possible. Otherwise, a skin-substitute patch can be sutured to cover the skin defect.

Contact Us:

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-  cincinnatichildrens.org/fetal



Cincinnati Children's is ranked #1 in the Midwest and #3 in the nation among Honor Roll hospitals.