

## Volumes & Outcomes Summary 2024

The Fetal Care Center is one of few comprehensive fetal care centers in the world. Led by physicians from **Cincinnati Children's, TriHealth and UC Health**, 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, 2024, except where otherwise noted.*

### Care for the Full Spectrum of Fetal Conditions

<b>Total Evaluations</b> .....	<b>9,347</b>
Twin-Twin Transfusion Syndrome (TTTS) .....	<b>2,512</b>
Bladder Outlet Obstruction (BOO)/Posterior Urethral Valves (PUV) .....	<b>635</b>
Myelomeningocele (MMC)/Spina Bifida .....	<b>563</b>
Congenital Diaphragmatic Hernia (CDH) .....	<b>474</b>
Congenital Pulmonary Airway Malformation (CPAM/CCAM) and Bronchopulmonary Sequestration (BPS) .....	<b>432</b>
Fetal Tumors .....	<b>161</b>
Twin Reversed Arterial Perfusion (TRAP) Sequence .....	<b>148</b>
Amniotic Band Syndrome (ABS) .....	<b>107</b>
Neurological Abnormalities (excluding MMC)* .....	<b>58</b>
Chorioangioma .....	<b>38</b>
Genitourinary Anomalies (excluding BOO/PUV)* .....	<b>31</b>
Other .....	<b>4,188</b>



See the comprehensive list of fetal conditions we treat **HERE**.

*\*Data for July 1, 2023 through June 30, 2024 only*

### Experience When Needed Most

In addition to amnioinfusions, amnioreductions, intrauterine transfusions, amniocentesis and shunts, we have also performed the following procedures:

<b>Total Procedures</b> .....	<b>2,164</b>
<b>Surgical Procedures</b>	
Fetoscopic .....	<b>1,873</b>
Open Fetal Surgeries (excluding EXIT) .....	<b>83</b>
<b>Delivery Interventions</b>	
Cesarean with ECMO standby .....	<b>96</b>
Ex-utero Intrapartum Treatment (EXIT) .....	<b>80</b>
Delivery with Procedures on Placental Support (POPS) .....	<b>47</b>
<b>Special Delivery Unit (SDU) Deliveries</b> .....	<b>717</b>

*Deliveries from July 2019 (SDU opening) through June 30, 2024*

*Our team consistently ranks among the top in the nation for our extensive experience in fetoscopic procedures.*

## 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.

*Patients with severe CDH receiving FETO had lower rates of ECMO use, shorter days on mechanical ventilation, and shorter length of stay in the NICU.*

**Total Evaluations** ..... **474**

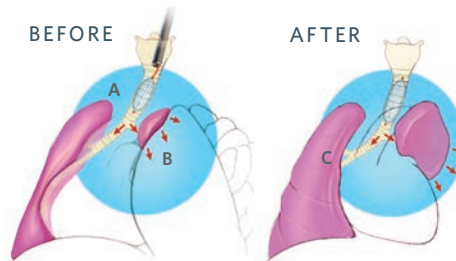
**Our surgeons have performed more than 55 FETO procedures.**

## Fetoscopic Endoluminal Tracheal Occlusion (FETO)

We provide FETO intervention for left- and right-sided CDH based on criteria and patient evaluation.



Watch our FETO surgical animation video [HERE](#).



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

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

**Total Evaluations** ..... **635**

Fetoscopic Interventions ..... **27**  
 Serial amnio-infusions for in-utero kidney failure ..... **214\***  
 Amnioport ..... **43**  
 Percutaneous needle ..... **171**

*As the first in the nation to offer the CARPEDIEM™ Machine—a groundbreaking technology providing life-saving dialysis for newborns in our NICU—our health system is pioneering innovative care to improve neonatal outcomes.*

Our team has also performed several hundreds of the following procedures:

- Vesicoamniotic shunting
- Bladder taps
- Peritoneal-amniotic shunting for urinary ascites

\* Data includes amnioports for serial amnio-infusions for in-utero kidney failure due to BOO and other kidney disorders from January 1, 2011 – June 30, 2024.



Watch our BOO surgical animation video [HERE](#).

## Twin-Twin Transfusion Syndrome (TTTS)

<b>Total Evaluations</b> .....	<b>2,512</b>
Twins .....	<b>2,403</b>
Triplets .....	<b>109</b>
<b>Fetoscopic Interventions</b> .....	<b>1,553</b>



Watch our TTTS surgical animation video [HERE](#).

## Fetoscopic Laser Photocoagulation (FLP) Procedures

<b>Total FLP Procedures Performed</b> .....	<b>1,464</b>
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### Placenta Position

Posterior Placenta .....	<b>51%</b>
Anterior Placenta .....	<b>49%</b>

### Gestational Age at Procedure

16-18 Weeks .....	<b>13%</b>
18-24 Weeks .....	<b>72%</b>
24-28 Weeks .....	<b>15%</b>

*Our center has performed more Fetoscopic Laser Photocoagulation (FLP) procedures for TTTS than most other centers in the nation, with a 97% survival rate of at least one twin.\**

*\*All TTTS patients (Stage I-III) including concurrent selective fetal growth restriction and short cervix, from July 1, 2022 to June 30, 2024.*

## Survival Rates for Patients Undergoing FLP Procedures

### Quintero Stages I, II, III

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

*Twin gestations from  
July 1, 2022 to June 30, 2024*

Survival of at Least One Twin .....	<b>97%</b>
Survival of Both Twins .....	<b>84%</b>
Overall Survival .....	<b>90%</b>

### Quintero Stage IV

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

*Twin gestations from  
July 1, 2011 to June 30, 2024*

Survival of at Least One Twin .....	<b>88%</b>
Survival of Both Twins .....	<b>73%</b>
Overall Survival .....	<b>80%</b>

## Myelomeningocele (MMC)/Spina Bifida

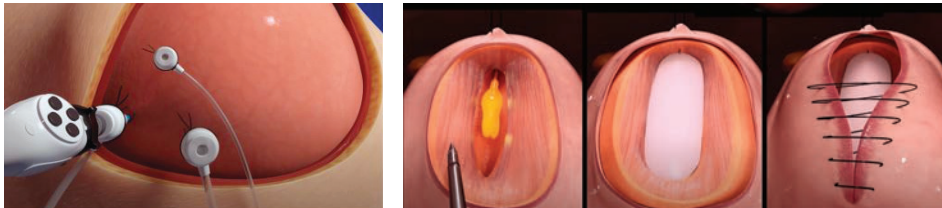
Total Evaluations .....	563
Prenatal MMC Repairs .....	154
Open Repairs .....	58
Fetoscopic Repairs* .....	96

**42%\* of patients receiving fetoscopic repairs delivered vaginally.**

\* Data reflects repairs starting in 2016.

*We are recognized as a leading center in the nation for MMC evaluations, prenatal repair, postnatal care and long-term management.*

## Fetoscopic Myelomeningocele (MMC)/Spina Bifida Repair



Watch our fetoscopic repair surgical animation video [HERE](#).

Fetoscopic repair uses three small ports inserted into the mother's womb. The ports allow for placement of instruments for the repair. The exposed nerves and neural placode are carefully released from their attachment and are then protected and covered with a double layer of neural-substitute patch. Skin defect is then sutured closed if possible. Otherwise, a skin-substitute patch will be used to cover the skin defect.

## Congenital Pulmonary Airway Malformation (CPAM/CCAM) and Bronchopulmonary Sequestration (BPS)

Total Evaluations .....	432
Procedures by Type	
Open Fetal Surgery .....	7
EXIT-to-Resection .....	13
Shunt Placement .....	52

**Patients diagnosed with low-risk CPAM and treated at our center have a 100% survival rate.**

## Twin Reversed Arterial Perfusion (TRAP) Sequence

Total Evaluations .....	148
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**Patients with TRAP Sequence treated with Radiofrequency Ablation (RFA) have a 97% survival rate.**

### Contact Us:

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*Cincinnati Children's is consistently recognized by U.S. News & World Report as a top children's hospital.*