

Equipment to Expect After Heart Surgery In the Cardiac Intensive Care Unit (CICU)

When your child is in the Cardiac Intensive Care Unit (CICU) after surgery, there may be a lot of equipment, machines and noise. This can be overwhelming. All of the equipment plays a role in helping your child during this medically fragile time.

The equipment in your child's room after surgery can be overwhelming. This document explains what you might see and what it is used for.

If you have any questions about equipment, ask your child's nurse.



Ventilator/ Endotracheal Tube

A mechanical ventilator is a breathing machine that may be used to support your child's breathing after surgery. The ventilator will help to get oxygen into the lungs and blood stream, and help the body get rid of carbon dioxide. If your child needs a mechanical ventilator, they will be intubated. Intubation is when a tube is placed in your child's windpipe through their nose or mouth to maintain their airway and assist breathing.

For more information, see our handout "Mechanical Ventilation" at seattlechildrens.org/pdf/PE819.pdf.



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To Learn More

- Cardiac Intensive Care Unit
206-987-2040
- Ask your child's healthcare provider
- seattlechildrens.org

Free Interpreter Services

- In the hospital, ask your nurse.
- From outside the hospital, call the toll-free Family Interpreting Line, 1-866-583-1527. Tell the interpreter the name or extension you need.

Chest Tube

A chest tube is a flexible tube that is a type of drain used to prevent blood and body fluids from collecting around the heart and lungs. The tube lies in the chest wall, around the heart and lungs and exits the body through the skin. It is held in place with stitches. The chest tube is connected to a collection device and your child's health care team monitors the amount of blood or other body fluid that drains.



Pacemaker

Sometimes after heart surgery the heart's natural rhythm is changed because of swelling or injury to the heart. The pacemaker is a battery-powered device that is outside the body. It is connected to your child's heart with small wires that are placed during surgery. The pacemaker electrically stimulates the heart muscle to get the heart rhythm, or heart rate, back to normal.



Pumps/Medication

Your child may have several IV (intravenous) pumps near their bed after surgery. The pumps give IV medicines and IV fluids, also known as drips or infusions. IV infusions allow medicines to be given evenly over time. Your child will have a pump for every IV medicine they need. These medicines help your child's heart work, control your child's pain, and give your child nutrition and fluids.



Central Line

A central line (central venous line) is a long, soft, thin tube that is placed into a vein in the neck or groin that leads into a large vein near the heart. This type of line has special benefits because it can deliver medicines without irritating the smaller veins and lasts longer than IVs that are far away from the heart (peripheral IVs or PIVs). Central lines can also be used to take blood samples without extra needle sticks.

Arterial Line

An arterial line is a small, short plastic tube that is placed through the skin into an artery of the arm or leg. An arterial line allows the health care team to monitor your child's blood pressure and take blood samples without extra needle sticks.

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Peripheral Line

A peripheral line is a small, short, plastic tube that is placed through the skin into a small vein in the arm, hand, leg or foot. A peripheral IV can deliver fluids and some medicines.

Feeding Tubes

A feeding tube is a small, soft, plastic tube placed through the nose (NG or nasogastric) or mouth (OG or orogastric) into the stomach. These tubes provide food and medicine directly to the stomach until your child can eat food by mouth. They can also remove air and fluid from the stomach.

Foley Catheter

The Foley catheter is a type of urinary catheter, which is a small, soft tube placed in the bladder that drains your child's pee into a collection bag. This allows the healthcare team to monitor your child's kidney health.



Monitors

After surgery, your child will be monitored so the healthcare team can check your child's vital signs (heart rate, blood pressure, oxygen saturation, temperature and breathing rate). The monitor picks up and displays all of this information in one place.



Near Infrared Spectroscopy (NIRS) Monitor

The NIRS monitor measures oxygen saturation levels of your child's brain and kidneys. Oxygen saturation is the amount of oxygen in your child's blood. Your child will have 2 stickers to take these measurements. One will be placed on your child's forehead to measure oxygenation of the brain. The other will be placed in the flank area, between the hip and the last rib, to measure oxygenation of the kidney.



Pulse Oximeter

A pulse oximeter is a sticker that goes around your child's finger or toe to measure your child's blood oxygen levels.

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Temperature Monitor and Management

A coated wire placed on the surface of your child's skin, can track your child's temperature. Depending on your child's temperature, a warmer, warm blanket, or a cooling blanket may be used to keep your child at a normal temperature.

Blood Pressure Cuff

Your child's blood pressure may be monitored through an arterial line. Your child will also have a blood pressure cuff on their arm or leg. The cuff is used to take their blood pressure as needed by the healthcare team but does not monitor blood pressure all the time.

Chest Leads

Chest leads are small stickers placed on your child's chest to count your child's heart and breathing rate. This information is displayed on the monitor.



Etiometry (Et3)

The etiometry monitor is similar to the vital signs monitor, but it collects information (heart rate, breathing rate, oxygen saturation, blood pressure and NIRS) over time. The healthcare team uses this information to monitor trends and changes.

