

General Anesthesia at Stanford Medicine Children's Health

What is general anesthesia?

General anesthesia is a special medicine that makes a person **unconscious**, which is a very deep sleep-like state. Doctors use general anesthesia during surgeries and other medical procedures, so the patient is not aware and does not feel anything. While getting general anesthesia, your child is not awake and does not feel the surgery or procedure happening. General anesthesia can be given through:

- Intravenous (IV), which goes directly into your child's veins using a small, flexible tube.
- Anesthesia gas, which your child breathes in through a mask.

General anesthesia is given by a specially trained doctor called an anesthesiologist. At Stanford Medicine Children's Health, our anesthesiologists are specially trained to give anesthesia to infants, children, and teenagers. Your child's anesthesiologist will decide the best way to give your child general anesthesia based on their weight and medical history.

Pediatric Anesthesia Resource Center, or PARC Forms to complete before your child's surgery or procedure:

Before your child's surgery or procedure, please complete two forms in your MyChart account:

2 to 3 weeks before your child's surgery or procedure, complete the Outpatient Surgery Center Patient History Form. You will be asked the following questions:

- **Medical history:** Include your child's and their family's medical, surgical, and social history. Some of these questions may feel personal, but they can help your anesthesiologist decide the best plan for your child.
- Diet: Include if your child is on a special diet or if there is anything they can't eat.
- Medicines: Include what medicines your child takes, including how much they take and when they take
 them.

2 to 3 days before your child's surgery or procedure, please complete the Outpatient Surgery Center Pre-Surgery Screening Form. You will be asked the following questions:

- if your child has stayed healthy for their surgery or procedure.
- your contact information.
- your plan for getting your child home after their surgery or procedure.

Pediatric Anesthesia Resource Center, or PARC Phone Call

PARC will call you 2 days before your child's surgery or procedure to discuss:



- Arrival Time: when you should arrive at the Treatment Center.
- Where to go: the address and location of the Treatment Center.
- How your child is feeling: we will ask how your child is feeling, including if they recently had a fever, cough, or cold.
- **Eating and drinking**: We will tell you when your child should stop eating and drinking. We may also talk to you about what to do with your child's current medicine.

You will also be asked if you would like to get a text message **after 6 p.m.** with a reminder of your arrival time and the time to stop giving your child food and drink.

On the day of your child's surgery or procedure

After check-in, you will be taken to an exam room. A nurse will review your child's medications, health, and allergies and ask you when your child last had anything to eat or drink. You will also be asked to review the consent form. You may also meet an anesthesia nurse practitioner who will ask you more questions about your child's medical history.

For safety, you will be asked many times to provide your name, your child's name, the type of surgery being done, and the last time your child ate or drank anything.

Your child may also be seen by Child Life Specialists, who will help your child understand and cope with their visit to the hospital. Some children may feel nervous or worried about getting anesthesia, their surgery or procedure, or being away from their caregivers.

Your child's care team can talk with you about different things we can do to help your child feel more comfortable. Some of the things we can do are:

- Give medicine either by mouth or through the IV. This medicine will make them feel relaxed and a little sleepy, which will help them feel more comfortable being away from you before surgery.
- Have your child work with a child life specialist who can discuss various options for distraction, including tablets, movie projectors, virtual reality, and video games.

Getting general anesthesia

Before your child's surgery or procedure, the anesthesiologist will talk with you about your child's anesthesia plan. They will talk with you about the side effects of general anesthesia. They will choose the best method based on your child's age, weight, and medical history. You are always welcome to ask any questions about anesthesia and the procedure.

There are 2 ways children can start the general anesthesia process:

Anesthesia gas: This is usually the best option for babies and young children. We will put a special
mask over your child's mouth and nose in the operating room. Your child will breathe in the anesthesia



medicine for a few minutes until they are unconscious. Once they are unconscious, the anesthesiologist will likely place an IV to give your child more medicine.

• IV anesthesia: This is usually the best option for older children and teenagers. Depending on your child's medical needs, this may also be the best option for younger patients. Your child will have an IV placed before they go to the operating room. An IV is a tube that goes into your child's vein to deliver fluids and medicine. We will talk about ways we can help your child cope with this IV placement. Once in the operating room, the anesthesiologist will give your child anesthesia medicine through the IV.

During general anesthesia

During anesthesia, your child may need extra oxygen to help them breathe. Your child's anesthesiologist will choose the best way to give your child oxygen based on your child's age, weight, medical needs, and the type of surgery or procedure. We can give your child oxygen using one of the following:

- Nasal cannula: Small flexible tubing that is placed outside of the nose.
- Anesthesia mask: The same type of mask we use to give children anesthesia gas.
- Laryngeal mask airway (LMA): Small flexible plastic device that sits in the back of your child's throat.
- **Breathing tube or endotracheal tube:** Flexible plastic tubing that is placed in your child's airway through their nose or mouth.

While your child is unconscious under general anesthesia, an anesthesiologist will be with them during the whole surgery or procedure. They will watch your child's vital signs, including breathing, heart rate, oxygen saturation, and blood pressure. They may give your child medicines during the surgery or procedure to make sure your child is comfortable during and after their procedure, including anesthesia medicine, pain medicine, anti-nausea medicine, and other IV fluids.

After general anesthesia

After the surgery or procedure is finished, your child's anesthesiologist will stop the anesthesia medicine. They will leave the IV in your child's vein to give your child any pain medicine, anti-nausea medicine, fluids, or other medicines they may need.

Your child will then go to the **Recovery Room or PACU (Post Anesthesia Care Unit)**, where their anesthesia medicine will wear off. For some children, the effects of the anesthesia medicine wear off quickly, and for others, the effects wear off slowly. Both are normal.

After your child is awake, you will be notified and taken to the recovery room by a hospital assistant to be with your child. During this time, your child's recovery room nurse will watch your child's vital signs and give them any medicines they may need.

Your child may be allowed to drink water or juice in the recovery room or PACU, but they cannot eat at this point. Ask your child's care team when your child can eat and drink after their surgery or procedure.



After general anesthesia, some children may have the following side effects:

- Nausea
- Vomiting
- Dizziness
- Pain
- Confusion
- Irritability

If your child has any of these side effects, your care team will work with you to help treat them.

Some children, especially young children, wake up from general anesthesia feeling confused, angry, and hard to comfort. This is normal, and you do not need to worry if this happens to your child. Your child's nurse may give them medicine and more time to recover.

Talk with your recovery nurse or PACU nurse if you are concerned about your child's side effects.