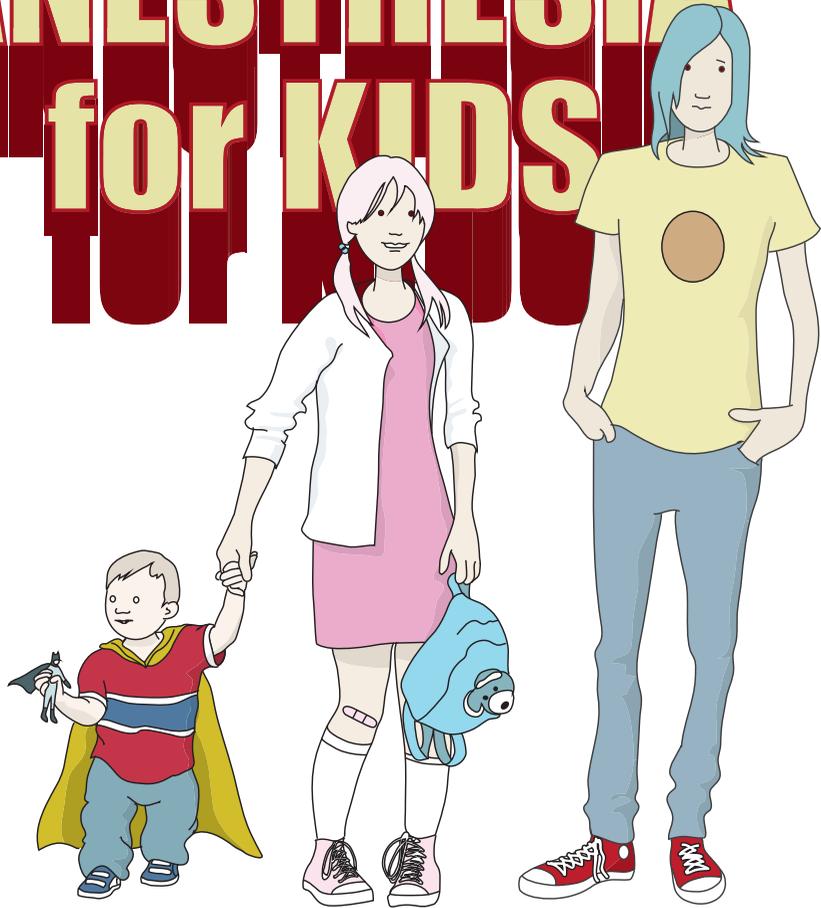


# ANESTHESIA for KIDS



Your child is scheduled for surgery at the Montreal Children's Hospital, we understand how important this is to both you and your child. Knowing more about the procedure and hospital stay will help you prepare. This booklet offers suggestions on how you can prepare and provide support to you child for surgery.

Name:

Arrival time:

Surgery date:

Surgery time:

This document was developed by Teresa Valois; MD, Sabrina Drudi, Child Life Specialist; and Thao Le, Clinical Nurse at the Montreal Children's Hospital

We would like to recognize the MUHC Education Portfolio and the McGill Molson Medical Informatics for their support throughout the development of this booklet, the design and the layout, as well as for the creation of all the images.

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## IMPORTANT: PLEASE READ

**Information provided by this booklet is for educational purposes. It is not intended to replace the advice or instruction of a professional healthcare practitioner, or to substitute medical care. Contact a qualified healthcare practitioner if you have any questions concerning your care.**

Hôpital de Montréal  
pour enfants  
Centre universitaire  
de santé McGill



Montreal Children's  
Hospital  
McGill University  
Health Centre

Department of Anesthesia Montreal Children's Hospital

abbvie



Office d'éducation des patients du CUSM  
MUHC Patient Education Office



Projet d'informatique médicale Molson de McGill  
McGill Molson Medical Informatics

This material is also available on the  
MUHC Health Education Collection ([infotheque.muhc.ca](http://infotheque.muhc.ca))  
and the MUHC Patient Education Portal ([muhcpatienteducation.ca](http://muhcpatienteducation.ca))

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# Introduction

## Who is an anaesthesiologist?

An anesthesiologist (sleep doctor) (Dr. Do-do) is a medical doctor who specializes in anesthesia, a field of medicine that helps patients deal with pain and keeps patients asleep during surgery. Anesthesiologists at the Montreal Children's Hospital (MCH) of the McGill University Health Centre (MUHC) have had special training (They have studied in average 10 to 12 years) to take care of children.

## Who is a paediatric anaesthesiologist?

Is an anaesthesiologist that has pursued extra training to specialize in providing anaesthesia to children.

## What is an Anesthesia Care Team?

The anesthesia care team is a group of professionals dedicated to the care of your child before, during and after surgery. In our hospital this team consists of respiratory therapists and pain nurses, who work closely with the anesthesiologist.



# Meet Benny the bear



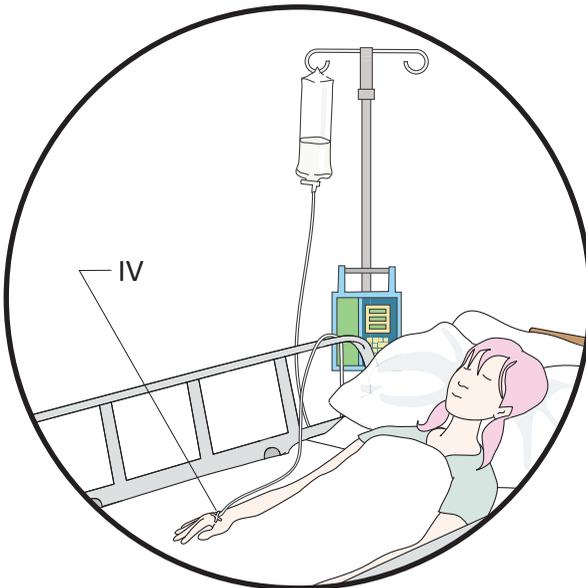
# Anesthesia

## What's the difference between Mask Induction (mask) and IV or Intravenous Induction (Needle)?

### Mask

The anesthesia mask is like a superhero, Princess, scuba diver, pilot mask. It is for:

- For children who do not like needles works better.
- The intravenous is placed after they are sleep, thus they won't feel it



### IV

- For children who do not like strong smells works better
- For certain surgeries and also depending on gender and age may decrease the risk of nausea/vomiting
- We can put a numbing cream that can help for not feeling the needle.

# Before Anesthesia

## Preparing for Surgery

### **Will my child and I meet the anesthesiologist before the surgery?**

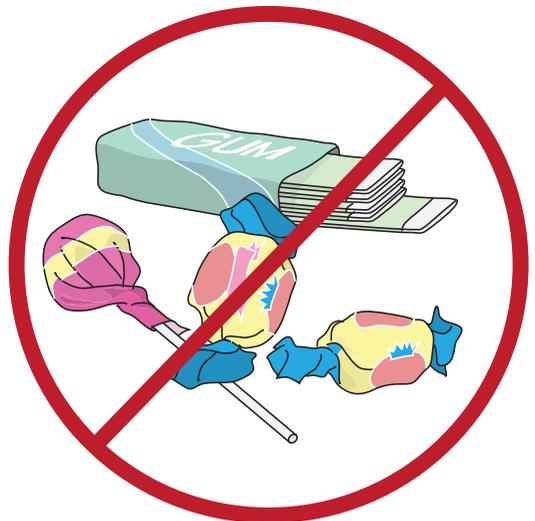
Yes. Before entering the operating room you will talk with the anesthesiologist, the surgeon and the nurse who are going to be in the room during the procedure. They will ask you a few questions about your child to make sure everything is ok.

### **How come my child is not allowed to eat or drink before surgery?**

It is very important that your child's stomach is empty before receiving an anesthesia. This is called fasting. While having anesthesia, the body's reflexes are not as good, so any food or liquid in the stomach could go into the lungs. This is called aspiration. This is dangerous so we prevent this from happening by not eating.

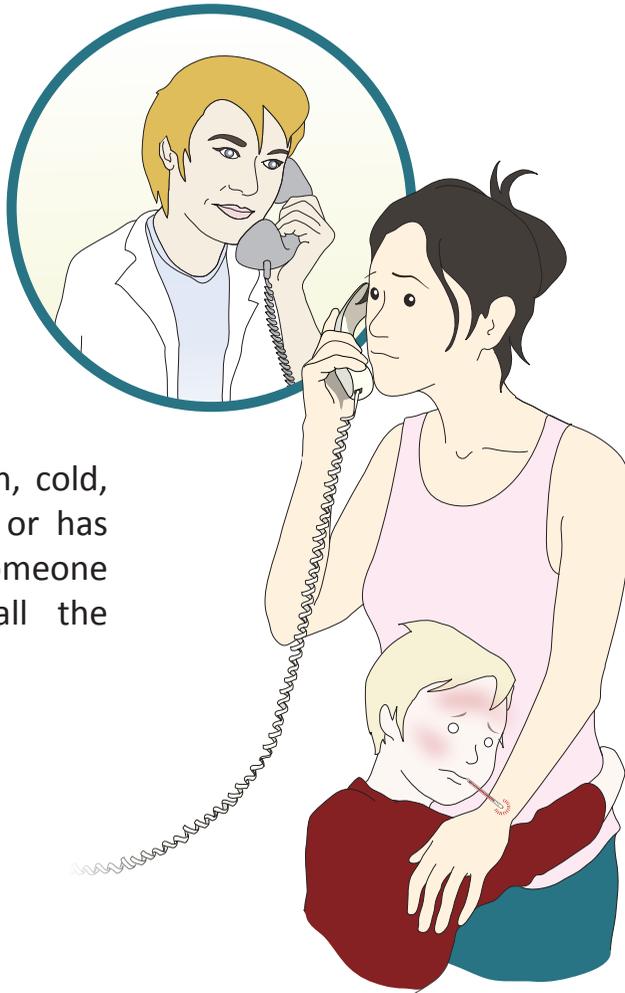
### **Why is aspiration bad?**

When aspiration occurs the contents from the stomach go into the lungs. Depending on the size of the food particles and acid level (pH), these can cause damage to the lung tissues block the absorption of oxygen. This is a very serious problem and if it happens, the patient may need to go to the Intensive Care Unit (ICU).



### **Can my child chew gum or suck on hard candy while waiting for surgery?**

No, gum and hard candy are considered a light meal. You must fast for at least 6 hours.



If your child has a rash, cold, cough, fever, diarrhea or has been in contact with someone who is infectious, call the surgeon.

## **The Post-Anesthesia Care Unit (PACU) / Recovery Room.**

It is important to note that siblings under 14 years old are not allowed in the Post-Anesthesia Care Unit (PACU) / Recovery Room. They are also not allowed to wander, so please make other arrangements for them. Two adults will be allowed in the recovery room. You will not be allowed to take public transportation with your child after the surgery, so please make arrangements to get home otherwise.

## Speak Up

Parents must sign a consent form before going for a planned surgery. Signing a consent means that you are giving permission to your surgeon to proceed with the surgery. *We encourage all patients* to inform their children about the surgery and to ask questions before signing their consent for surgery.



Before signing your consent the perioperative team (surgeon, anesthesiologist and nurses) must give you enough information so that you can make an informed decision. It is not necessary or expected that you would receive every detail of the surgery. You need only the information that would be expected to make the best decision. This information should include the risks and likelihood of the risks, the benefits and likelihood of the benefits.

## Questions to ask

If you have any questions please ask us. It is important that you understand your child's surgery.

As part of the preparation for surgery, we will have discussed with you how your child is going to sleep, pain management, possible side effects, and what might happen if you refuse to have the surgery. If you have any questions, again it is important that you ask us and that you understand.

And finally the consent form should be signed and dated both by the doctor and by the parents and, if the case, your child.

## How can I help my child relax before surgery?

Studies have shown that preparation is the best way to help your child cope with surgery. We encourage you to talk to your child about his/her surgery and answer any questions he/she may have.

If you need more information you can consult these books or other similar books:

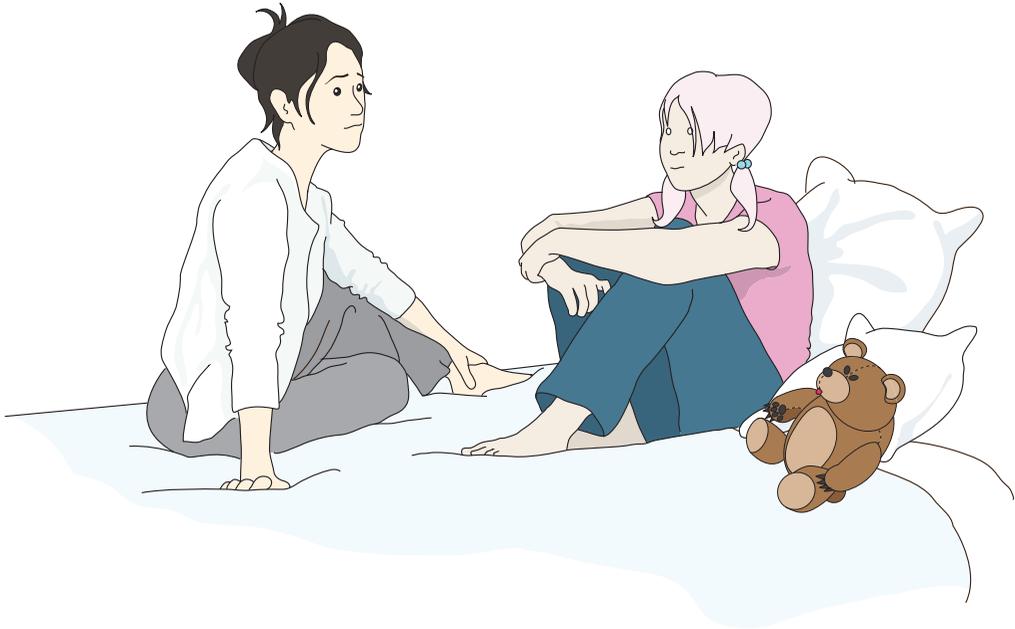
- **“L’operation de Lucas”** par Stephan Boonen et Birgitte Vangehuchten (Editions Enfant Québec) ISBN 978-2-923347-58-5
- **“Franklin goes to the Hospital”** by Paulette Bourgeois and Brenda Clark (Kids Can Press) ISBN 1-55074-732-7. This book is available in the MCH Family Resource Library (Rm. C-542). You can reserve the book by calling 514-412-4400 ext. 22382 or visiting the library web site at [www.mchfamilylibrary.ca](http://www.mchfamilylibrary.ca).

Also at the Children's we have a Child Life Specialist that can assist you in preparing your child for surgery. You can contact her at: [sabrina.drudi@muhc.mcgill.ca](mailto:sabrina.drudi@muhc.mcgill.ca)

# How Do I Talk to My Child About Surgery?

We recommend that all children be prepared when having surgery. How and when you prepare your child will depend on: their developmental age, any other hospital experience, and how you think they will cope with having surgery.

If you feel your child needs extra preparation; please contact the Child Life Department at **(514) 412-4400 ext. 23832**



- Preparation depends on your child’s age and experience.
- Remember to give honest , simple explanations.
- If you don’t know the answer, it is ok to say: “I don’t know, but I will find out.”



**Please make sure to bring with you a list of the questions you and your child may have with regards to the anaesthesia, we’ll be pleased to answer them during the pre-anaesthesia interview.**

# General guidelines for preparation

## Ask Questions

Find out as much as possible about the surgery. This can include the order of events, what your child will see, feel, and hear, and the people he/she will meet.

## Be Honest

Provide age and developmentally appropriate information about his/her surgery. If you do not know the answer to a question, tell your child that you do not know. Let him/her know that you will try to find the answer before the surgery.

Talking about the surgery with your child. Being honest does not mean you have to give every detail of what will happen. Begin slowly with simple information. Let your child know you are willing to talk about the surgery and his or her feelings about it. With your child, you may choose to read children's books about going to the hospital, or you can play with dolls, puppets or a pretend medical set.

## Explain to your child why he/she needs the surgery

What you say will depend on the type of surgery your child is having. You can use words like: "The doctor needs to fix a problem with your body to help you."

It is important for children to know that they will not feel, hear or see anything during the surgery. They will be given medicine that will put them to sleep. Some children fear waking up in the middle of the surgery. Your child needs to be reassured that this will not happen. He/she will only wake you up once the surgery is finished.



## Choose Language Carefully

Some hospital words can confuse some children. For example, when talking about anesthesia, you might want to be careful about using words like “put to sleep.” This might hold a double meaning for children who have had pets that did not come back after being “put to sleep.” Instead, you might try saying “a special sleep”. Also, choose words like “poke” instead of needle, “bed on wheels” instead of stretcher, “fix” or “repair” instead of cut or remove.

## **Do not make promises you will not be able to keep**

Do not say things like “I won’t leave you,” as this is not possible. Try instead: “See you later, I will be waiting for you and I will see you when you wake up.”

## **Do not bribe or threaten**

This may work in the short term but may get in the way of giving your child positive ways to cope in the long term.

## **Making the experience positive for everyone**

Children are very good at picking up on their parent’s feelings, even when you try to hide them. Knowing what to expect about the surgery can help relieve much of your anxiety. Remain calm will help your child to feel positive about the experience.

## **Other resources:**

### **A Boy and a Turtle: The Children’s Visualization Book**

Written by: Lori Lite; illustrated by Kimberley C. Fox

(Call # WB880L712001JUV)

### **Imagine a Rainbow: A Child’s Guide for Soothing Pain**

Written by: Brenda S. Miles; illustrated by Nicole Wong

(Call #WL704M592006JUV)

# Evening before surgery

Your child can eat until midnight the day before surgery, depending on the age of your child he/she will be allowed to have breast milk, formula or clear fluids as per these guidelines:

## Babies under 1 year on regular milk feed

- **6 hours** for infant formula or nonhuman milk;
- **4 hours** for breast milk;
- **3 hours** for clear fluids e.g., water, dextrose, apple or cranberry juice.

**\*\*Do not give orange juice**

## Children over 1 year

No milk or any food after **midnight**, except:

- 3 hours for clear fluids e.g., water, apple or cranberry juice, 7UP.

**\*Do not give orange juice**

**\*\* Chewing gum** is considered as a clear fluid.

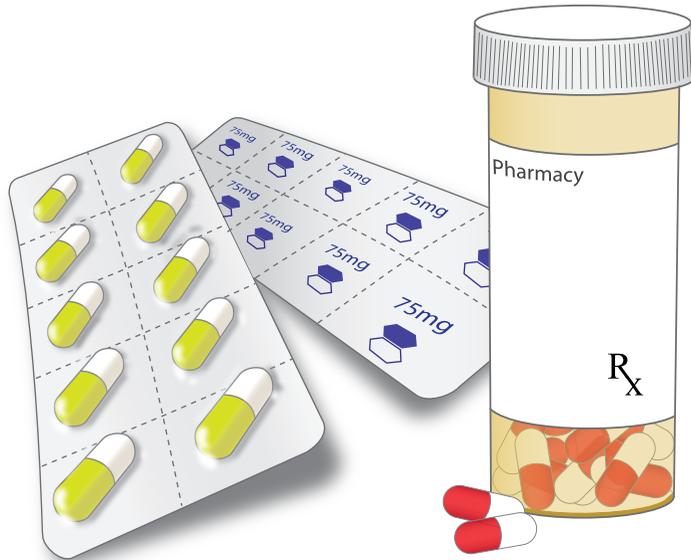


**NO MILK, YOGURT,  
LEMONADE OR ORANGE JUICE**

# Day of Surgery

## At Home - Preparing for Surgery

### Medications/ Herbal/Naturals



If your child is taking medications please ask the nurse or anesthetist and write down which ones to take.

Take the following medications  
(with sips of water)



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---

---

**Do not** take the following  
medications



---

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# Things to bring to the hospital

- ❑ This booklet
- ❑ Your child's valid Medicare card.
- ❑ Any medications you're your child is taking, including inhalers, in their original containers.
- ❑ If you do not speak French or English, please let us know in advance and we will be able to arrange a translator to accompany you and your child.
- ❑ Bathrobe, slippers, pajamas, loose comfortable clothing for your child.

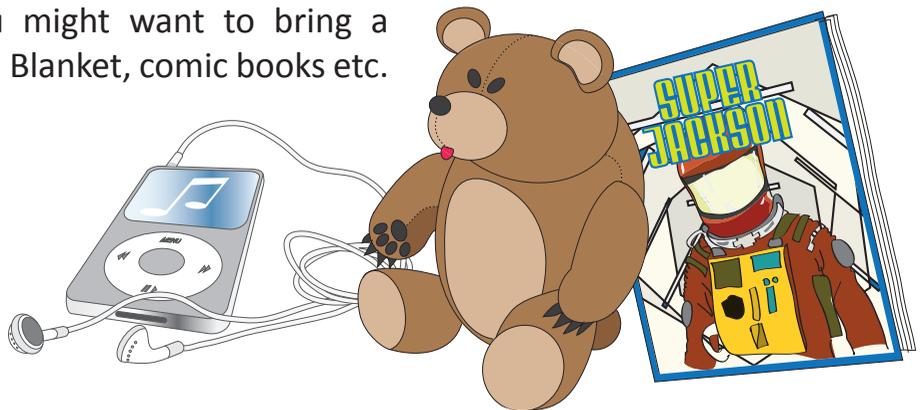


## Bring these following items as needed:

face cloth, Kleenex, pacifier, diapers, sanitary napkins, extra underwear, bottle/drinking cup, slippers/shoes, sweater/housecoat, etc.

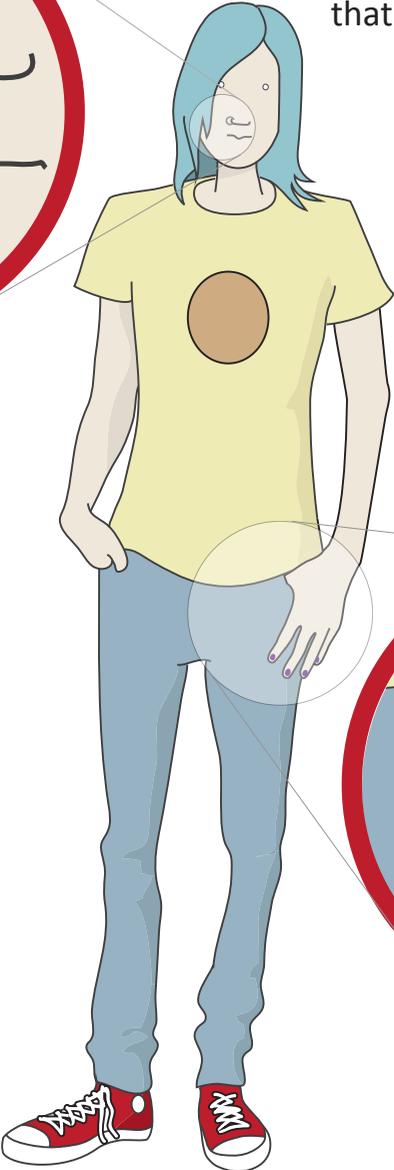
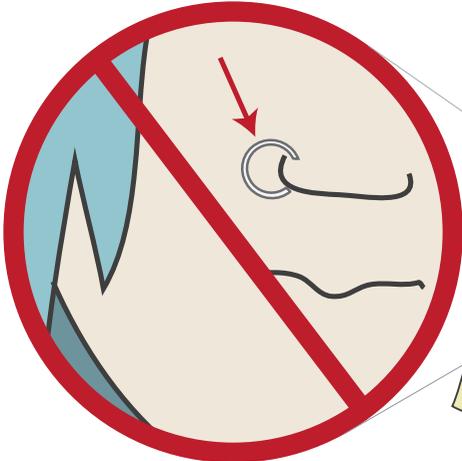
## Best Friends

If you will be staying in the hospital after your surgery, you might want to bring a Teddy bear, Music, Blanket, comic books etc.



**Please Remove:**

any make-up, nail polish, jewelry (including piercing) and temporary ("stick on") tattoos that your child may have.

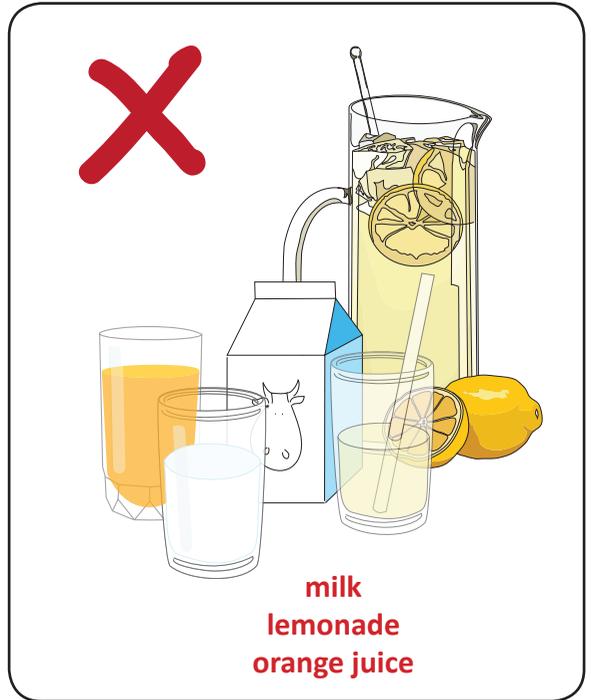


# Food and Drinks

All patients need to stop eating at midnight the night before the surgery.



Some patients are allowed to have carbohydrate drinks **until two hours before their expected time of arrival to the hospital.**



## At the Hospital

You will meet the Day surgery nurse, then your child will get changed and then you will go to the 10th floor (Follow the paw prints) and hand the chart to the OR clerk.



# Age Specific Considerations

Newborns  
0 ~ 18 months

## Infant: Newborn ~ 18 months

### Things to bring:

familiar and comforting items from home: pacifier, toy, stuffed animal or a favourite blanket.

### What helps:

Play soft music or sing to your child. The sound of your voice will be soothing to your child.



On the day of surgery, it is most important that you remain your child's greatest source of comfort. Continue to hold and comfort your child while staff is setting up.

**\* Same questions to ask, Notes section**

# Toddlers: 18 months ~ 3 years

## What helps:

Prepare your toddler one or two days before the surgery.

Due to fasting and/or anesthesia, your child may be fussy or upset after procedure.



Toddlers  
18 mo ~ 3 years

Let your child choose a comfort item to bring to the hospital.

\* Same questions to ask, Notes section

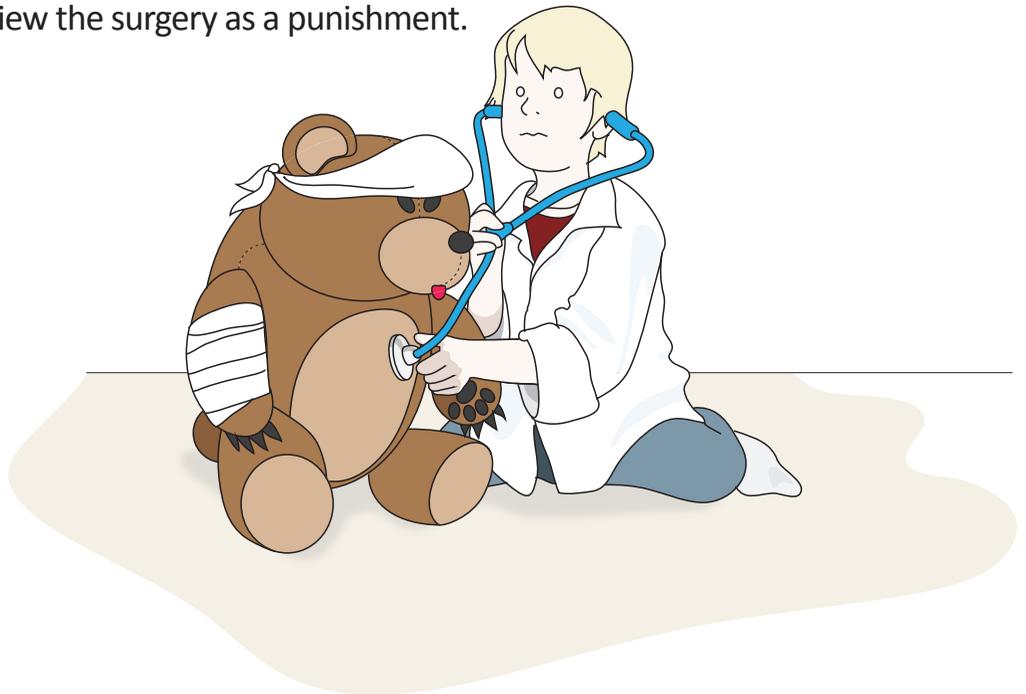
# Pre-schoolers: 3 ~ 5 years

## Things that help:

Prepare your preschooler a few days before the surgery. You may want to talk about going to the hospital and what your child can expect to see there. You will find books and resources, at the Family Resource Library. ([www.mchfamilylibrary.ca](http://www.mchfamilylibrary.ca))

You can emphasize that your child's surgery is the best way for the doctors to help your child feel better or to fix something in his body.

It is important to tell your child that they did not cause the surgery. Children this age often think that they have "done something wrong" therefore; they might view the surgery as a punishment.



Things to bring: Reading books about hospitals and surgery may help to get them ready. Playing with a pretend medical set may also help to explore feelings about the surgery.

**\* Same questions to ask, Notes section**

# School age children: 6 ~ 12 years

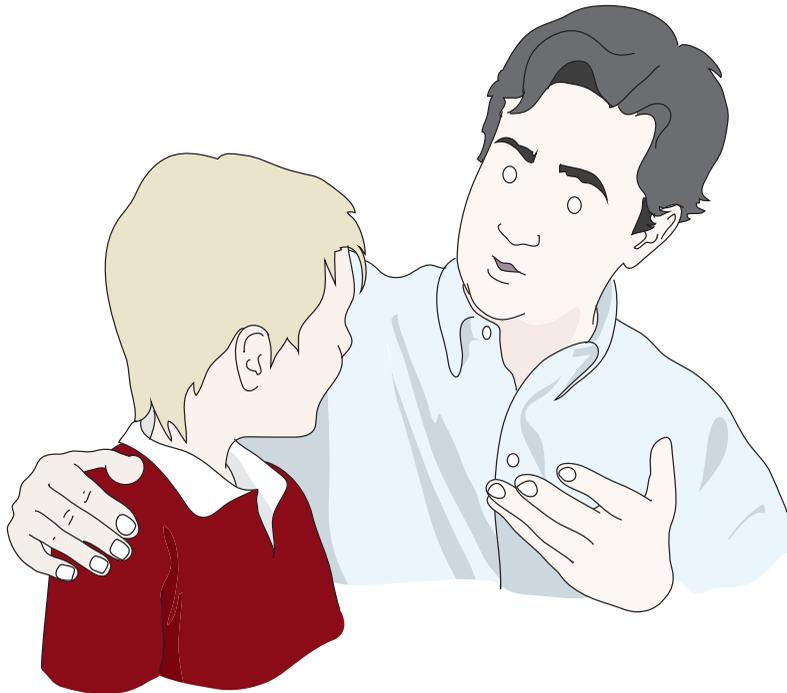
## Things that help:

Prepare your school-age child one week before the surgery.

Your child needs to know what will happen before, during and after surgery.

Your child also needs a sense of what he/she will see, hear and feel.

Your child may fear waking up in the middle of surgery. He/she needs to be told that this will not happen.



Tell your child that a “sleep doctor” (an anesthesiologist) will be there to make sure he/she doesn’t wake up until the surgery is finished.

Talk about how this surgery may change his or her appearance, if applicable, explaining bandages, tubes, casts, etc.

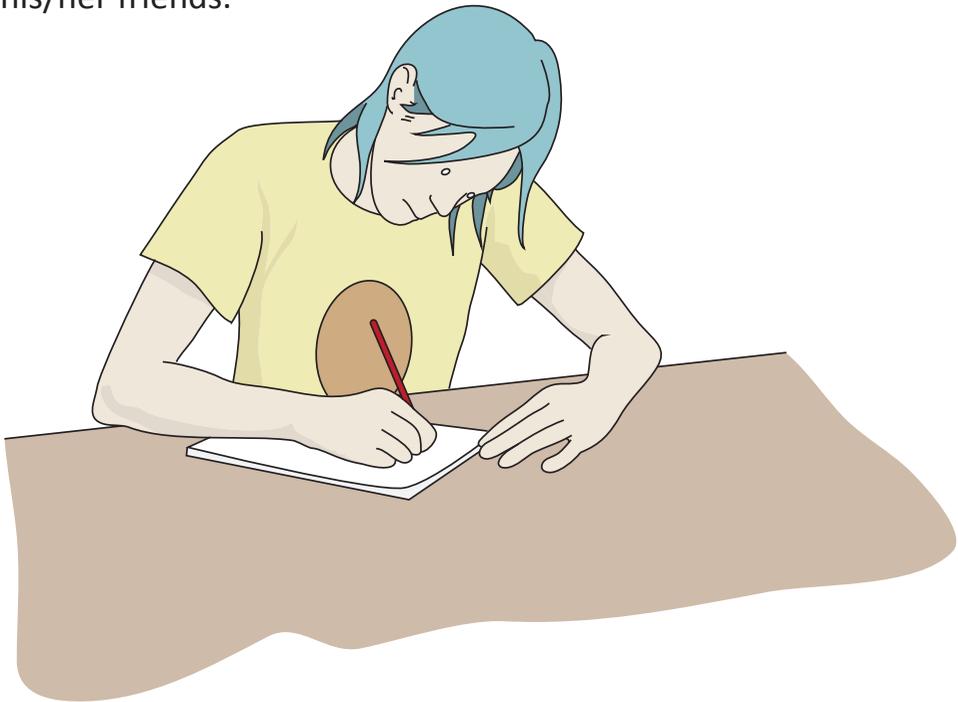
**\* Same questions to ask, Notes section**

# Adolescents: 13 years and older

## Things that help:

We recommend that your adolescent be included in talks and decision-making about his/her surgery. In Quebec, the legal age to sign the consent is 14 years of age.

Teens are concerned with privacy, anesthesia's effectiveness, and how surgery may change their appearance or how it will change daily activities with his/her friends.



Encourage your adolescent to write down any questions he/she may have. Encourage them to ask those questions to the doctor or the nurse.

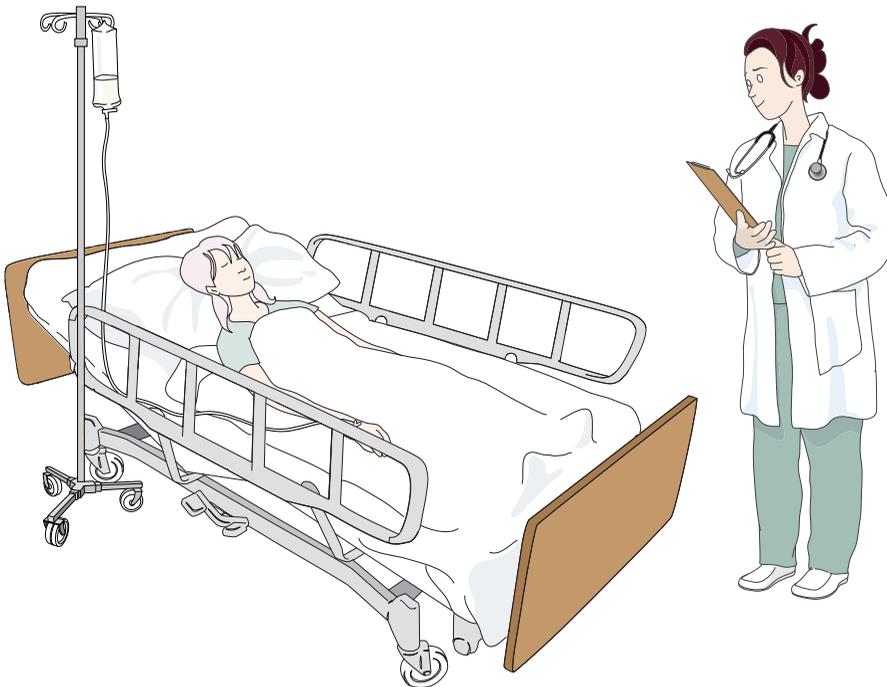
**\* Same questions to ask, Notes section**

# Recovery Room

## Where will my child go after the surgery finished?

Your child will be transferred to the Recovery Room. This is where patients wake up after the procedure. Patients are monitored in the Recovery Room by the nurses until they are ready to go to their room at the hospital or go home.

You will receive more information about care after surgery from the nurse in the Recovery Room.

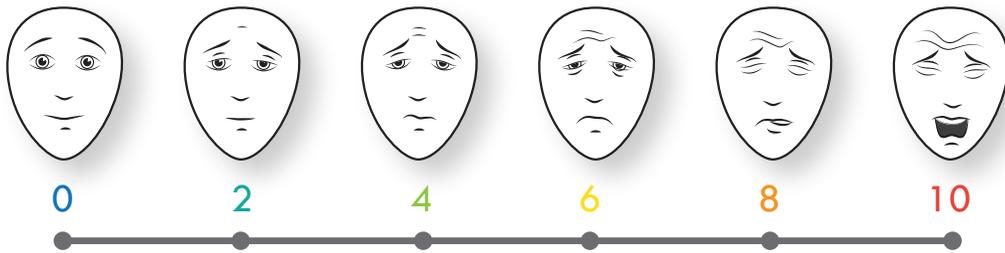


Once your child is in the recovery room, the anesthesiologist will tell the recovery room nurses how everything went during the surgery. The nurses in the recovery room will take the vital signs and make sure your child is well and comfortable. Shortly after, they will allow you to come and see him/her.

# How do I help my child with pain?

Pain is an experience that happens in the body and mind. We use medication and non-medication ways to manage the pain.

During your child's stay in the recovery room, the nurses will show your child a scale to be able to measure the pain. There are several types of scales, the two more commonly use are the Visual Analog scale (VAS) with numbers and the faces scale (See below)



Once your child has pointed to the amount of pain she will be able to provide the medication to help with the pain.

**After surgery, you can keep a pain diary with your child's evolution of pain during the days following the surgery. (see p.28)** This can help the team looking after you identifying any issues that may arrive.

After your child is awake and if he/she is allowed he/she can have a popsicle or apple juice. After the nurses from the recovery room will provide you with instructions on how to proceed from then on.



## Non-medication ways to manage the pain:

- help reduce pain and anxiety for children of all ages
- are safe, inexpensive and easy to learn
- can be used in the hospital or at home
- can be used with pain medication, not instead of pain medication

## Comforting Strategies

Distraction helps your child focus on something pleasant other than the pain. Encourage your child to choose the activity. **Here are some popular methods that have worked for other children and parents:**



**Newborns**  
*0 ~ 18 months*

Breastfeeding/pacifier, Holding, rocking, patting/swaddling, Soft voice, singing and music

---



**Toddlers**  
*18 mo ~ 3 years*

Interactive toys, Blowing bubbles, Light wands, Singing

---



**Pre-schoolers**  
*3 ~ 5 years*

Blowing bubbles, I SPY books, DVDs, Storytelling

---



**School-age children**  
*6 ~ 12 years*

Deep breathing, Blowing bubbles, TV/video games, Books, Counting, Singing

---



**Adolescents**  
*over 12 years*

Deep breathing, TV/video games, Music, Books

Excerpted from Ellis and Zempsky et al, 2004, and Ellis et al, 2004.

**You know your child best. If other methods work well for you and your child, let your health care team know.**

# Pain Diary

For example:

 Morning	<u>4</u> / 10
--	---------------

Days After Surgery	 Morning	 Noon	 Evening	 Night	Medicine	Pain Relief ? (Yes / No)	Comments:
1	__ / 10	__ / 10	__ / 10	__ / 10			
2							
3							
4							
5							
6							
7							

## More Pain Resources:

**The Montreal Children's Hospital** has a Family Resource Library and librarian, who may also assist you with information.

For further references, go to the Family Resource Library website at [www.mchfamilylibrary.ca](http://www.mchfamilylibrary.ca):

click at the **Welcome** link,  
click at the **Medical Conditions** link,  
check on the **Surgery, Day Surgery, and Anesthesia**,  
and click on **Submit**.

Please feel free to browse the list and search for any topic(s) which might be related or relevant to your child's surgery

**Other Related links at The Montreal's Childrens Hospital website**  
(<http://thechildren.com>)

**Child Life Services:**

<http://bit.ly/TRoLvA>

**Preoperative Assessment Department:**

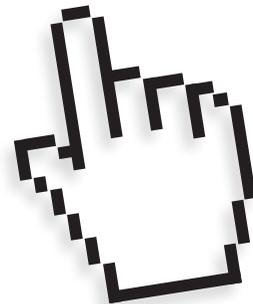
<http://bit.ly/W0tWZD>

**Anesthesia Department:**

<http://bit.ly/T1QQ1P>

**Web site address for the video "My visit to day surgery"**

<http://bit.ly/UQcFn3>



# GLOSSARY

**Anesthesiologist:** The doctor who helps you fall into a deep sleep for surgery. He or she is specially trained to give you medicine that helps you fall asleep and stay asleep until the operation is over.

An **anesthesiologist** (sleep doctor) is a medical doctor who specializes in anesthesia, a field of medicine that helps patients deal with pain and keeps patients asleep during surgery. Anesthesiologists at the Montreal Children's Hospital (MCH) of the McGill University Health Centre (MUHC) have had special training to take care of children.

*(from MCH website)*

**Blood Pressure Cuff:** It gives your arm a big hug. When you go to the doctor, a nurse might put a band around part of your arm and pump air into the band, blowing it up like a balloon. This is how a nurse checks your blood pressure. This test shows how hard your heart is pumping to move blood through your body.

**Child Life Specialist:** a professional who works with children and their families in health care settings striving to alleviate the stress and anxiety that accompany surgery and hospitalization. They will prepare you and your child for the surgery by showing pictures, teaching dolls, and the actual equipment (ex. anesthesia mask). They may also accompany your child back into the OR for additional support.

**Comfort measures:** Techniques from positioning to distraction, environment to word choice that can work together to keep a hospital experience positive.

**Day Surgery** means that your child will be safely discharged home on the same day after a surgical or interventional procedure under general anesthesia.

*(from MCH website)*

**Distraction** helps your child focus on something pleasant other than the pain. Encourage your child to choose the activity.

**Fasting:** On the day of surgery, you won't be allowed to eat drink anything. You can't even chew gum. It is important that your stomach is empty before you wake have sleep medicine (anesthesia).

If you will be going to sleep for the surgery, you probably won't be able to eat breakfast. That's because having food - or even water - in your stomach can make it dangerous to give you anesthesia.

**Guided imagery (also known as active imagination)** A strategy that uses mental images produced by memory or imagination. Help your child use his/her imagination to create a safe place by focusing on pleasant thoughts. Ask him/her to tell you about a real or pretend event, their last vacation or favorite place, using as many of the senses as possible (what they see, hear, feel, smell and taste). For example: swimming with a dolphin or playing your favorite sport (visual strategy).

Resources:

A Boy and A Turtle: The Children's Visualization Book  
Written by: Lori Lite; illustrated by Kimberley C. Fox  
(Call # WB880L712001JUV)

Imagine a Rainbow: A Child's Guide for Soothing Pain  
Written by: Brenda S. Miles; illustrated by Nicole Wong  
(Call #WL704M592006JUV)

**Heart Monitor Leads:** Three round stickers, two will be on your chest and one on your belly to watch your heart working while you are in your special sleep.

## **Intravenous (IV)**

Sometimes kids need fluids or medicine through an intravenous catheter, also called an IV. An IV is a thin plastic tube that is inserted into a vein so you can get the medicine or fluids you need to feel better.

## **Operating Room (OR)**

The operating room, sometimes called the OR or surgery center, is where surgery (say: sur-juh-ree) takes place in a hospital.

**Oximeter:** Special clip with a red light that is placed on your finger or toe to keep track of the oxygen flowing inside your body.

**Post-Anesthesia Care Unit (PACU)** PACU stands for post -anesthesia care unit. “Post” means “after,” so you can probably guess that the PACU is where you go after your operation is done. This is the “wake-up” room, and that’s exactly what you’ll be doing there - waking up!

## **Preoperative Assessment Clinic**

This clinic coordinates and facilitates the care of children and their families as they go through a surgical experience. The service includes the physical assessment of the child, the required consultation, the appropriate laboratory work up and psychological preparation for the expected occurrences on the day of surgery. (from MCH website)

**Operating Room (OR) Nurse:** works with the surgeon and anesthesiologist to assist the procedure. The nurse will introduce himself or herself before the surgery and answer any questions you may have.

**Recovery Room** also known as **PACU**

**Relaxation** helps decrease stress in the body and mind. Encourage your child to breath slowly and deeply and count his/her breaths.

**Respiratory Therapist:** works with the anesthesiologist to administer anesthesia medication and monitor your child's vital signs.

**Surgeon:** The doctor who scheduled the surgery and will be conducting the procedure. This doctor will be the one helping your part of your body that is not doing its job correctly.

**Surgery:** helps fix a problem with your body to make you better.





# Help Us Help Others

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