

Patient education: Ear tubes (The Basics)

[Written by the doctors and editors at UpToDate](#)

What are ear tubes? — Ear tubes are tiny tubes that a doctor puts in a child's eardrum to make an opening. The eardrum is the thin layer of tissue between the ear canal and the middle ear ([figure 1](#)). To put ear tubes in, doctors need to do surgery. Ear tubes are also sometimes called “tympanostomy tubes” or “PE (short for ‘pressure equalization’) tubes.”

Why might children get ear tubes? — Children might get ear tubes if they:

- Get a lot of ear infections – This includes children who get 3 or more ear infections in 6 months, or 4 or more infections in 1 year ([figure 2](#)). Ear tubes can help keep children from getting more ear infections.
- Have fluid in the middle ear that won't go away – Ear tubes let the fluid drain out of the middle ear (the part of the ear behind the eardrum) ([figure 3](#)). This is helpful because fluid in the middle ear can cause hearing loss. Long-term hearing loss can lead to language and speech problems in children, especially in young children.

There are other benefits of ear tubes, too. They:

- Let air into the middle ear, which helps the middle ear heal
- Keep the pressure between the middle ear and the ear canal the same
- Can keep a growth of cells (called a “cholesteatoma”) from collecting in and damaging the middle ear

What does ear tube surgery involve? — Before the surgery, your child's doctor will give you instructions about what to do. Children should not eat or drink for a certain number of hours before surgery.

When the surgery starts, the doctor will give your child medicine to make him or her fall asleep. Then the doctor will make a small cut in the eardrum. He or she will place the ear tube in the eardrum.

Most children can go home a few hours after surgery. They can usually do their normal activities the next day.

After surgery, the doctor will see your child for a follow-up visit. The doctor will check that the tube is in the correct place and that fluid is draining well. He or she will also check your child's hearing. This might involve getting a hearing test.

Your child's doctor will also tell you if you need to keep water out of your child's ear. This is only needed in very few cases. If it is important for your child, the doctor might recommend that your child wear ear plugs when swimming or bathing.

What problems can happen with ear tubes? — The following problems can happen with ear tubes. They can:

- Keep draining – Sometimes, fluid or pus keeps draining out of the tube.
- Get blocked
- Move out of place and fall into the middle ear
- Fall out after only a short time
- Make a long-lasting hole in the eardrum
- Damage the eardrum tissue

When should I call my child's doctor or nurse? — After surgery, call your child's doctor or nurse if your child:

- Gets a fever
- Has bloody drainage from the ear

- Has trouble hearing
- Has ear pain that doesn't get better or gets worse
- Is dizzy or falls down a lot

How long do ear tubes stay in? — Most ear tubes fall out on their own after 6 to 18 months. This is normal. If the ear tube doesn't fall out on its own after a few years, the doctor will probably do surgery to remove it.

How can I decide if my child should get ear tubes? — This decision depends on your child and his or her individual situation. You should talk with your child's doctor about the benefits and downsides of ear tubes, and how much they can help your child.

The decision will probably depend on:

- How old your child is
- How many ear infections he or she gets, or how long he or she has had fluid in the middle ear
- Whether your child has hearing loss
- Whether your child is talking
- Whether your child has other ear conditions