Chest tubes

A chest tube is a small tube put in the space between the lung and the chest wall (called the pleural space). It removes air or fluid from around the lung to make it easier for your child to breathe.

**Why does my child need a chest tube?**

Your child may need a chest tube if:

- Fluid has built up in their pleural space because of infection, surgery, chest trauma, or swelling
- They have a pneumothorax (new-mow-THOR-ax), or collapsed lung, because air leaked into the pleural space

**How is a chest tube put in?**

Your child will be sedated and receive a chest tube in the operating room or at their bedside in the ICU. A healthcare provider will:

- Make a small opening between your child’s ribs on the affected side
- Put the chest tube through the opening and into the pleural space
- Hold the chest tube in place with a few stitches and a large bandage and tape the tubing to your child’s body
- Attach the chest tube to a longer tube and chest drainage unit. This rectangular container sits on the floor and provides:
  - a water seal so air can come out but can’t re-enter the chest
  - suction to help pull fluid and re-expand the lung
  - a receptacle for blood and fluid drainage

**What can I expect after my child has a chest tube put in?**

After your child has a chest tube put in:

- The chest drainage unit makes a bubbling sound from the suction as it drains your child’s lungs
- They receive pain medicine by mouth or through the IV (a small tube that goes into a vein). Older children may have a patient-controlled analgesia (PCA) pump. This allows your child to get medicine when they need it but not take too much.
- They may need extra oxygen through a mask that covers their nose and mouth or a nasal cannula tube under their nose
- Healthcare providers will monitor their breathing and heart rate and check the tubing often
- They may need antibiotics to prevent or treat an infection
How can I help my child when they have a chest tube?

A chest tube can make it hard for your child to move on their own. The healthcare team will determine if your child can be held or get out of bed. You can help by:

- Encouraging your child to breathe deeply and cough to help their lungs drain and re-expand
- Giving your child a pillow to hold against their chest when they cough
- Propping pillows behind your child or putting the head of the bed up so they can sit upright
- Holding an older child around their waist instead of under their armpits as they get up to use the bathroom
- Supporting an older child as they walk around the room (if their healthcare provider says it’s OK)
- Keeping the hospital room clean so your child doesn’t trip or stumble
- Watching your child carefully to make sure they don’t fall
- Discouraging your child from pulling or tugging on the chest tube

What are the risks of a chest tube?
The risks of a chest tube include:

- Bleeding
- Air leaks
- Lung damage
- Infection
- Allergic reaction to anesthesia

When will the chest tube be removed?

Your child usually has the chest tube for 1–4 days, depending on why they need it. The chest tube can be removed when:

- There is little or no fluid draining
- A chest x-ray shows there is no longer air around the lung

To remove the chest tube, the healthcare provider may:

- Give your child pain medicine
- Ask your child to inhale or exhale deeply and hold their breath while they quickly pull out the tube
- Close the opening with sutures (small stitches) or let it close on its own
- Cover the opening with a bandage for a few days

What happens after the chest tube is removed?

After your child has their chest tube removed, a small, airtight dressing will cover the site. Your child will probably have a follow-up chest x-ray to make sure the fluid or air hasn’t come back. Tell your child’s healthcare provider if your child has any discomfort or change in breathing.

If your child is discharged home soon after the chest tube is removed, make sure to keep the bandage dry and in place until your child’s follow-up appointment. Your child can shower but can’t take a bath until a scab has formed on the incision.

Your child should see their healthcare provider again within 48 hours. The healthcare provider will make sure there is no fluid or air in the lung and the incision is healing. They may also replace the bandage with a smaller one.
When should I call my child’s healthcare provider?
Call your child’s healthcare provider if your child:

- Is experiencing pain
- Has a change in breathing
- Has a fever of 101°F or higher
- Has dizziness or weakness or faints
- Feels anxious or restless
- Has a fast pulse
- Has bluish skin

Call 911 or take your child to the emergency room immediately if they have chest pain or trouble breathing.

Notes