

Arterial Lines

What is an arterial line?

An arterial line (also called an art line) is a short, soft, plastic tube (catheter) put directly into an artery. The arterial line is connected to a thick tube that leads to an infusion pump and monitor.

Your child needs an arterial line when their:

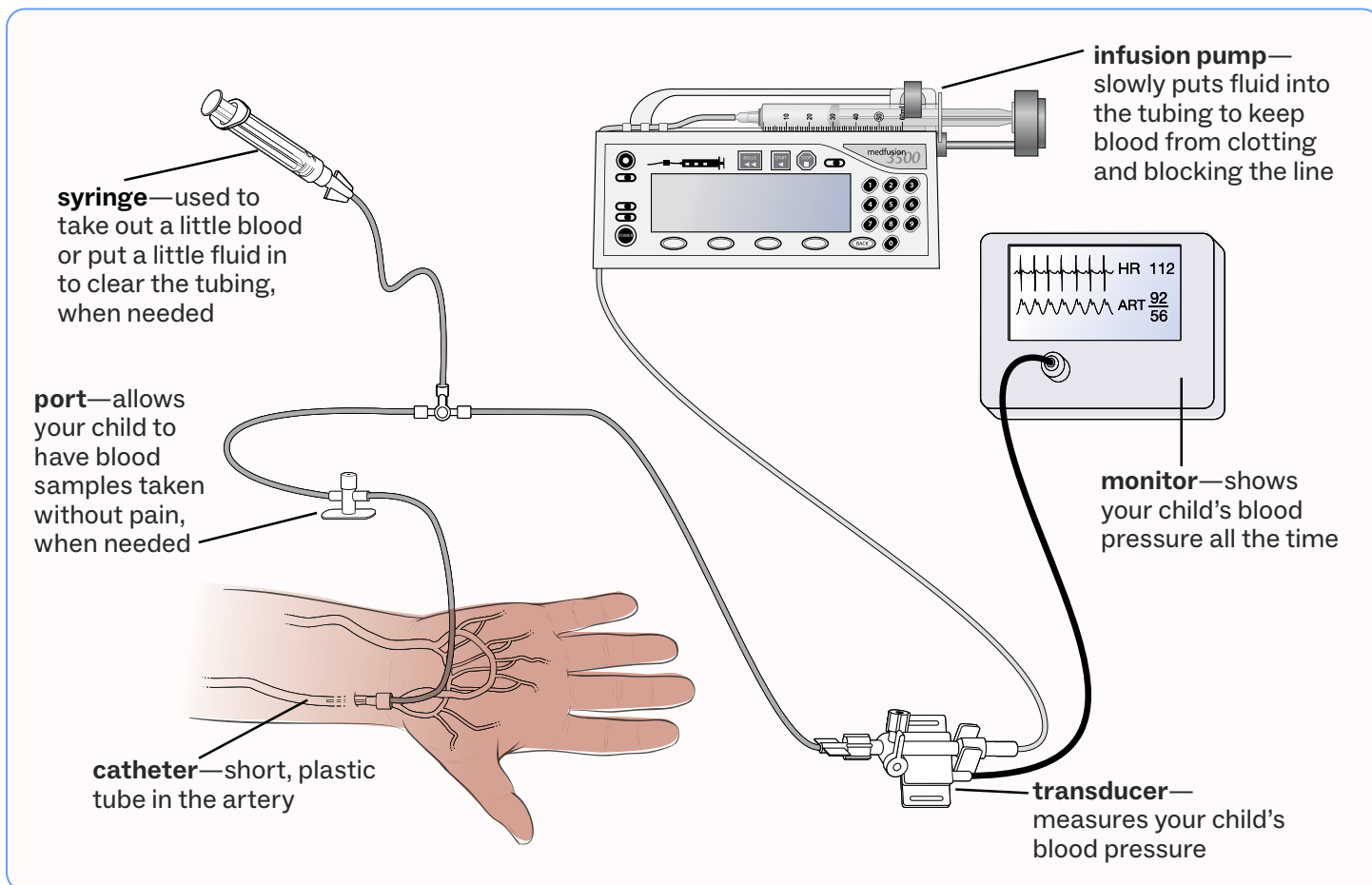
- Blood must be drawn often to measure how their lungs are working
- Blood pressure must be monitored at all times

How is an arterial line placed?

A healthcare provider places an arterial line in the operating room or in the intensive care unit (ICU). Your child may receive medicine to help relieve pain and anxiety during the procedure.

To place an arterial line, the healthcare provider will:

- 1 Insert a small needle connected to the arterial catheter into the artery
- 2 Remove the needle and put a couple stitches in the skin to secure the catheter
- 3 Connect the catheter to a thick tubing (see the illustration)
- 4 Fill the tubing with solution to prevent blood from clotting and blocking the line
- 5 Tape the line securely to your child's skin
- 6 Put your child's arm or leg on a padded board to keep it still and prevent the line from accidentally being pulled out





How can I help my child cope with an arterial line?

Some children do not like arterial lines because they cannot bend their wrist or use their hand much. If appropriate, remind your child how the arterial line is helping them and that the tube is small.

When will the arterial line be removed?

An arterial line is removed when:

- Your child doesn't need to have blood tests frequently
- Your child doesn't need to have their blood pressure watched all the time
- It doesn't work anymore

How is the arterial line removed?

- 1** Your child's nurse will gently remove the tape holding the arterial catheter in place. This pulls gently on the skin. If your child has a hard time with this, the nurse can use a special liquid that helps loosen the tape. The liquid does not cause pain.
- 2** The nurse removes the stitches. Most children say they cannot feel this or that they just feel a tug.
- 3** The nurse then removes the catheter, which takes only a few seconds. They will hold your child's wrist with a bandage for at least 5 minutes to make sure the bleeding stops. It may help to read your child a short story or talk about their favorite things while they wait. The nurse will then apply a bandage that needs to stay in place for 1 day.

When the arterial catheter is removed, it means your child is getting better. It is one of the signs your child is getting well enough to be transferred out of the ICU.

Notes