



NATIONWIDE CHILDREN'S
When your child needs a hospital, everything matters.™

Helping Hand™

Health Education for Patients and Families

Chest Physiotherapy – Infants

Newborn to 12 Months

Normally, there is just the right amount of mucus in the lungs. In people with Cystic Fibrosis or when the lungs become irritated or infected, a lot of thick mucus is produced. Extra mucus can slow down or stop the cilia (tiny structures on the linings of the lungs that clear excess mucus from the lungs) from working. If the cilia cannot clear the mucus, we have to help the lungs get the mucus out. This is why chest physiotherapy is done.

Chest physiotherapy, also called postural drainage, is a way for you to help your child get rid of extra mucus in his or her lungs. This is important because too much mucus can block the airways in the lungs. If the airways are blocked, the air cannot move in and out like it should.

How chest physiotherapy is done

Chest physiotherapy uses chest percussion. Chest percussion is clapping of the chest with percussor cups, which are similar to suction cups. This vibrates the airways in the lungs. The vibration helps loosen mucus so it can be coughed out. See Picture 1.

Percussor cups

- Never percuss over bare skin. Make sure the child is wearing a t-shirt or onesie.
- Hold the percussor between your fingers and firmly pat over 6 areas of the child's chest and back for 2 to 4 minutes.
- Do the patting in a regular rhythm.
- Percussion, done properly, does not hurt.



Picture 1 Use percussor cups to help clear your child's airways.

Positioning

- Position your child so that the part of the lung to be drained is higher than any other part of the lung.

It is important for you to be in a comfortable position because this makes the treatment more effective and easier for both you and your child. You may use a pillow to make your child more comfortable.

- Place your child on your lap.
- Always have your child's knees and hips bent to help him or her relax and to make coughing easier.
- Pictures 1 through 6 below show how chest physiotherapy is done.

Picture 1
Upper lobes front



Picture 2
Upper lobes back



Picture 3
Lower lobes front



Picture 4
Lower lobes back



Picture 5
Lower lobes right side



Picture 6
Lower lobes left side



More information

- Try to make this as enjoyable as possible for you and your child.
- Many times with infants and younger children, chest therapy can be done just before naps and bedtime because it puts them to sleep.
- **Do not** percuss immediately after a meal. **Do** percuss before eating or wait at least one hour after.
- Only percuss over the ribcage.
- If aerosol treatments have been prescribed, do them before percussion therapy, unless your child's physician tells you otherwise.
- Chest physiotherapy needs to be increased at the first sign of cough or illness.
- Remember: it is very important that your child does not think of chest therapy as punishment!

Transitioning to a chest vest

When your child can hold up his or her head and keep it steady, contact the doctor to ask about starting to use a chest vest for chest therapy.

Sizes and measurements for a chest vest are as follows:

- Child x-small: 16 inches to 19 inches around the chest or abdomen and 5.5 inches from base of neck to lower back.
- Child small: 19 inches to 23 inches around the chest or abdomen and 13 inches long from base of neck to lower back.