

Tips and tricks for cystic fibrosis sputum sample collection

Children and young people can find it difficult to bring up sputum when they are well or on modulator therapy. Here are some tips and tricks to help you practice producing a sputum sample during physio, sport, play and in different environments. If you are having difficulty, please discuss this with your clinic physiotherapist.

How to practice getting a sputum sample:

During airway clearance (physio)...

- Do your regular airway clearance routine and practice with each huff and cough to spit out something.
- If you use hypertonic saline, it may help to try to huff and clear after this.
- Add in star jumps until you feel a little puffed. This helps to shift more sputum.
- Cuddle your pillow to help support your stomach muscles to make your cough stronger.
- Practice 'chicken wing' coughs to get more 'oomph' in your cough.
- Take a few big breaths followed by a strong cough, then repeatedly clear your throat. Aim to move something onto your tongue and then spit it out.

After exercise...

- After a sport that makes you puffed, have your huff tube and sputum pot ready to try some huffs and coughs.
- Some great exercise ideas include; football, netball, surfing, soccer, dancing, trampolining.
- Try cartwheels and handstands before huffing. This will help move secretions.

Try different games...

- Sing energetically! Try timing your huffs /coughs with a beat or lyric of your favourite song.
- Practice gargling water and spitting it out as far as possible (do this in your backyard!).
- Tickle wars can help trigger a strong spontaneous cough.
- Rocket/butterfly huffs with tissues; see how far they fly with your best huff technique.
- Play wrestling often leads to laughter and helps move sputum.
- Try hopscotch, skipping and bear crawls. These help the frogs inside your lungs escape!
- Practice blowing a ping pong ball across the table. Can you get it to the other side?





Try different environments...

- Stand in the steamy bathroom after a warm shower take deep breaths and huffs. Try first thing in the morning when you wake up, some people clear easier after a long sleep.
- Have a swim at the beach.
- Play in the surf spray and take deep breaths.

More tips...Practice makes perfect!

- Make throat clearing sounds always spit even when it doesn't feel like you have anything to spit out.
- When you cough immediately clear your throat and spit.
- If you're having difficulty spitting into the sputum pot, wipe your tongue on the inside of the pot to practice.
- Focus on your huffs listen for the crackles. Don't cough until you have moved the crackles to the top of your throat. Think of it like a treasure hunt for frogs!
- Practice dribbling sputum/saliva into the pot.
- When brushing your teeth practice spitting toothpaste out into the sink. Aim for a spot to bullseye.
- Fog up the mirror with a huff in the bathroom and draw a picture. Huffing can help stimulate a spontaneous cough.
- Transferring drinks into different cups with your mouth. This helps build mouth coordination.

Tips and tricks for parents supporting their child:

- Make it a 'special occasion' when they produce a sample. Give lots of praise!
- Bribery is allowed four times a year!
- Keep sputum cups handy around the house, car etc to opportunistically catch a sputum sample. Make sure your child knows where they are.
- Be aware it may look just like saliva however there are often sputum specs large enough to sample under the microscope.
- Speak your child's language think of the names for coughing, spitting and sputum to help them understand. Not everyone likes frogs!
- Sometimes children are embarrassed to cough and spit. Leaving the room or turning around can help them feel less self-conscious.
- When your child is unwell it can be a good time to collect a sample and practice coughing and spitting as they will get more feedback hearing secretions shift.





This document can be made available in alternative

formats on request for a person with a disability.



Child and Adolescent Health Service 15 Hospital Avenue, Nedlands, WA, 6009. Telephone: (08) 6456 2222 Produced by: Physiotherapy Ref: 1653 © CAHS 2024

Disclaimer: This publication is for general education and information purposes. Contact a qualified healthcare professional for any medical advice needed. © State of Western Australia, Child and Adolescent Health

Service.

