

# Exercise and Sport in School

Cystic fibrosis (CF) is a genetic disease that affects a number of organs, particularly the lungs, by clogging them with thick sticky mucus. Exercise has many benefits and is an important part of the daily treatment routine for children with CF. It can help clear mucus in the airways and lungs, build up muscle mass and strength, improve general cardiovascular fitness, improve posture, slow lung function decline and improve general health and wellbeing.

## Medication

Before exercising, some children with CF may need to take some medication, such as Ventolin, to open the airway to allow them to get the most benefit from their exercise. If you have a child with CF in your class they may need to be reminded to do this before sport. They may also need to carry their medication with them while they are exercising.

## Hydration

It is important for people with CF to drink plenty of water during and after exercise to avoid dehydration, especially in hot weather. People with CF are more susceptible to dehydration due to excessive loss of salt in sweat. Dehydration can cause irritability, nausea, cramps, headaches, lethargy and fatigue. Salt replacement tablets and sports drinks such as Gatorade may be required.

## Coughing

During exercise, people with CF may experience coughing, wheezing and/or breathlessness, even when they are well. These symptoms may be worse if they are unwell. Sometimes they may need to rest for a moment until it passes or they may need to take more medication (such as Ventolin).

Coughing is a natural part of having CF. Children with CF are encouraged to cough and should not suppress this important airway clearance mechanism. Their cough is not contagious.

## Mucus

Sometimes people with CF will cough up mucus during exercise which they may either swallow or spit into a tissue. The amount of mucus a child coughs up may vary and the volume is likely to increase when they are unwell. Mucus may have some blood streaking or larger quantities of blood in it. If a child coughs up blood for the first time they should cease exercise and you should

notify their parents immediately. Coughing up large quantities of blood can be serious and requires urgent medical attention.

### **Stress Incontinence and Digestion**

Due to excessive coughing, some children with CF may have weakened pelvic floor muscles and may experience incontinence with exercise. This can be made worse by constipation which is more common in CF. It is an issue which can be quite embarrassing, and have a significant impact on health, as it may cause them to reduce their level of exercise and suppress their cough.

Children with CF may need to go to the toilet more often and may spend longer in the toilet than other children as a result of general CF digestion issues and incontinence. It may be necessary to consider access to toilets during sport.

### **Medical Plan**

It is important to be familiar with the child's medical plan to know what action may need to be taken if an emergency arises. How much exercise he or she is able to participate in will depend on the individual's level of health, how they feel from day to day and the intensity of the exercise.

### **PICCs and Ports**

Some children with CF may come to school with a PICC (peripherally inserted central catheter) line in their arm. A PICC line is used to administer IV (intravenous) medicine at home, allowing the child to leave hospital earlier. The line is sealed and covered with a bandage which enables the child to continue on with their daily life, however during this time they should not lift heavy objects, swim, play contact sports or do repetitive movements with the arm.

A port (infusaport) is a more permanent device inserted under the skin of the chest and is used to allow direct access to the blood stream. If the child is receiving regular antibiotics the port will be needled and be covered with a dressing. During this time, they should avoid swimming and upper body weighted exercises. At other times, the port won't be needled and the child can do sport as normal.

### **Useful Resources**

- CFSmart [cfsmart.org/resources-for-teachers](http://cfsmart.org/resources-for-teachers)
- CFFit [www.cfwa.org.au/what-we-offer/resources](http://www.cfwa.org.au/what-we-offer/resources)

Disclaimer: The information contained herein is provided in good faith. However accuracy of any statements is not guaranteed by Cystic Fibrosis WA. We provide the information on the understanding that persons take responsibility for assessing relevance and accuracy. Individuals are encouraged to discuss their health needs with a health practitioner.

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