

# Lungs

The health of your lungs after childhood cancer treatment

### **Background**

The lungs are essential organs that supply oxygen to the body. It is vital to be aware of the potential problems that may occur due to your treatment and what you can do to keep your lungs as healthy as possible.



Published in conjunction with Aftercure: A guide for teenage and young adult survivors of childhood cancer





## Who is at risk of lung problems?

The following treatments may affect the health of your lungs:

- chemotherapy drugs:
  - bleomycin
  - carmustine (BCNU)
  - Iomustine (CCNU)
  - busulfan
  - high doses of cyclophosphamide
- radiotherapy to the chest including mantle (from the chin to the upper abdomen), mediastinal (central part of the chest), spine or whole lung
- total body irradiation (TBI)
- surgery to lungs or chest
- chronic graft-versus-host disease following bone marrow transplant
- significant lung infections during your treatment

Your risks may also be increased by:

- younger age at the time of cancer treatment
- exposure to other drugs that can enhance the risks from radiotherapy (eg. anthracyclines and actinomycin)
- smoking
- pre-existing lung problems (chronic asthma or lung disease)



## How are lung problems screened for?

Pulmonary (lung) function test and a chest x-ray at least once after completion of all cancer treatment. Your doctors can decide with you if further testing is required based on the results and your previous treatment.

#### How will I know if I have lung damage?

Some people have no symptoms, even when their lungs have been affected by their cancer treatment. Your team may therefore want to perform regular screening tests. It is important that you attend for regular monitoring. Symptoms caused by lung problems include:

- long-standing cough
- shortness of breath
- fatigue on mild exertion/exercise
- frequent lung infections

## What can I do to keep my lungs healthy?

- Avoid smoking, including passive smoking.
- Take regular exercise and eat a healthy diet.
- Ask your GP about having pneumococcal and yearly flu vaccinations, especially if you have evidence of lung problems.
- Remember to tell the doctors that you have received bleomycin, particularly before any treatment or operation that requires an anaesthetic and oxygen. Avoid breathing high concentration of oxygen for a long period of time whenever possible (see CCLG factsheet on bleomycin factsheet).
- Avoid scuba diving until you have received further advice and assessment by a specialist from the British Diving Association.
- **Seek medical advice** before considering a parachute jump or non-pressurised flying (not in an aeroplane).
- Follow safety regulations in your work place and avoid breathing toxic fumes.

#### Where can I find out more information?

The British Sub-Aqua Club has further information about scuba diving

www.bsac.com

#### www.aftercure.org

The full range of factsheets for childhood and teenage cancer survivors are available on the CCLG and Aftercure website in conjunction with CCLG's booklet entitled 'Aftercure: A guide for teenage and young adult survivors of childhood cancer'.



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Children's Cancer and Leukaemia Group is a leading children's cancer charity and the UK and Ireland's professional association for those involved in the treatment and care of children with cancer. Each week in the UK and Ireland, more than 30 children are diagnosed. Two out of ten children will not survive their disease.

We bring together childhood cancer professionals to ensure all children receive the best possible treatment and care. We fund and support research into childhood cancers, and we help young patients and their families with our expert, high quality and award-winning

If you have any comments on this factsheet, please contact us.

CCLG publications on a variety of topics related to children's cancer are available to order or download free of charge from our website.