

The radiographers will speak to you through the intercom system to let you know when to breathe in. Don't rush – when you feel ready, take a deep breath in and hold it. Once you are in breath hold (for about 15 seconds), the yellow bar will turn green in the blue area and the treatment machine will deliver the radiation treatment. When this section of the treatment is completed the treatment machine will switch off and the radiographer will tell you to breathe normally. This process will then be repeated.

Important

Relax and follow the visual and audio prompts. Please remember:

- If your breath does not raise the bar high enough the treatment machine will not turn on.
- If you release your breath without being told, the treatment machine will switch off.

If you are struggling to hold your breath and are arching your back to achieve the green line, please exhale and when you're ready, inhale deeply again, but keep your spine relaxed. This ensures the accuracy of the treatment.

The radiographers will also be monitoring you the whole time and will help guide you through the treatment.

Contact us

Radiotherapy Basement, King George V Wing (KGV), St Bartholomew's Hospital, West Smithfield, London EC1A 7BE
020 3465 5222 Radiotherapy Reception
07917 093 738 Emergency Hotline (when the department is closed)

Vicky Clement-Jones Macmillan Cancer Information Centre

Ground Floor
West Wing, St Bartholomew's Hospital
Mon-Fri 10am-12noon and 2-4.30pm
Tel: 0203 465 5602

Support websites and groups

Cancer Research UK
www.cancerhelp.org.uk 020 7061 8355

Patient Advice and Liaison Service

If you need general information or advice about Trust services, please contact the Patient Advice and Liaison Service (PALS) on www.bartshealth.nhs.uk/pals. Alternatively please contact staff who are providing your care if you require clinical advice.

Large print and other languages

For this leaflet in large print, please speak to your clinical team.

For help interpreting this leaflet in other languages, please ring 020 8223 8934.

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Patient information

Deep Inspiration Breath Hold Technique for Radiotherapy (DIBH)

Who is this leaflet for?

This leaflet is for patients having radiotherapy to the breast or chest wall using Deep Inspiration Breath Hold technique (DIBH).

What is the deep inspiration breath hold technique?

DIBH is an effective method of limiting radiation exposure to the heart and lungs.

This treatment technique requires you to hold your breath during your CT scan and radiotherapy treatment. By holding your breath, the treatment area is pushed away from the heart and lungs. It also eliminates movement caused by breathing.



This treatment technique will be discussed with you by your oncologist. The oncologist will take into account your ability to comfortably hold your breath for a short period of time.

You can decline to have Deep Inspiration Breath Hold treatment and your oncologist will discuss the risks and benefits of this along with alternative radiotherapy techniques.

What will you need to do?

At home, practice holding your breath for 15 seconds. Repeat this several times in a row. Daily practice will help improve your ability and confidence in taking and holding bigger breaths.

At the CT scan, the radiographers will explain and demonstrate what a 'deep inspiration' (big breath) means. The radiographers will practice this with you to make sure you are comfortable before going ahead with the scan.

Tips to performing DIBH

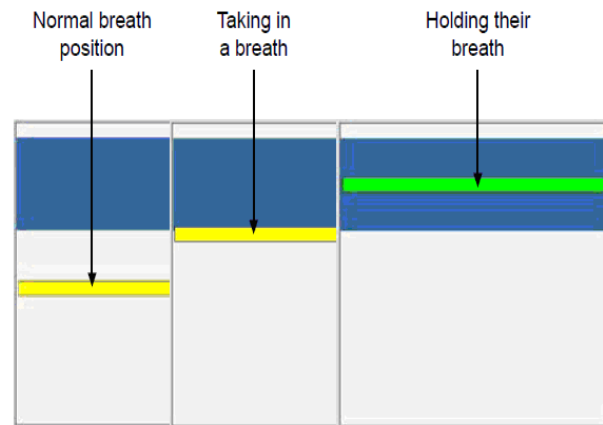
- Try and stay as relaxed as possible
- Follow the visual and audio prompts
- Breathe in through your nose (if you can) – this helps to achieve a similar amount of air in your lungs.
- Lie heavy on the bed and focus on expanding your lungs.
- Don't arch your back when you breathe in. Don't raise your shoulders when you breathe in.

What to expect at the planning CT scan appointment

The radiographers will position you on the couch in the preferred position. A small plastic box will be placed on your chest and a camera will monitor the motion of this box. This motion represents your breathing.

You will be given goggles which show you a picture representation of your breathing. The display will help you to see if you are taking enough air into your lungs. The radiographers will ask you to hold your breath a few times for approximately 15 seconds.

The image shows the goggle view of someone taking a breath to hold:



The yellow bar (shown in the picture) moves up and down when you breathe in and out.

When you hold your breath the yellow bar will move up into the blue area and turn green.

When you breathe out the green bar will move down into the blue area and turn yellow.

It is important to take a consistent deep breath. If you are finding it difficult to breathe into the blue area please inform the CT radiographers. The settings are individual and can be adjusted.

What to expect during the treatment appointments

The radiographers will position you on the couch in exactly the same way as you were for the CT scan. A small plastic box will be placed on your chest and a camera will monitor the motion of this box. Instead of the goggles, a mirror will be positioned above you. In the mirror you will see the same screen as you did at your planning appointment – a yellow bar to represent your breath and a blue box to represent your target breath hold. Ask the radiographers to adjust the mirror if you cannot see clearly.

The radiographers will practice the breathing with you to make sure you are comfortable and consistent when raising the yellow bar into the blue area and holding for 15 seconds. You will be given verbal instructions through an intercom system. Ask the radiographers to adjust the volume if you cannot hear.

When the radiographers are happy you are in the correct position they will inform you they are ready to leave the room. Lie still and breathe normally. You are monitored on CCTV.