DEEP INSPIRATION BREATH HOLD RADIATION THERAPY

You may benefit from a Radiation Therapy technique called Deep Inspiration Breath Hold (DIBH). If this technique is recommended for you, this leaflet will help you to train yourself for your planning CT scan and your radiation therapy treatment.

What is Deep Inspiration Breath Hold?
DIBH is a radiation therapy technique where you take in a deep breath and hold this breath for a short time. By taking a deep breath in, your lungs fill with air and your heart will move away from your chest wall. DIBH can be useful in situations where radiation therapy is needed in the chest region to avoid radiation dose to the heart.

What is Deep Inspiration Breath Hold used for?
DIBH is used in particular circumstances to minimise radiation dose to the heart. This may be used for:
- left-sided breast cancer
- other tumours of the chest or upper abdomen as required

What does Deep Inspiration Breath Hold mean for you?
During DIBH you will be required to hold your breath for up to 20 seconds. This is not difficult for most people when they have practised it. The radiation beam will only turn on when we direct you to take a deep breath in. As you take a deep breath in, the heart moves away from the treatment area (represented by the pink radiation beam) as seen in the picture below.

This diagram is a cross section through the upper chest.

DIBH involves the delivery of radiation whilst you are in a deep inspiration breath hold. This will limit the amount of your heart that is exposed to the radiation beam during treatment. The radiation therapy team will coach you during your planning and treatment sessions.
How to practice your Deep Inspiration Breath Hold at Home

1. Lie on your back on your bed or on the floor.
2. Use a pillow to support your knees and head.
3. Place your arms above your head (this is similar to the radiation treatment position).
4. When you are ready, take a slow deep breath in.

   **Your back should not lift up from your bed** when you take a deep breath in.

5. When you are ready and confident, take a slow deep breath in and hold your breath for at least 20 seconds.

7. Return to your normal breathing
8. Once you feel you have returned to your normal breathing, it is time to try again.

Practice this way of breathing a few times daily. Remember to relax, focus on your breathing and most importantly take it at your own pace. Your radiation therapy team will be there to assist and coach you.