Recommended Exercises
During and After Radiation Therapy for Breast Cancer

Why are these exercises important?
Radiation therapy may cause tightness of the chest muscle, which may affect shoulder movements. Exercises will help you to return to your daily activities (like bathing, cooking, dressing, driving). When movement is back to normal, try adding more exercises to keep your body, muscles, and bones strong.

How should I do these exercises?
Exercises during radiation therapy are different from those you would do after radiation therapy. Follow these steps to help recover your treated area:

1. Exercise during radiation therapy and monitor skin healing
2. Assess your shoulder movement
3. Exercise to improve flexibility and prevent complications

When you are doing these exercises, dress comfortably in loose clothing, do them slowly, and breathe deeply. Listen to your body and progress at your own pace.

Step 1. Exercise during therapy and monitor skin healing
- Perform these exercises every day until your shoulder movement is back to normal. Be gentle and do not overstretch. Listen to your body and rest when needed.
- Skin changes may occur during and after radiation therapy. If you notice that your skin is red, inflamed, sore, or hot, please consult your nurse. During a skin reaction, be extra cautious to not overstretch your irradiated chest wall and shoulder.
### A. Cane or stick* over the head

1. Lie on your back with knees bent as shown, holding a cane or stick with both hands, shoulder width apart
2. Raise both hands overhead slowly, so that you feel a stretch
   - Hold 3-5 seconds
   - 8-10 repetitions, 2-3 sets, 2 times a day

### B. Cane or stick* to the side

1. Stand holding stick as shown with your *affected arm* out to side
2. With the stick, use your opposite arm to push your *affected arm* away from your body
3. Slowly return to the starting position
   - Hold 3-5 seconds
   - 8-10 repetitions, 2-3 sets, 2 times a day

*For exercises A and B, you can use a household item like a broomstick or long umbrella*

### C. Snow angels

1. Lie on your back with knees bent and shoulder width apart
2. With palms of hands facing up, slowly glide arms towards the ears, until hands touch
   - Hold 3-5 seconds
   - 8-10 repetitions, 2-3 sets, 2 times a day
### D. Towel or scarf pull behind the back

1. Stand with towel as shown with *affected arm* behind back
2. Stretch the arm up behind your back by pulling upward on the towel with the other hand for assistance
   - Hold 3-5 seconds
   - 8-10 repetitions, 2-3 sets, 2 times a day

### E. Front spider crawl

1. Stand facing a wall with *affected arm*, as shown
2. Slowly “walk” or “crawl” your fingers up the wall, so that you feel a stretch
3. As your fingers go higher, keep your arm straight and move your body closer to the wall
   - Hold 3-5 seconds
   - 8-10 repetitions, 2-3 sets, 2 times a day

### F. Side spider crawl

1. Stand beside a wall with *affected arm*, as shown
2. Slowly “walk” or “crawl” your fingers up the wall, so that you feel a stretch
3. As your fingers go higher, keep your arm straight and move your body closer to the wall
   - Hold 3-5 seconds
   - 8-10 repetitions, 2-3 sets, 2 times a day

### G. Scapular retraction

1. Stand with arms at sides as shown
2. Pull your shoulder blades together slightly and try to push shoulder blades down
   - Hold 3-5 seconds
   - 8-10 repetitions, 2-3 sets, 2 times a day
H. Shoulder external rotation
1. Stand straight with your legs comfortably apart and chin tucked in
2. Raise both arms and clasp your hands behind your head
3. Push your elbows back as much as you can to feel a stretch
   - Hold 3-5 seconds
   - 8-10 repetitions, 2-3 sets, 2 times a day

I. Shoulder extension
1. Stand up tall with your shoulders and back straight
2. Clasp your hands behind your back
3. Raise your hands away from your back until you feel a gentle stretch across your chest wall and in front of your shoulders
   - Hold 3-5 seconds
   - 8-10 repetitions, 2-3 sets, 2 times a day

Step 2. Self-assess your shoulder movement
- 6-8 weeks after your radiation therapy, if you are unable to do the following 6 shoulder movements, please consult a physiotherapist.

1. Raise arms from side of body to over your head
2. Move hand up to reach middle of your back
3. Raise arms from front of body to over your head
4. Raise elbows to the side with hands down
5. Raise elbows to the side with hands up
6. Clasp hands behind back and move away from body
Step 3. Exercise to improve flexibility and prevent complications

- When your skin reaction has settled and you have regained your shoulder movements, progress to these exercises.

A. Chest wall stretch A

<table>
<thead>
<tr>
<th>1. Stand up next to a wall</th>
<th>2. Place your <em>affected arm</em> along the wall so that your elbow is <strong>in line with</strong> your shoulder, as shown in image</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Rotate your body away from your raised arm until you feel a stretch across your chest</td>
<td>• Hold 15 – 30 seconds</td>
</tr>
</tbody>
</table>

B. Chest wall stretch B

<table>
<thead>
<tr>
<th>1. Stand up next to a wall</th>
<th>2. Place your <em>affected arm</em> along the wall so that your elbow <strong>higher than</strong> your shoulder, as shown in image</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Rotate your body away from your raised arm until you feel a stretch across your lower chest</td>
<td>• Hold 15 – 30 seconds</td>
</tr>
</tbody>
</table>

C. Shoulder flexion/tricep stretch

<table>
<thead>
<tr>
<th>1. Stand holding elbow of your <em>affected arm</em> with other hand, as shown</th>
<th>2. Pull elbow behind and toward your head so that you feel a stretch</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hold 15 – 30 seconds</td>
<td>• 3 – 4 repetitions, 2 – 3 times a day</td>
</tr>
</tbody>
</table>

D. Scapular retraction

<table>
<thead>
<tr>
<th>1. Stand with arms at sides as shown</th>
<th>2. Pull your shoulder blades together slightly and try to push shoulder blades down</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hold 3-5 seconds</td>
<td>• 8-10 repetitions, 2-3 sets, 2 times a day</td>
</tr>
</tbody>
</table>
### E. Shoulder extension

1. Stand up tall with your shoulders and back straight
2. Clasp your hands behind your back
3. Raise your hands away from your back until you feel a gentle stretch across your chest wall and in front of your shoulders
   - Hold 15 – 30 seconds
   - 3 – 4 repetitions, 2 – 3 times a day

### F. Shoulder external rotation and back extension

1. Stand straight with your legs comfortably apart and chin tucked in
2. Raise both arms and clasp your hands behind your head
3. Push your elbows back as much as you can to feel a stretch
4. Lift your upper back and look up towards ceiling
   - Hold 15 – 30 seconds
   - 3 – 4 repetitions, 2 – 3 times a day

This information should not be considered as medical advice. It is not to be used in place of a visit with a doctor, nurse, physiotherapist, or other healthcare professional. If you have questions about your individual medical situation, please consult with your healthcare professional.

The Quebec Breast Cancer Foundation is proud to promote bone health in women with breast cancer through financial support of the Breast & Bone Health Program.