Shortness of breath can be a normal symptom of heavy exertion. But shortness of breath becomes limiting if it occurs in unexpected situations such as daily tasks or light exercise. Treatment typically depends on the underlying cause.

What causes shortness of breath?
It is due to either chest conditions such as asthma, pneumonia or chronic obstructive pulmonary disease or cardiac causes such as cardiac ischemia, or congestive heart failure.

How can physiotherapy help?

   - Take a slow, deep breath through your nose. Breathe in for 3 seconds. Feel your belly expand as you inhale.
   - Hold the breath for 3 seconds.
   - Pucker your lips, and exhale through your mouth.
   - Breathe out slowly and evenly for 6 seconds. Feel your abdomen (belly) move inward.
   - Repeat the first three steps 3 to 5 times to experience the calming effect of deep breathing.

2. Positions to Reduce Shortness of Breath
In conjunction with the breathing control techniques above, use these breathing positions to help you reduce shortness of breath.

These positions are helpful when you have shortness of breath during activity, emotional excitement, exposure to adverse weather conditions or when you feel tense and need to relax.

Sitting
- Rest your feet flat on the floor.
- Lean your chest forward slightly.
- Rest your elbows on your knees or rest your chin on your hands.
- Relax your neck and shoulder muscles.
• OR—
  • Rest your feet flat on the floor.
  • Lean your chest forward slightly.
  • Rest your arms on a table.
  • Rest your head on your forearms or on some pillows.

Standing
• Stand with your feet shoulder width apart.
• Lean your hips against a wall.
• Rest your hands on your thighs.
• Relax your shoulders, leaning forward slightly and dangling your arms in front of you

• OR—
  • Rest your elbows or hands on a piece of furniture, just below shoulder height.
  • Relax your neck, resting your head on your forearms.
  • Relax your shoulders.

Sleeping
• Lie on your side with a pillow between your legs and your head elevated with pillows. Keep your back straight.

• OR—
  • Lie on your back with your head elevated and your knees bent, with a pillow under your knees.

3. Regular Exercise
It is important to exercise most days. You are advised to exercise at least 5 out of 7 days, and not to take two days off in a row. This is because you start to lose the benefits of exercise within 48 hours, so it is important to avoid this.

Here are a couple of tips to help you to gauge what level of exercise is the correct level for you.
• When you are walking you should be able to talk but not sing.
• You should feel slightly to moderately breathless immediately post exercise, and you should recover from this breathlessness after a short rest (you can rate this using the Borg scale on Page 3).
• You should not feel so tired after your walk that you need to go to bed to recover. You may need to take a daily nap in the weeks following your surgery, which is normal, but should not be related to your walking.

You should stop exercise if you experience any of the following:
• Dizziness
• Palpitations
• Chest discomfort
• Sickness
• Cramps
• Extreme fatigue

**How do I know when I am doing too much/ little?**

Shortness of breath is graded on the *Borg Scale Rating of Perceived of Effort*. While doing physical activity, we want you to rate your perception of exertion. This feeling should reflect how heavy and strenuous the exercise feels to you, combining all sensations and feelings of physical stress, effort, and fatigue.

Look at the rating scale below while you are engaging in an activity; it ranges from 6 to 20, where 6 means "no exertion at all" and 20 means "maximal exertion." Choose the number from below that best describes your level of exertion. This will give you a good idea of the intensity level of your activity, and you can use this information to speed up or slow down your movements to reach your desired range.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Perception of effort</th>
</tr>
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<tbody>
<tr>
<td>6</td>
<td>Very, very light</td>
</tr>
<tr>
<td>7</td>
<td>Very light</td>
</tr>
<tr>
<td>8</td>
<td>Fairly light</td>
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<tr>
<td>9</td>
<td>Somewhat hard</td>
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<tr>
<td>10</td>
<td>Hard</td>
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<tr>
<td>11</td>
<td>Very hard</td>
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<tr>
<td>12</td>
<td>Very, very hard</td>
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<td>13</td>
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<td>19</td>
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<td>20</td>
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Please ask your physiotherapist if you have any questions about any of this information. Should you need any further advice, once you are discharged, please contact UPMC Beacon Physiotherapy on 01-2936692.

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