Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

Breathing Exercises

This information describes breathing exercises that can help stretch and strengthen your breathing muscles. Doing these exercises can help you recover from infections that cause breathing problems, such as pneumonia, bronchitis, and COVID-19.

Check with your healthcare provider to see if you should follow any safety guidelines before starting any exercise. If you experience pain beyond light discomfort, stop doing the exercises and speak with healthcare provider.

Your diaphragm, chest wall (rib cage), and abdominal (belly) muscles (abs) help you breathe.

- Your diaphragm is the muscle that separates your chest and abdominal cavity. It gets tight when you breathe in. Taking extra deep breaths helps make this muscle stronger.
- Your chest wall and abdominal muscles get tight when you breathe out, especially when you cough. Breathing out strongly through pursed lips (like blowing out candles) helps make these muscles stronger.

If you have COVID-19 or another respiratory infection, only do these exercises when you're alone. Deep, forceful breathing can release bacteria and viruses into the air and infect people near you.

Please visit www.mskcc.org/pe/breathing-exercises-video to watch this video.

Splinted coughing

Squeezing a pillow against your abdomen when you cough can help make your cough stronger and less painful. This is called splinted coughing. You can use splinted coughing anytime you need to cough, including when you're doing these exercises (see Figure 1).

Figure 1. Splinted coughing

You can do each exercise 3 times a day (morning, afternoon, and evening).

Shoulder rolls

The shoulder roll is a good exercise to start with because it's a gentle stretch for your chest and shoulder muscles.

1. Sit comfortably or lean back in bed with your arms relaxed at your sides.
2. In a circular motion, bring your shoulders forward, up, backward, and down (see Figure 2).

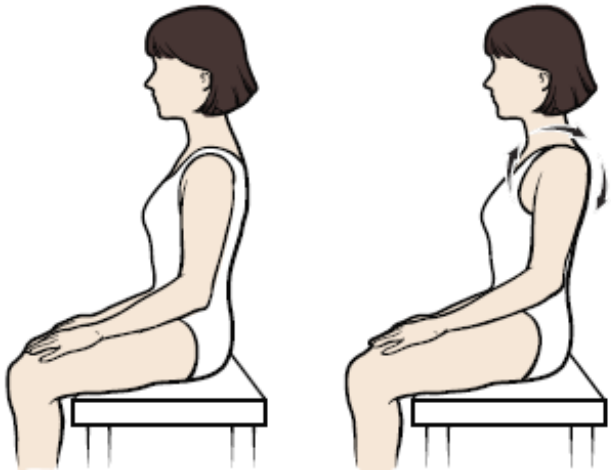

Figure 2. Shoulder rolls

3. Repeat 5 times.

Try to make the circles as big as you can and move both of your shoulders at the same time. If you have some tightness across your chest, start with smaller circles and make them bigger as your muscles get looser.

Diaphragmatic breathing

This exercise can help relax your chest wall and abdominal muscles.

1. Lie on your back or sit in a supportive chair.
2. Place one or both of your hands over your abdomen (see Figure 3).

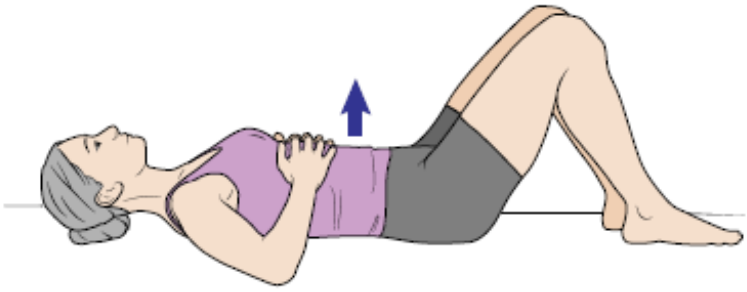

Figure 3. Diaphragmatic breathing

3. Breathe in slowly and deeply through your nose. Your abdomen should rise, but your upper chest should remain still and relaxed.
4. Breathe out slowly through pursed lips (like blowing out candles). As you breathe out, slowly and gently pull your abdomen towards your spine.
5. Repeat 5 times.

Shoulder blade squeezes

Shoulder blade squeezes are a good way to help expand your chest wall and move your ribs so you can take deeper

breaths.

1. Sit in a supportive chair or lean back in bed.
2. With arms relaxed at your sides, turn your palms to face up. Gently squeeze your shoulder blades back and down (see Figure 4). This should make your chest puff out.

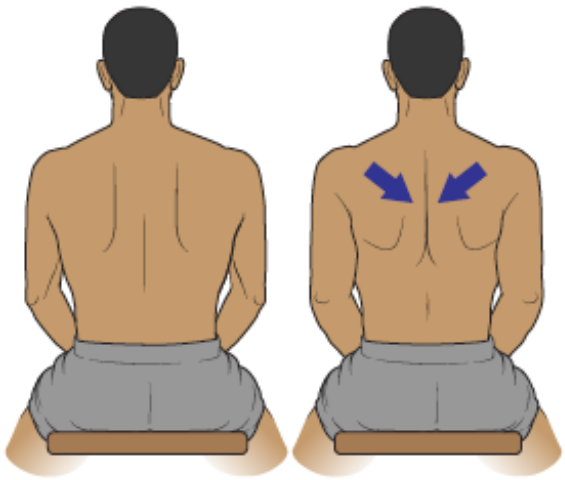

Figure 4. Shoulder blade squeezes

3. Breathe in through your nose and out through pursed lips (like blowing out candles).
4. Relax for a second or two, then repeat 5 times.

Overhead chest stretch

The overhead chest stretch is a good way to loosen the muscles in your chest and help air move in and out of your lungs. This helps to increase the amount of oxygen in your whole body.

1. Sit in a supportive chair or lean back in bed.

2. Gently squeeze your shoulder blades back and down.
3. Hold your hands together and slowly raise your hands as high over your head as comfortable while taking a deep breath in (see Figure 5).

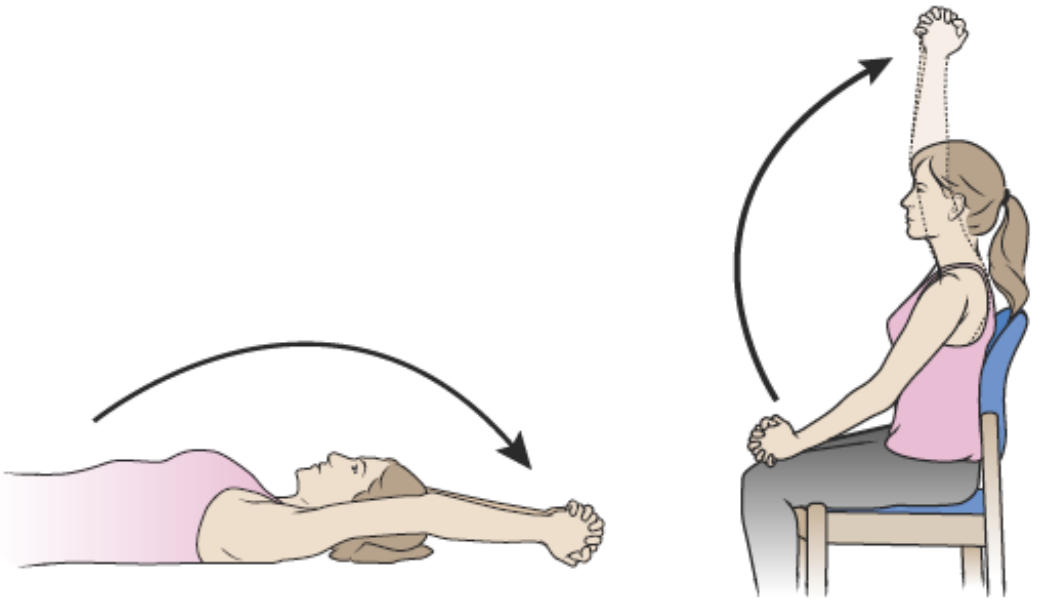

Figure 5. Overhead chest stretch

4. Slowly lower your hands back down while breathing out.
5. Relax for one to two seconds, then repeat 5 times.

Quick sniffles

This exercise can help strengthen your diaphragm to help you breathe in more air.

1. Sit in a supportive chair or lean back in bed.
2. Take a deep breath through your nose, then quickly sniff in through your nose at least 3 times (without breathing out) (see Figure 6).

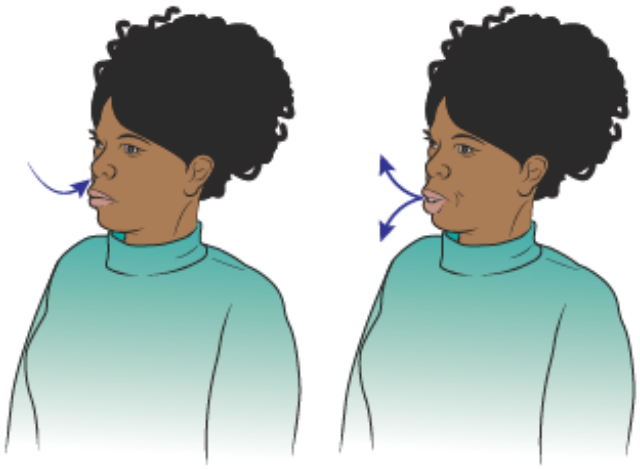

Figure 6. Quick sniffles

3. Breathe out slowly through pursed lips (like blowing out candles).
4. Relax for a second or two, then repeat 3 times.

Deep breathing 4-8-8

This is an exercise that increases the amount of oxygen in your whole body.

1. Sit in a supportive chair or lean back in bed.
2. Breathe in through your nose for 4 seconds.
3. Hold your breath for 8 seconds, if you can (see Figure 7).

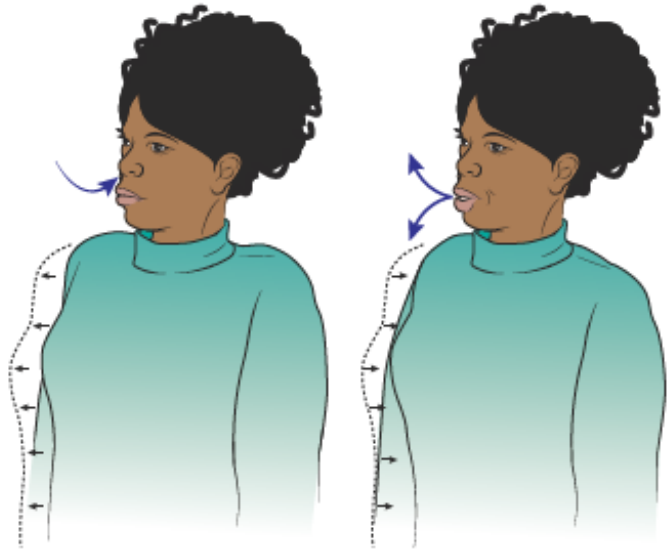

Figure 7. Deep breathing 4-8-8

4. Breathe out through pursed lips (like blowing out candles) for 8 seconds.
5. Relax for one to two seconds, then repeat 3 times.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

Breathing Exercises - Last updated on December 7, 2023

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