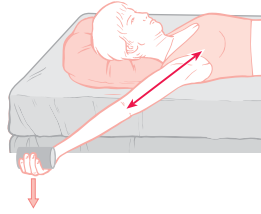


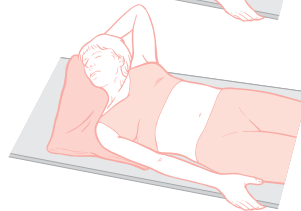
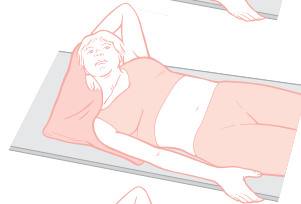
Pectorals

Once daily lie at edge of bed holding a half-kilo can, arm out sideways. Raise arm and hold for 10 seconds, then allow arm to hang down, stretching upper chest muscles for 30 seconds.



Upper trapezius

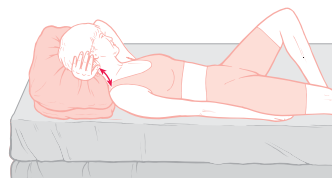
Right side, posterior fibers: Lie at edge of bed. Stretch right arm toward feet and grasp edge. Turn head *fully* left. Use left hand to ease head sideways left. Lightly contract muscle between neck and shoulder on right without movement ('ear to shoulder/shoulder to ear') for 10 seconds. Relax. Turn and bend head further to left. Stretch right arm further down edge of bed. Hold stretch for 30 seconds.



Same procedure with head *half* turned left, and turned *slightly to right* treats middle and anterior fibers of muscle respectively.

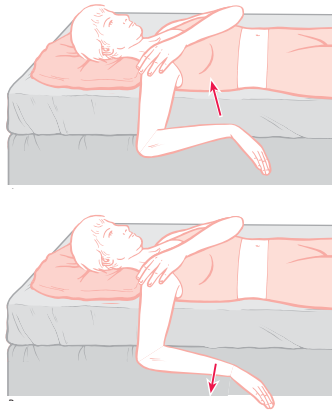
Levator scapula

Place cushions under neck. Same position as for upper trapezius, posterior fibers. Contract by pushing head back against hand's resistance for 10 seconds. Relax. Take head/neck further forward, and left. Take arm toward feet. Lie on hand. Hold for 30 seconds.



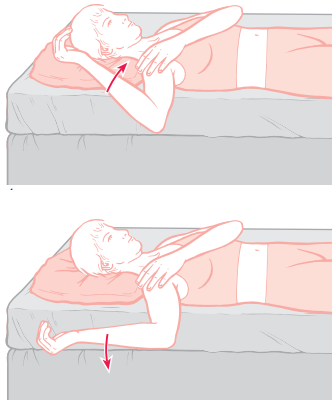
Infraspinatus

Lie at edge of bed, upper arm extended sideways, elbow bent, lower arm parallel with trunk, palm down. With other hand hold shoulder toward bed/surface throughout exercise. Raise back of lower arm toward ceiling for 10 seconds. Relax and allow arm/hand to ease toward floor. Hold position for 45 seconds. Repeat.



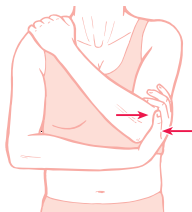
Subscapularis

Lie at edge of bed, upper arm extended sideways, elbow bent, lower arm parallel with neck, palm up. With other hand hold shoulder toward bed/surface throughout exercise. Raise front of lower arm toward ceiling for 10 seconds. Relax and allow arm/hand to ease toward floor. Hold position for 45 seconds. Repeat.



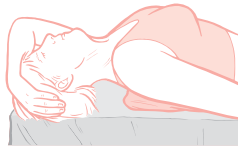
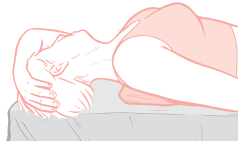
Supraspinatus

For left side: Sit. Place left hand on right shoulder. Hold left elbow with right hand. Push lightly to left against resistance from right hand for 10 seconds. Relax. Using light pressure ease left elbow further to right to stretch muscle. Hold for 30 seconds. Repeat.



Scalenes

For right side: Lie with folded towel under shoulders. For posterior scalene turn head fully left. Place left hand on head/face. Lightly *lift and turn* head to right against resistance from hand for 7 seconds. Relax. Let head rest on surface putting light stretch on right side of neck for 30 seconds. Repeat.



For middle and anterior scalenes same sequence but with head in half turn left, or lying straight.

Sternocleidomastoid

For right side: Lie with folded towel under shoulders, head turned fully left. Raise head sideways, just off the surface. Hold for 7 seconds. Rest head on surface for 30 seconds. Repeat.



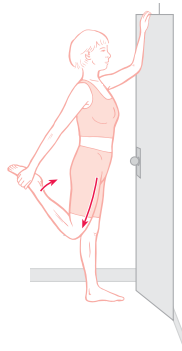
Sternocleidomastoid

For right side: Sit in upright chair, back close to wall, cushion behind neck/shoulders. Sit forward on chair so that head tilts back when resting on cushion. Turn head fully left. With *eyes only*, look upward and toward left for 10 seconds. Close eyes and let head rest back and turned further left, for 30 seconds. Repeat.



Psoas and rectus femoris

For right side: Stand facing wall. Use left hand to stabilize. Bend right knee, holding ankle with right hand. Take right thigh backward to create stretch in front, *without bending forward at hips*. Lightly straighten lower leg against right hand resistance for 10 seconds. Relax. Take thigh further back. Bend knee further. Hold for 30 seconds. Repeat.



Piriformis

For left piriformis: Lie face down. Bend left knee. Allow left lower leg to fall outward toward the floor. When relaxed, bring left lower leg slightly toward the upright. Hold for 10 seconds. Relax. Let leg fall outward for further 30 seconds. Repeat.



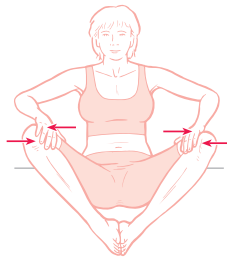
Hamstrings/low back

Sit on floor, legs outstretched. Bend forward as far as comfortable. Grasp legs. Sit up against resistance from held position for 10 seconds. Relax. Bend further forward. Hold for 30 seconds. Repeat.



Adductors

Sit on floor, soles of feet together, knees fully separated. Use hands to resist attempt to bring knees together for 10 seconds. Relax. Ease knees further apart; hold for 30 seconds. Repeat.



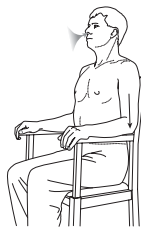
Establishing correct breathing pattern: hi-lo test

Sit in front of a mirror, one hand on upper chest, other hand on upper abdomen. Maintain this during early stages when practicing (a) pursed lip breathing, (b) antiarousal breathing, to observe that abdomen *does* move first, outward, and that chest/hand *does not* move toward the chin. If it does, use shoulder stabilization methods when practicing breathing. Once a week recheck breathing pattern using this test.



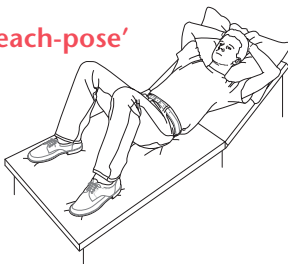
Shoulder stabilization method: chair

Sit in upright chair with arms. When inhaling during breathing exercise push down lightly onto chair arms with forearms to 'lock' shoulders. Release downward pressure as you exhale.



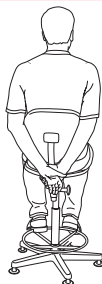
Shoulder stabilization method: 'beach-pose'

Lie or recline with hands clasped behind your neck/head. Maintain this position as you practice breathing exercise to restrict shoulder movement and 'open' chest.



Shoulder stabilization method: wrist grasp

Sit in office-style chair, hands behind back, grasping one wrist with other hand. On inhalation, during breathing exercise, pull the arm down toward floor to 'lock' shoulder movement. Release as you exhale.



Pursed lip breathing exercise

- Adopt hi-lo test position, one hand on the abdomen, the other hand on the chest.
- On inhalation your abdomen should move forward.
- Breathe in *through the nose* and *slowly* out through the mouth, with pursed lips.
- Repeat this 20–30 times twice daily.
- To encourage pursed lip breathing, imagine that you are (a) blowing through a straw, (b) slowly blowing up a balloon.

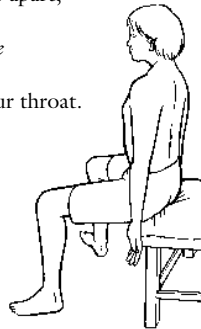
Antiarousal exercise

- Adopt hi-lo test position.
- On inhalation your abdomen should move forward with no upward movement of the chest.
- Breathe in *through the nose* and *slowly* out through the mouth, with pursed lips.
- Count to yourself as you inhale and exhale, to establish the desired rhythm, with exhalation taking twice as long as inhalation. (It may take some weeks of practice to achieve this.)
- Avoid focus on inhalation. Let this be uncontrolled, after the full exhalation.
- The long, slow exhalation creates the opportunity for a full inhalation.
- After several weeks of practice, a full cycle (in and out) should last about 10 seconds, when doing the exercise.
- You may feel light-headed after the exercise so sit quietly for a minute or two before resuming normal activities.
- Repeat 30 cycles twice daily.

Brugger position for breathing rehabilitation

Adopt the Brugger position, several times daily, especially if you spend time seated at a desk.

- Sit close to the chair edge, arms hanging down.
- Place feet below the knees, then move them slightly more apart, and turn them slightly outward.
- Roll your pelvis slightly forward to produce a *small degree* of low back arching.
- Ease your breast bone slightly forward and up toward your throat.
- Turn your arms outward, palms facing forward.
- Separate your fingers until your thumbs face slightly backward.
- Tuck your chin in.
- Maintain this while you practice 5 cycles of slow, pursed lip, antiarousal breathing.
- Repeat whenever you sense muscle tension during sitting, or a need for deeper breathing.



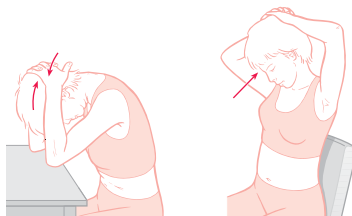
Side bending of the neck

To improve left side bending: Sit at a table, left elbow resting on it. Side bend neck to comfortable limit. Rest left side of face against left hand. Using quarter strength, push left against resisting hand, for 7 seconds. Relax. Bend neck further to the left. Repeat. Alternatively, 'pulse' head against hand 20 times in 10 seconds, before taking it further to the left. Repeat.



Improving neck flexion: 1

Sit at a table, both elbows resting on it (or sit in a chair), your head/neck bent forward as far as possible, both hands clasped behind your head to hold it forward. Using a small effort, try to straighten neck against resistance from hands, for 7 seconds. Relax. Take head/neck further into flexion. Repeat.



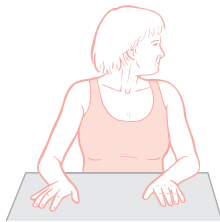
Improving neck flexion: 2

Sit at a table, both elbows resting on it, your head/neck bent forward as far as possible, forehead resting on hands. Try to bend head further forward against resistance of hands, for 7 seconds. Relax. Take head/neck further into flexion. Repeat.



Improving neck rotation: 1

Sitting upright, turn your head (painlessly) as far as possible in one direction (left in this example). With *eyes only*, look toward the right as far as possible for 7 seconds. Relax and close eyes, and turn head further to the left. Repeat. Do same with head turned to the right (eyes to the left).



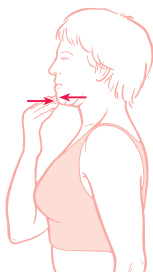
Improving neck rotation: 2

Sitting at a table, turn your head as far as you can in one direction (left in this example). Place your left hand against left side of face. Turn further to the left against resistance of left hand for 7 seconds using quarter strength. Relax. Turn head further to left. Repeat. Do same with head turned to right.



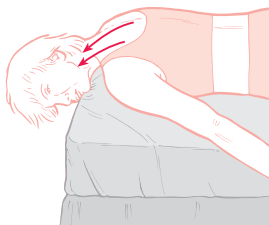
'Gapping' facets at back of neck

Sit upright. Ease your chin backwards toward the back of your neck (a 'shunting' movement), as far as possible. Put one hand on your chin and restrain a mild effort to push forward for 7 seconds. Relax. Take the jaw backward again to stretch the small muscles at the back of the neck. Hold for 30 seconds. Repeat.



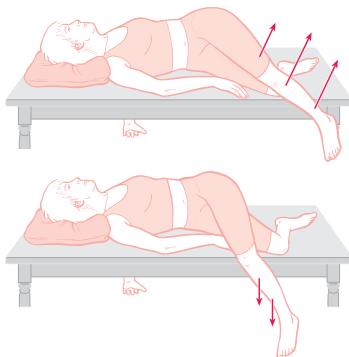
Releasing muscles of the upper back

Lie face down at end of bed, upper part of head and face over the edge. With head turned left (in this example) you are supported on the side of the face. Let your head hang down, and then lift it a fraction (1 inch/2.5 cm). Hold for 7 seconds and then relax, letting the head hang down, with gravity stretching the left upper back muscles. After 30 seconds repeat, then turn head to the right and repeat.



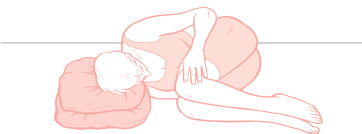
Stretching left side back muscles

Lie on your right side, 6 inches (15 cm) from the edge of a bed. Hang your left arm behind you. Stretch your right arm toward your feet. Turn your head left. Hang your left leg over the edge of the bed, right hip and knee slightly bent, right knee resting at the edge. Raise your left leg 1–2 inches (2.5–5 cm). Hold 7–10 seconds. Relax. Let left leg hang toward the floor. Hold stretch for 30 seconds. Repeat. Turn and do same on other side.



Gentle curling spinal stretch

Lie on right side (in this example), pillow under head. Keep legs together, one on the other. Bend knees and curl into bent position, back rounded, nose close to knees. Breathe slowly and deeply for 30 seconds, then hold breath and as you breathe out curl further. Stay in this position for another 30 seconds.



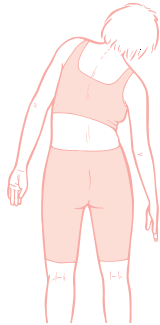
Stretching latissimus dorsi (right side)

Lie on left, back at edge of bed, pillow under waist. Bend left knee and hip. Right leg hangs behind, off edge of bed. Extend right arm above your head, upper arm against side of face, lower arm hanging over end. Raise right arm and leg 1 inch (2.5 cm) for 10 seconds. Relax. Allow arm and leg to hang loose for 30 seconds. Repeat. Turn and do same on other side.



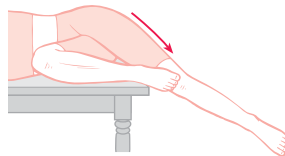
Stretching quadratus lumborum (left side)

Stand, feet shoulder width apart. Side bend to the right (to stretch left side). When side bent as far as comfortable, breathe in deeply and move slightly (1 inch/2.5 cm) toward the upright. Hold for 7 seconds. Release. Bend further to the right and hold for 30 seconds. Repeat. Do same on other side.



Stretching tensor fascia lata (left side)

Lie on right side (to stretch left) with your buttocks close to end of bed. Bend right hip and knee for stability and let left leg hang over edge. Raise left leg 1–2 inches (2.5–5 cm) for 10 seconds. Relax and allow leg to hang down, stretching muscles at side of hip and thigh, for 30 seconds. Repeat. Turn over and do same on other side.



Strengthening (left) gluteus medius

Lie on right side, right leg straight, left leg bent slightly at hip and at knee so that foot rests on floor just below the right knee. Keeping your foot on the floor, raise left knee 45°. Hold this for at least 10 seconds and lower. Repeat 5 times. Do same other side. Note: ability to maintain leg in this position for 10–15 seconds suggests normal strength.



Strengthening gluteus maximus

Lie face down. Bend knee on side to be toned. Lift that leg 2 inches (5 cm) off the floor, without arching your back. Hold this position for at least 10 seconds. Slowly lower leg to the floor and repeat 5 times. Do same on other side. Note: ability to maintain leg in this position for 10–15 seconds suggests normal strength.



Strengthening rhomboids, mid/lower trapezius

Sit upright with arms hanging down, palms forward. Start repetitive mini-contractions (start/stop, start/stop), bringing shoulder blades together and turning arms further outward. Perform 20 rhythmic mini-contractions in 10 seconds, then rest. Repeat 3 more times to tone these muscles.



Toning deep abdominal muscles ('dead-bug' exercises)

Lie on back, legs out straight. Raise your head, then your shoulders from the floor, arms at your side. Can you do this comfortably, for at least 10 seconds, *without* your abdomen 'doming' or your low back arching? If not, do the next 4 exercises until you can.



Abdominal retraction ('bring navel to spine', as in this example) and normal breathing should be maintained throughout all stages of these exercises.



Exercise A: Raise both arms and one foot 2 inches (5 cm) from the floor and hold for 5–8 seconds. Do this with each leg 5–10 times until it is easy.



Exercise B: Same as previous exercise except raised leg needs to come 12 inches (30 cm) off the floor. Do this with each leg 5-10 times until it is easy.



Exercise C: Same as previous exercise except both feet are held 12 inches (30 cm) from floor for 5–8 seconds. Repeat 5–10 times until it is easy.

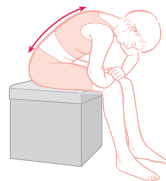


Exercise D: Same as previous exercise except both feet are raised 24 inches (60 cm) from the floor for 5–8 seconds. Repeat 5-10 times until it is easy. In this final position gentle 'cycling' motions add to the toning effect.



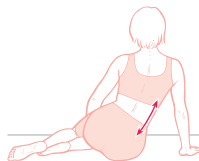
Mobilizing lower back

Sit in upright chair, feet flat, resting palms of hands on thighs above knees, fingers facing each other. Let elbows bend outwards as you bring head and chest toward your knees until a slight low back stretch is experienced. Hold this position, breathing slowly for 3 full cycles. As you exhale move back to start position. Repeat 5 times, going a little further each time. Hold the final stretch for 30 seconds. Repeat daily.



Mobilizing lower back

Sit on floor on right buttock, knees bent, feet together on the left, supported by straight right arm. Push against the floor to slightly straighten your body, until you feel a slight stretch in the lower back. Keeping elbow straight introduce rhythmic mini-pushes against the floor, taking your left shoulder toward the left. Rest after 20 'pulsations'. Ease trunk toward the midline a little, and repeat 20 pulsations. After third sequence stay in position 30 seconds, then change sides. Repeat daily.



Lower spinal twist

Lie on carpeted floor, both knees bent. Cross left leg over right. Let gravity ease left foot toward the floor. 'Stretch' but not pain should be felt. Lift the left foot slightly (3 inches/7 cm) and rhythmically bounce the foot toward the floor, and back again, 'springing' the lower back. After 5 pulsations, rest in the twisted position for 30 seconds. Repeat the exercise on the other side. Repeat daily.



Upper spinal twist

Lie on floor, hands behind neck, elbows together, knees bent, feet flat. Raise head 2 inches (5 cm) and rhythmically, repetitively, twist trunk in opposite directions so that first one elbow then the other touches the floor. Repeat 5–10 times each side. Rest. Repeat daily.



Mobilizing upper spine

Get onto hands and knees, thighs vertical to the floor, hands flat on floor at head height. Don't let head hang down. Bend elbows outward to lower head toward hands. On exhalation, take chin as close to hands as possible and imagine rolling a pea toward your knees with your chin – slowly. Return to start position and inhale. On next exhalation roll invisible pea from knees toward hands. Return to start and inhale. Repeat 5 times in each direction. Repeat daily.



Trunk stretch

Sit on floor, legs outstretched with left leg crossed over right. Place right hand between crossed knees touching floor. Place left hand 6–8 inches (15–20 cm) behind buttocks to produce painless twist. Turn head left, as far as possible. Breathe in and out slowly 5 times. On final exhalation, twist a little further. Hold this for 30 seconds. Return to neutral and repeat on other side. Repeat daily.



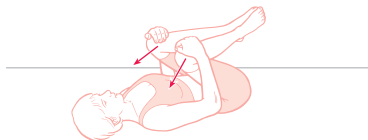
Gravity stretch for spine

Lie face up, pillow under head. Bend knees, feet flat on floor. Stretch arms sideways, palms up. *Keeping shoulders and feet flat*, let both knees fall to one side as far as possible. Breathe in and out slowly for 30 seconds, then hold your breath for as long as is comfortable. On exhaling let knees fall further toward the floor. Hold this for another 30 seconds. Repeat on other side. Repeat daily.



Low back release

Lie on back (no cushion). Knees apart, bend knees and hips. Place a hand on each knee and painlessly pull these toward shoulders (not chest) as far as is possible. Breathe in and hold breath as long as comfortable. On exhalation, draw knees closer to shoulders. Hold for 30 seconds. Repeat once more. Repeat daily.



Springing the sacroiliac joint

CAUTION: Only do this exercise on advice from a practitioner

Lie on unaffected side, pillow under head, lower leg straight. Flex upper leg at knee and hip, and let knee rest on floor. Place palm of upper hand on front of pelvis, palm toward floor. With minimal force rhythmically and repetitively ‘spring’ the bone in a direction toward the opposite side lower ribs, for 20 seconds. Follow this with the pelvic stabilizing exercise described below.



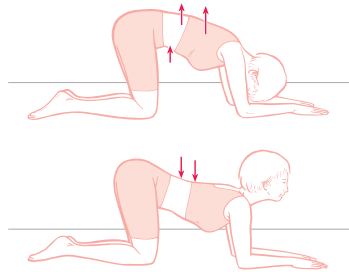
Pelvic stabilizing exercise (to follow previous exercise, on practitioner's advice only)

Lie on your back, hips and knees flexed, feet flat on floor. Place a firm cushion between knees. Using full strength squeeze your knees together for 5 seconds. Relax. Repeat twice more. This helps stabilize the pelvic joints.



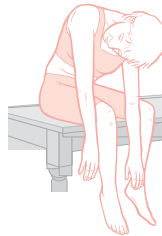
Upper and lower spine flexibility ('cat/camel') exercise

Kneel on a carpeted floor, weight on your knees and elbows for upper spine, and on knees and hands for lower spine. As you inhale, arch your back upward while pulling your navel toward your spine, allowing your head to drop toward the floor. Hold for 5 seconds. As you exhale, lower your spine and lift your head. Hold for 5 seconds. Repeat sequence 5 times in each direction. Repeat daily.



Upper spine and rib flexibility

Sit on edge of table, knees apart, legs hanging free. Bend forward. Let left arm hang between legs. Turn head right. Relax shoulder blade area. Inhale fully and turn head further right, and stretch left hand toward floor. Hold stretch as long as you hold the breath. As you exhale, relax in this position for 20–30 seconds. Repeat. Repeat on other side (right hand hangs between legs, head turns left). Repeat daily.



Mobilizing upper spine

Sit, arms *fully* outstretched sideways, fingers widely spread. Rotate arms so thumb of one hand points up, and the other down. Turn head toward side of thumb-down hand. After 5 seconds simultaneously (a) inhale, (b) fully rotate arms in opposite directions (thumb down becomes thumb up) and (c) turn head toward side of thumb down. Exhale. On inhalation reverse all movements, taking care not to tense or hunch shoulders. Repeat 10 times. Repeat daily.

