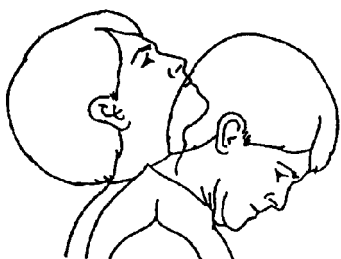


## Cervical Spine Stretches

**Purpose:** Stretching exercises help to restore joint range of motion by lengthening shortened muscles and connective tissue, which helps to reduce pain and tightness.

- Instructions:**
1. Perform highlighted stretches initially **1-2 x/day**, or \_\_\_\_\_
  2. Hold each stretch **30-60 seconds** if tolerated for lengthening of muscles; repeat 2-3x/each or \_\_\_\_\_
  3. Stretch to your **pain-free** end point, then breathe deeply through your belly and relax as you exhale. This will encourage maximal range in that stretch.
  4. It is best to stretch with a warmed-up body, about the temperature that causes a light sweat.
  5. For pain reduction, it is best to stretch tight muscles at night just before going to bed.
  6. If it is not tight...**DON'T STRETCH IT!** When tight muscles are no longer tight, you may decrease frequency to 2-3 times per week.
  7. Maintain **good, upright posture** with all stretches and **avoid shrugging your shoulders!**



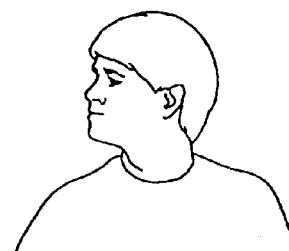
### FLEXION / EXTENSION

Bring your chin toward your chest; hold. Return to upright, then bring your head back; hold. Hold the back of your neck with your hands if you need more support.



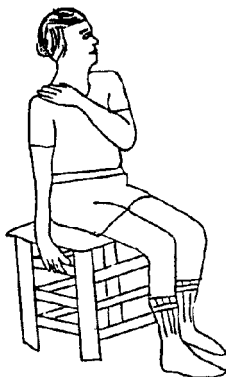
### SIDEBENDING

Bend your ear toward your right shoulder while looking straight ahead; hold, then alternate.



### ROTATION

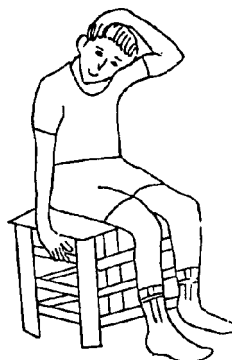
Turn to look over your right shoulder; hold, then switch sides. Add gentle hand pressure at the chin as tolerated for more stretch.



### SCALENE

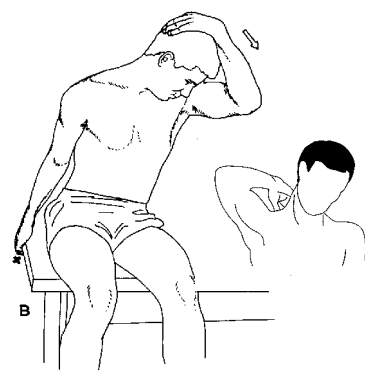
Sit with your right hand holding edge of chair. Place your left hand over your right collarbone to stabilize. Pull chin back, tip ear toward left shoulder, turn to look over left shoulder and hold. Repeat on right side.

**MODIFICATION:** Begin in the same position, but now tip left ear to left shoulder, and tip head back as if drinking out of a cup.



### UPPER TRAPEZIUS

Sit with right hand holding edge of chair. Move chin towards chest, tilt your left ear toward your left shoulder turn right to look up toward the ceiling. Left hand can be used for overpressure-**DON'T PULL**. Repeat to right side.

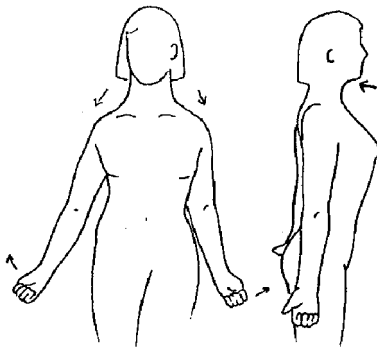


### LEVATOR SCAPULAE

Sit with right hand holding edge of chair. Tip chin towards chest, tip ear toward your left shoulder and nose toward your left armpit. Left hand can be used for gentle overpressure-**DON'T PULL**. Alternate.

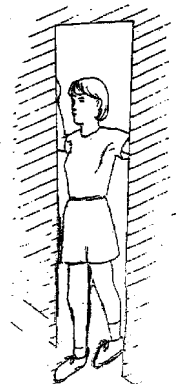
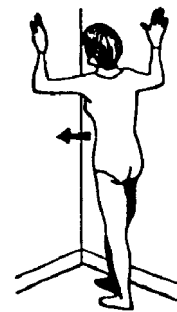
**For a deeper stretch:** Lift right arm up and place hand behind neck. Avoid shrugging. Tilt left ear toward left shoulder, turn head to left, and bend chin down. Alternate.

## Thoracic Spine & Postural Stretches



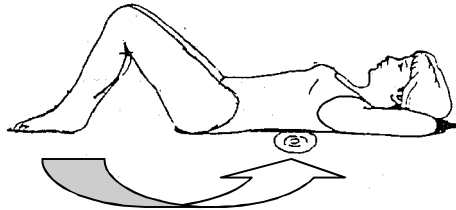
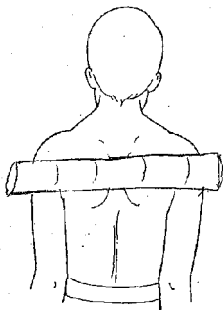
### HEAD AND SCAPULAR RETRACTION

Pull chin straight back (without tucking it down). Squeeze shoulder blades down and together, then rotate palms outward and hold.



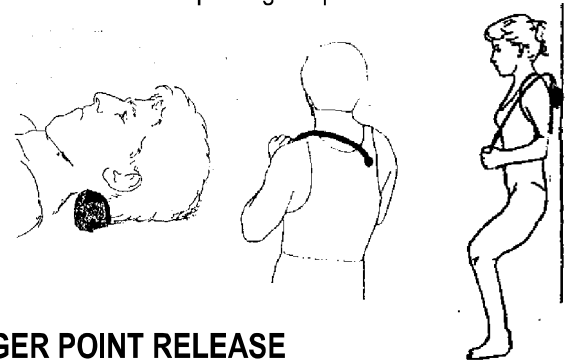
### PECTORALS

Stand either in a doorway or facing a corner. Place your palms/forearms on each side of the corner or doorframe. Place one foot in front of the other and lean your chest forward and hold. Support your body with your legs, not with your arms. Keep your head and chest up in a good posture.



### THORACIC TOWEL ROLL STRETCH

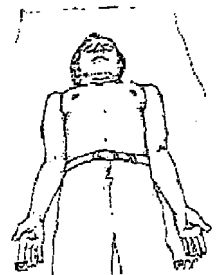
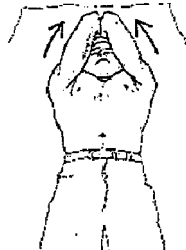
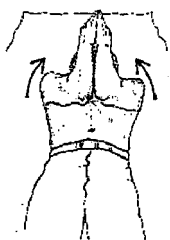
Lie on your back with knees bent, and place a towel roll across shoulder blades. Relax for as long as tolerated up to 5 minutes, 1-3 times per day. As this becomes more tolerable, raise arms above head and tuck chin for a better stretch. To stretch chest muscles, tuck chin and place arms at sides, elbows bent and positioned at 90 degrees. **ALTERNATE:** Place towel vertically.



### TRIGGER POINT RELEASE

Using a Theracane, tennis ball, or trigger ball, give gentle direct pressure to tight muscles and knots. Hold or gently massage areas 60-90 seconds each, once daily. Tip: Placing two tennis balls in a sock works well to release the suboccipitals and improve headaches; use the tennis ball against the wall for knots along shoulder blades.

### LOWER TRAPEZIUS MOBILIZATION



**Step 1:** Sit, stand or lie on your back. Place your elbows, forearms and palms together in front of your chest.

**Step 2:** Keep your elbows as close together as possible while you raise your elbows over head.

**Step 3:** Turn your palms up then out. If lying, try to lower your arms to the floor.

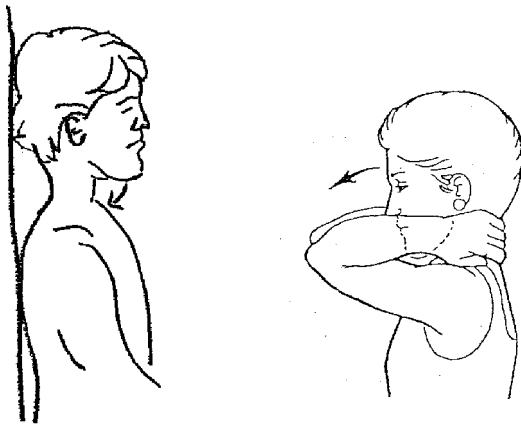
**Step 4:** Lower your elbows down the sides of your body. If lying, continue to keep your elbows in contact with the floor. Keep palms turned out as if you're opening curtains.

**Step 5:** Straighten your elbows and pull your hands down along your sides. Pause and relax while breathing slowly. Repeat the stretch 2-3 times.

## Daily Cervical Stabilization Exercises

**Purpose:** The most common muscles to become weak for those with neck dysfunction are the cervical flexors. The deep neck flexors are significant contributors to the stability of the cervical spine. These exercises will strengthen the deep flexors to improve posture and decrease strain on the spine, which can decrease neck pain and headaches.

- Instructions:**
1. **Hold 10 seconds & Repeat 10 times.**
  2. Maintain DLC.
  3. Complete **1-2 times per day.**
  4. This should be **pain-free**. Drop back at least one level and consult your therapist if this causes pain.
  5. Progress to the next exercise when you can complete a **10 second hold for 10 repetitions** without fatigue.
  6. Once able to perform level 3 easily, decrease frequency to 1x/week to maintain strength.
  7. If participating in circuit program, you may discontinue this exercise.



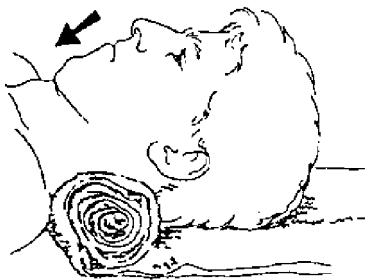
### LEVEL 1: SEATED HEAD NOD

Sit upright with good posture. Hold your neck with your hands or sit or stand against a wall with the back of your head against the wall for some support. Gently nod head by bringing your chin toward your Adam's apple. You should feel the back of your neck stretch and the front of your neck tighten.

**DO NOT ALLOW THE LARGE MUSCLES IN THE FRONT OF YOUR NECK TO TIGHTEN** (you can place your fingers on the front of your neck to make sure.) Focus on the small muscles around your throat.

Hold 10 seconds, repeat 10 times.

**ALTERNATE:** Complete while sitting in your car with your head against the head rest.



### LEVEL 2: SUPINE HEAD NOD

Lie on your back with your head on a firm surface and a towel roll under your neck. Gently nod your head by bringing your chin towards your Adam's apple. Do not lift your head off of the table, and maintain contact with the towel roll. Feel the back of your neck lengthen and the front of your neck tighten.



### LEVEL 3: SUPINE HEAD LIFT

Lie on your back with your head on a firm surface and a towel roll supporting your neck. Gently nod your chin toward your Adam's apple and lift your head up slightly. Do not lose contact with the towel roll. Feel the back of your neck lengthen and the front of your neck tighten.

## Cervical Isometric Exercises

**Purpose:** To strengthen muscles in the neck and/or maintain strength gained in the MedX machines.

- Instructions:**
1. Do only the exercises instructed by your therapists.
  2. **Remember to hold the DLC**, then begin the exercises.
  3. Hold each exercise for a total of **10 seconds**. Ramp up the pressure into your hands (or ball) for 2 seconds, push at maximum pressure for 6 seconds, then slowly release the pressure for the final 2 seconds.
  4. Repeat the sequence for a total of **three to six repetitions**, trying different joint angles if instructed to do so.
  5. Exercise **2-3 times per week**, not 2 days in a row, performing instructions from your therapist.
  6. There should be no movement of your head while pushing; however, your therapist may instruct you on how to do each exercise in various positions throughout the range of motion.

### HAND ISOMETRICS



#### EXTENSION

Clasp both hands behind your head, use a towel sling, or furniture headrest. Attempt to tip your head back to look up at the ceiling while resisting with your hands



#### SIDEBEND

Place your right hand above your right ear. Attempt to tip your right ear toward your right shoulder while resisting with your hands. Repeat on the other side.



#### ROTATION

Place the heel of your right hand against the side of your forehead. Attempt to turn your head to the right while resisting with your hand. Repeat on the other side

### BALL ISOMETRICS (ALTERNATE EXERCISE)



#### EXTENSION

Cradle ball at base of skull. Push head back into the ball then tip your head back as if trying to look at the ceiling



#### SIDEBEND

Place the ball on your right shoulder. Push head in and down against the ball as if toward your shoulder



#### ROTATION

Place ball at right side of forehead. Push cheek into ball and turn your head in the direction of the ball. Do not turn your body.

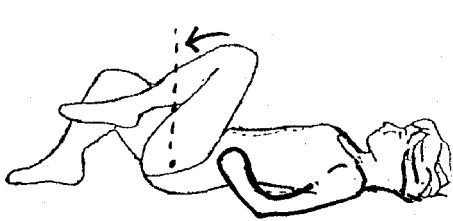
## Core Stabilization Exercises

**Purpose:** These exercises will strengthen and improve coordination of the trunk muscles which is needed to help maintain active balanced posture and lumbar stability. Core strength helps decrease strain on the spine and ultimately helps to decrease back pain.

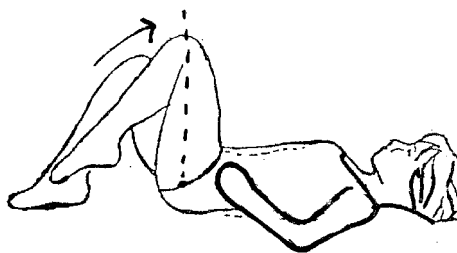
- Instructions:**
1. Do only the exercises indicated and instructed by your therapists.
  2. Remember to hold **Deep Layer Contraction Muscles (DLC)** then start the stabilization exercise.
  3. Exercise 3 times per week, not 2 days in a row, performing instructions of your therapist.
  4. Stop if pain symptoms significantly worsen or radiate and consult your therapist.
  5. **Slowly repeat each exercise for a maximum of 2 minutes.**
  6. \_\_\_\_\_
  7. **Progress to the next level of exercise when able to complete 2 minutes without maximal fatigue.**

### 1. Lower Abdominal Exercise: Maintain DLC

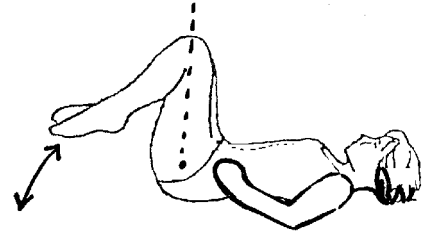
Position on your back with knees bent. Maintain a deep core contraction, and **neutral, balanced low back curve throughout; do not arch or move your back while moving the legs.** Repeat each exercise for **20 repetitions or up to 2 minutes.**



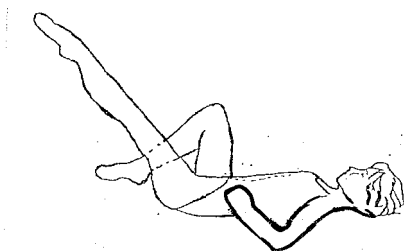
**Level 1:** Either bring one leg up past 90 degrees (easier), or stop at 90 degrees (harder). Lower it slowly back down to the floor. Alternate and repeat.



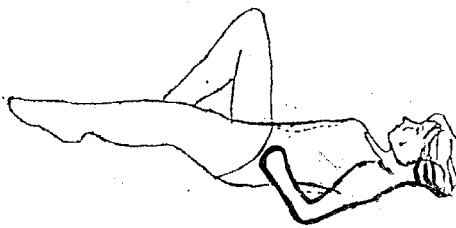
**Level 2:** Bring one leg up to 90 degrees, and then bring the other one up to meet it. Lower one leg down to the floor. Lower the other leg down to the floor. Alternate lead leg and repeat.



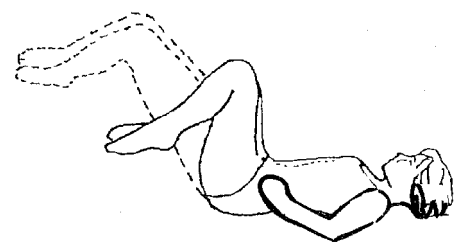
**Level 3:** Bring one leg up to 90 degrees, and then bring the other one up to meet it. Lower one leg down and just tap your toe on the floor, and return back up to 90 degrees. Alternate and repeat.



**Level 4:** Bring one leg up to 90 degrees, and then bring the other one up to meet it. Straighten one leg out and drop slightly (less than 45 degree angle). Return to starting position. Alternate and repeat.



**Level 5:** Bring one leg up to 90 degrees, and then bring the other one up to meet it. Straighten one leg out and drop down to just above floor. Return to starting position. Alternate and repeat.



**Level 6:** Bring one leg up to 90 degrees, and then bring the other one up to meet it. Straighten both legs and drop slightly (less than 45 degree angle). Return to starting position and repeat.