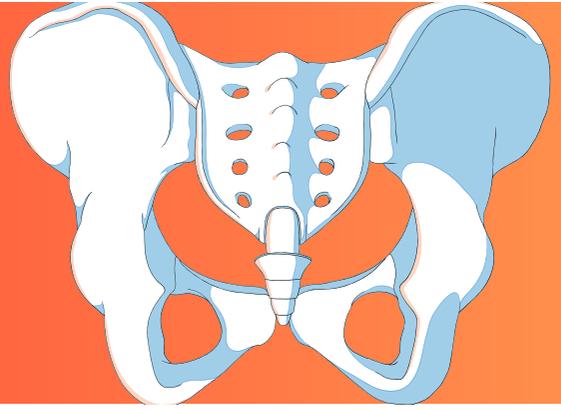


# LOW BACK PAIN

## PREVENTION FOR FIREFIGHTERS



## GOALS

- Increase core strength, activation, and stabilization.
- Increase spine flexibility and movement.
- Increase back strength.

## HOW OFTEN

To gain and maintain proper core strength, back strength, and increase spine flexibility, ideally this program should be completed every day once a day. Try incorporating this program every shift day. Then escalate to every time you workout and eventually complete these exercises every day.

## CORE

Exercise	Description	Cues
<b>Single Leg Bridges</b>  <b>3x15 each side</b>		<p><i>Keep core and glutes tight. Activate pelvic tilt before bridging.</i></p>

<p><b>Dead Bugs</b></p> <p><b>3x15 each side</b></p>		<p><i>Keep core tight. Breath in nose and out mouth 360 degrees.</i></p>
<p><b>Side Plank with Hip Lift</b></p> <p><b>3x15 each side</b></p>		<p><i>Keep hips, knees, shoulders, and ankles stacked in a straight line. Brace with your core and glutes.</i></p>

# MOBILITY

Exercise	Description
<p><b>T-Spine Open Book</b></p> <p><b>10x each side</b></p>	



**Quadruped Hip CARs**

**3x12 each side**



**Segmental Cat-Cow into  
Child's**

**10x each direction**

**BREATHING**

Exercise	Description	Cues
<b>360 Breathing</b>	<p>Place your hands on your ribs with your palms on the sides of your chest and fingers touching down the midline of your chest.</p> <p>Breathe in deeply through your nose, breathing air into the back of your lungs pushing your back into the surface beneath you.</p> <p>Breathe out in a sigh through your mouth, knitting your ribs together so your fingers begin to touch.</p>	<p>Imagine filling all the edges of a balloon in your lungs.</p> <p>Breathe into the sides and back of your lungs.</p>
<b>Clamshell Reset</b>	<p>Position yourself in a side-lying clamshell (does not matter which side you lay on).</p> <p>Take a deep breath in filling your lungs as much as you can through your nose.</p> <p>Slowly and completely empty your lungs by exhaling out of your mouth. Push until you feel like you can't get rid of anymore air.</p> <p>When you have no more air left to push out, lift the top leg in the clamshell position and slowly lay it back down.</p> <p>Once your legs come in contact with each other, take a deep breath in through your belly.</p>	<p>Do this once a week. Push as much air as possible out of your lungs.</p>

## STRETCHING

Exercise	Description	Cues
		

## Pelvic Tilts

15-20x each direction



Tilt pelvis forward creating space behind your hips.



Tilt your pelvis back, pressing your low back into the surface beneath you.

## Piriformis Stretch (Figure 4)

10-12x, hold 15-20 seconds



Make a "4" with one leg over the opposite leg. Pull bent leg in to chest or push down on bent knee.

## Chest Press Up

10-12x, hold 5 seconds



Lay on your stomach then press up onto your hands. Hold for 5 seconds then return to lying face down.

## Bent Knee Rotation

15-20x, hold 5  
seconds



Bent 1 knee to chest then swivel knee across chest. Try not to lift the opposite side hip off the floor.

# STRENGTHENING

When working on strength training aimed at the low back, aim for exercises that target your:

- Glutes
- Hamstrings
- Hip Abductors

These muscle groups all play a role in stabilization of the pelvis which is where low back pain ultimately originates from. Be aware of proper movement patterns while completing these exercises (strong core, straight back).