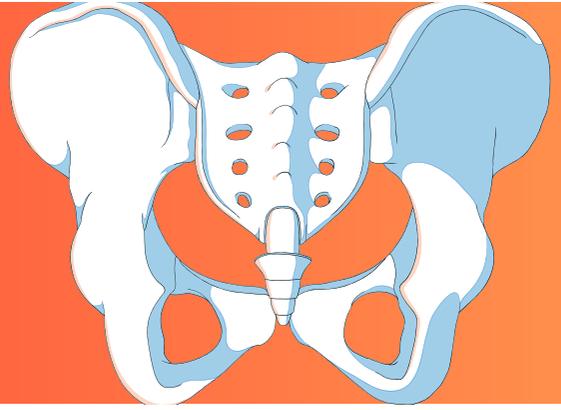


LOW BACK PAIN

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

<p>Dead Bugs</p> <p>3x15 each side</p>		<p><i>Keep core tight. Breath in nose and out mouth 360 degrees.</i></p>
<p>Side Plank with Hip Lift</p> <p>3x15 each side</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>T-Spine Open Book</p> <p>10x each side</p>	



Quadruped Hip CARs

3x12 each side



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

10x each direction

BREATHING

Exercise	Description	Cues
360 Breathing	<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>
Clamshell Reset	<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).