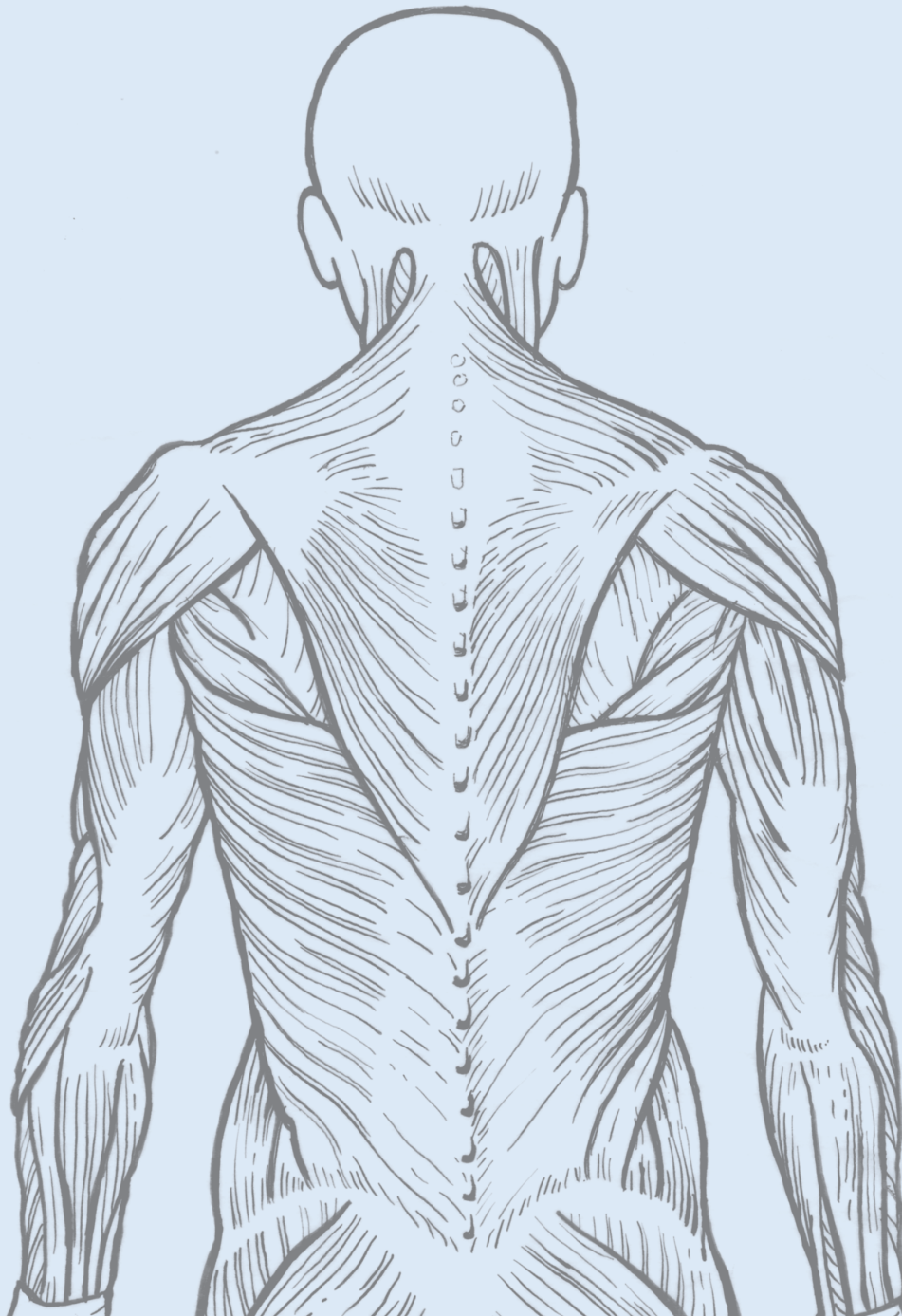


Managing Your Back Pain

Developed by The Department of Rehabilitation & Sports Medicine



Reliant
Medical Group
Atrius Health

Management of Lower Back Pain

Eight out of ten people will experience at least one major episode of back pain in their lifetime. Once you experience an episode there is a 90% chance of recurrence. In fact, back pain is so common that it can be called a normal part of life much like the common cold. There are many things you can do to make your back feel better. These include exercise, heat or ice, proper posture, good body mechanics and relaxation techniques. Take responsibility now and empower yourself to take control of your back problem.

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Use of Heat/Cold Therapy

ICE: This should be used if your injury has occurred within the last two days. It may also be used if heat makes your symptoms worse. Place ice bags, ice packs, or even a bag of frozen vegetables on the affected area, for 20 minutes at a time, from one to three times per day. Ice is an analgesic and anti-inflammatory, which will help with pain, spasm, and swelling, in addition to promoting healing. Ice is very effective when used after exercise. Ice should never be applied directly to the skin.

A pillowcase makes a good barrier.

HEAT: This is usually more effective 48 hours after an acute injury and is tolerated better by most patients with back pain. Proper use of heating includes moist heating pads* or hydrocollators for no more than 20 minutes at a time, from one to three times per day. When using a hydrocollator, it is necessary to use many layers of toweling to prevent burns. Heat is very effective when used before exercise or when muscles are tight and/or sore.

If the heat makes your back throb or increases pain in your back and/or leg, use ice instead. If cold makes your pain worse, switch to heat.

Caution: If you are a diabetic or have impaired circulation, do not use heat or cold. Consult your physician.

**A dry heating pad may be used, although it is not as effective as moist heat.*

Exercises

Exercise is not supposed to hurt. If you get tired, you may experience some burning in the muscle. This is normal. The day after exercise you may experience delayed onset muscle soreness that occurs when you use the muscle. This too is normal. Pain down your leg is not a good side effect of exercise. If this occurs, stop right away. Begin again by adding only one exercise at a time and wait 3 exercise periods before adding a new one. This will help you to isolate the exercise that bothers you and you can delete it from your work-out. If you cannot find an exercise program that works for you, see a physical therapist for help.

EXERCISE: Regular exercise performed three to five times per week (or daily if it is an acute injury) develops strength and flexibility in your back, stomach and leg muscles. This provides support for your back and keeps it in a healthy balance. In addition, aerobic exercise (sustained exercise done for 20-30 minutes, three to five times per week) such as swimming, walking, bicycling, or cross- country skiing, contributes to total fitness and a healthy back. When exercising it is good to observe the following rules:

- Warm up before stretching.
- Stretch before and after exercising.
- Do not hold your breath.
- Do not force or overdo.
- Stretch slowly. Do not bounce.
- Discontinue any exercises that cause increased pain, numbness or tingling down the leg.

Walking

Studies have shown that a fairly brisk daily walk (greater than normal walking speed) can help reduce lower back pain. Normal walking speed is approximately 2.5 miles per hour. Of course, if you get pain down your leg or numbness while walking, walking may not be for you.

Flexibility Exercises

1. LOWER TRUNK ROTATION – Lie on your back with both knees bent and feet flat on the floor. Slowly lower knees to the right as far as you can. Then slowly bring both knees back to upright position and lower down to the left. Gently and slowly rock your knees back and forth. Perform for one minute.



2. UPPER TRUNK ROTATION – Lie on your back with both knees bent and feet flat on the floor. Grasp opposite elbows so that arms are locked together. Raise arms to chest height. Rock arms left and right, keeping arms locked together. Have head follow side-to-side in the same direction as your arms. Perform for one minute.



3. COUNTER TRUNK ROTATION – Combine upper and lower trunk rotation in opposite directions. Move slowly, at your own pace, and do not cause pain. Make sure you don't push past where your body can comfortably go; even a little bit of motion will be helpful. You can turn your head with your arms or legs, whichever is more comfortable. Perform for one minute.



4. CAT AND CAMEL – Get on your hands and knees, round your back like an angry cat, dropping your head and tucking buttocks under. Hold briefly. Next, let your back arch toward the floor. Lift your head up. Perform for one minute.



5. QUADRUPED SIT BACK – Get on your hands and knees, sit back toward heels and keep hands forward on the bed. You should feel a stretch in the lower back and no pain down the leg. Hold for one minute, repeat 2-4 times.



6. CAT CRAWL – Get on your hand and knees. Crawl hands only around to the right then to the left. You should feel a stretch in your side. Hold for 30 seconds each side. Repeat 2-4 times. If you get pain down your leg do opposite side only.



7. SUPINE HAMSTRING STRETCH – Lie on your back, bend your knee up toward your chest. Place your hands behind your knee. Gently straighten the leg until you feel pulling behind the thigh. Hold for 30 seconds. Repeat 2-4 times each leg.



8. PRONE LYING – Lie on stomach with arms alongside your trunk and head turned to one side. Lie in this position for 5-10 minutes. If this position causes pain, add pillow under stomach. When this exercise gets easy, progress to Prone On Elbows.



9. PRONE ON ELBOWS – After lying on stomach, place elbows under your shoulders and support your upper body by the elbows and fore-arms while the hips remain on the floor or mat. Lie in this position for 5-10 minutes or as directed. When this exercise gets easy, progress to Prone Press Ups.



10. PRONE PRESS UP – Lie on stomach with your hands in push up position. Raise the top half of your body by straightening the arms while the pelvis remains relaxed and sags with gravity. Repeat 10-15 times, trying to go further each time.



Abdominal Strengthening

1. REMEDIAL CRUNCH – Lie down with one leg straight and one leg bent up. Hands behind back. Raise face toward ceiling. Do not bend head down or lift shoulders high off the bed. Hold for 10 seconds, repeat 10 times. When this becomes easy progress to Intermediate Crunch.



2. INTERMEDIATE CRUNCH – Lie down with one leg straight and one leg bent up with hands behind back. Raise your elbows off of the floor or bed and raise face toward the ceiling. Hold for 10 seconds, repeat 10 times. When this becomes easy progress to Advanced Crunch.



3. ADVANCED CRUNCH – Lie down with one leg straight and one leg bent up. Place fingers lightly on your forehead, never place hands behind the head as this may hurt your neck. Lift head and neck off floor. Hold for 10 seconds, repeat 10 times. This is an advanced exercise.



4. SINGLE ARM FLEXION – Tighten stomach muscles, and slowly bring your right arm overhead, without letting your back arch. Only allow your arm to go to the place just before your back starts to arch off of the table. Return arm back to your side. Perform for 1 minute for each arm. When it becomes easy add 1-2 lb. weights or add a soup can.



5. SIDE PLANK OFF A WALL – Stand about 3 feet away from a wall. Lean into the wall with your forearm on the wall, pretend you are stiff like a board and hold that posture for up to one minute. Do this to each side several times. When this becomes easy progress to Side Plank Off A Table.



- 6. SIDE PLANK OFF A TABLE** – Lean on a table with your hand. Pretend you are a board and maintain a stiff posture for up to one minute. Do this to each side. When this becomes easy progress to Side Floor Plank.



- 7. SIDE FLOOR PLANK** – Lie on your side upon your elbow with legs straight and lift hips to ceiling. Start with holding for 10 seconds and work up to holding for 30 seconds.



- 8. FRONT PLANK** – Turn onto your stomach and push down on your elbows to lift your body off the floor, keeping your forearms and toes on the floor. Start with holding for 10 seconds and work up to holding for 1 minute. This is an advanced abdominal exercise and should be performed after you have mastered the other plank exercises.



- 9. BIRD DOG OVER A BALL** – Lie on your stomach over a ball. Raise opposite arm and leg. Hold for 10 seconds, repeat 10 times each side.



- 10. BIRD DOG EXERCISE IN QUADRUPED** – Get on your hands and knees. Raise opposite arm and leg. Hold for 10 seconds, repeat 10 times each side.



Leg Functional Exercises

1. PARTIAL SQUAT – Stand with your feet shoulder width apart. Using your thigh muscles to control the movement, squat down slowly about one half of the way. Do not let your heels come off of the floor. If you have pain in your knees while doing this exercise do not go down as far. This will help you to be able to practice good lifting techniques and body mechanics. Repeat for 1 minute.



2. READY SQUAT – Perform partial squat while keeping back straight and sticking buttocks out. Return to standing. Repeat for 1 minute.



3. LUNGES – Lunge as far forward and as deeply as you can without hitting the floor. Alternate legs. Repeat for 1 minute. Progress this by adding weights to your hands.



4. WEIGHT SHIFTS – Stand and shift your weight from leg to leg as quickly as you can, keeping your stomach muscles tight. Perform for 1 minute.



Postural Hints

Good posture and positioning is essential for a healthy back and prevention of injury. You should change positions frequently, every 15-30 minutes, depending on your tolerance.

Sitting

Proper chair seat angle should be 70 degrees. You can buy chairs like this or do it yourself by putting a wedge or small pillow in the back of the seat.

Forward Sit

Correct



Incorrect



-
- Use a wedge or pillow in your car seat. A small pillow in the mid back may help to increase your comfort.

Wedge



Towel Roll



- Do not slump in your chair or lean forward to reach your work. Use of a pillow, slanted platform or lap desk can help you reach your work without leaning.

Standing

- Do not wear high-heeled shoes. This throws off your center of gravity and your back has to compensate for it.



**Poor posture
with heels**



**Good posture
without heels**

- Leather-soled shoes are very poor shock absorbers; rubber soled shoes are better for your back.
- Shifting your weight side-to-side may help to reduce pain with prolonged standing.
- Do not lock your knees.
- Do not stand and bend forward for long periods of time (i.e. brushing teeth, gardening).

Sleeping

- If you lie on your back, try a pillow or two under your knees. You could also try a night roll under your back.



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- If you lie on your side, try a pillow between your knees and lie on the most comfortable side.



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- Stomach sleepers should use a firm pillow under hips and lower back. Many people with back or neck pain cannot get comfortable in this position.



- A general rule is to use a firmer mattress if you have a flexible body type.
- Similarly, use a softer mattress if you have a stiff/inflexible body type.

In General:

- Garden on hands and knees.
- Stand straight to brush teeth and use a cup to spit into.
- Get a flexible mirror that can be pulled out or hand-held for shaving, makeup and dental flossing.

Body Mechanics and Lifting Techniques

- Do not lift objects that are heavier than you can handle.
Get help whenever possible.
- Take a firm stance: feet should be shoulder width apart.
- Bend your knees and keep your spine straight when you are attempting to lift something, whether it is a 100 pound box or a tissue off the floor.
- Tighten the stomach muscles. When you lift or squat down, these muscles should work with the leg muscles to support the back.
- Always keep the load close to you and lift with your legs.
- Do not twist when squatting or lifting; pivot from your feet.
 - Push rather than pull.
- Use a stool for overhead activities.
- Avoid lifting from the floor, use 6 inch pallets or shelves.
Complete the lift in stages.
- Beware of sitting and twisting while answering the phone, making copies or reaching for objects such as files. Filing in low drawers is best done on hands and knees.

Lifting

Floor to Waist



Tripod Lift



Incorrect Lift



Vacuuming

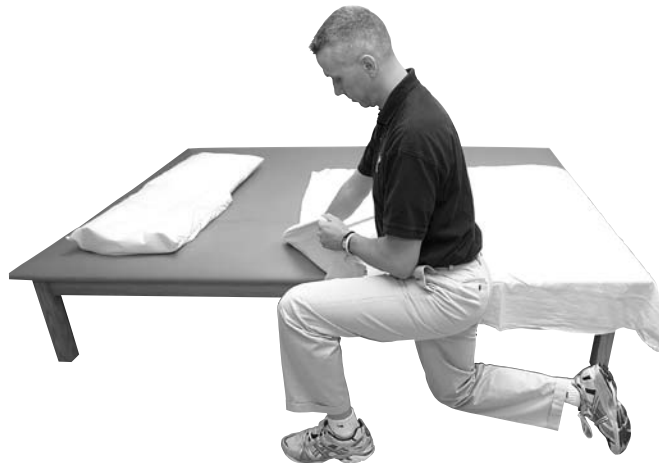


Incorrect



Correct

Bed Making



General Instructions When Having Severe Low Back Pain

Lie on stomach with ice on back for 15-20 minutes, two times per day. If you cannot tolerate this you can place a pillow under your stomach. If your pain gets worse consult medical provider.

- Sit and drive as little as possible.
- If you must sit, use a lumbar pillow or cushion and maintain the inward curve in the low back at all times. You may also find it comfortable to recline approximately twenty degrees.
- Do not sit on soft couches or chairs.
- Do not sit on the floor or in bed with your legs straight out.
- Avoid lifting. If you must lift keep objects very light, stand close to the object, squat and lift with your legs.
- Avoid bending forward at the waist with daily activities such as brushing your teeth, or washing your face.
- Use proper body mechanics.
- Use a supportive mattress. If it is sagging you can try putting a piece of plywood between the mattress and box spring or have someone put the mattress on the floor.
- Some may benefit from sleeping with a rolled up sweatshirt tied around the waist to fill the gap between back and mattress.
- If you must sneeze or cough, stand up and lean backwards to increase the curve in your low back.

Relaxation

It is very important for anyone with a painful condition to regularly practice relaxation techniques.

Suggestions:

- Deep Breathing – This is done in a quiet room without distractions. Concentrate on inhaling while feeling your abdomen expand with your hand. As you let the breath out, you should feel your abdomen sink back down. Practice this at your own comfortable breathing rate.
- Meditation – One type uses the above breathing as a focus point. You should concentrate on the breath; while other thoughts may come into your mind, just keep refocusing on your breathing. This is usually practiced for 15-20 minutes on a daily basis in a quiet room.
- Contract/Relax – With this technique, start at the toes, tighten up the muscles in the feet/toes, then relax them. Work progressively up the body to the legs, thighs, hips, back, abdomen, trunk/rib cage, shoulders, neck, head, and face, tightening first and then relaxing each area.
- Exercise, such as walking or swimming, can help you relax and reduce back pain.
- Take time for yourself – do something you enjoy!

Notes

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