

# 10 MOST EFFECTIVE EXERCISES

TO DO FOR LOWER BACK PAIN AT WORK

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## INTRODUCTION

Back pain is one of the most common reasons people go to the doctor or miss work, and it is a leading cause of disability worldwide. Most people have back pain at least once. The pain can appear suddenly or gradually and can range from a dull ache to intense, sharp pain. In some people, the pain may be chronic.

Fortunately, you can take measures to prevent or relieve most back pain episodes. If prevention fails, simple home treatment and proper body mechanics often will heal your back within a few weeks and keep it functional. Surgery is rarely needed to treat back pain. Lower back pain is very common. It usually develops due to overuse or a minor injury, but sometimes there may be no obvious cause. Lower back pain can also be a symptom of an underlying medical condition.



### **WHAT IS LOWER BACK PAIN?**

Low back pain is a universal human experience almost everyone has it at some point. The lower back, which starts below the rib cage, is called the lumbar region. Pain here can be intense and is one of the top causes of missed work. Fortunately, low back pain often gets better on its own. When it doesn't, there are effective treatments.

#### SYMPTOMS OF LOWER BACK PAIN

Symptoms range from a dull ache to a stabbing or shooting sensation. The pain may make it hard to move or stand up straight. Signs and symptoms of back pain can include:

- Muscle ache
- Shooting or stabbing pain
- Pain that radiates down your leg
- Pain that worsens with bending, lifting, standing or walking
- Pain that improves with reclining

#### **WHEN TO SEE A PHYSIOTHERAPIST**

Severe back pain after a fall or injury should be checked out by a professional physiotherapist. Other warning signs include a loss of bowel or bladder control, numbness in the groin area, leg weakness, fever, and pain when coughing or urinating. If you have any of these symptoms along with your back pain, contact professional physiotherapist.

Also contact right away if you have back pain and you have any of these: a history of cancer, unintentional weight loss, long-term steroid use, weak immune system, history of IV drug use, or your pain gets worse with rest. Most back pain gradually improves with home treatment and self-care, usually within a few weeks. If yours doesn't improve in that time, you must have to care about it. In rare cases, back pain can signal a serious medical problem. Seek immediate care if your back pain:



- Is severe and doesn't improve with rest
- Spreads down one or both legs, especially if the pain extends below the knee
- Causes weakness, numbness or tingling in one or both legs
- Is accompanied by unexplained weight loss

Also, see a doctor if you start having back pain for the first time after age 50, or if you have a history of cancer, osteoporosis, steroid use, or excessive alcohol use.

#### **RISK FACTORS**

Anyone can develop back pain, even children and teens. These factors might put you at greater risk of developing back pain:

Age: Back pain is more common as you get older, starting around age 30 or 40.

**Lack of exercise:** Weak, unused muscles in your back and abdomen might lead to back pain.

**Excess weight:** Excess body weight puts extra stress on your back.

**Diseases:** Some types of arthritis and cancer can contribute to back pain.

**Improper lifting:** Using your back instead of your legs can lead to back pain.

**Psychological conditions:** People prone to depression and anxiety appear to have a greater risk of back pain.



Back pain that comes on suddenly and lasts no more than six weeks (acute) can be caused by a fall or heavy lifting. Back pain that lasts more than three months (chronic) is less common than acute pain. Back pain often develops without a cause that your doctor can identify with a test or an imaging study. Conditions commonly linked to back pain include:

#### MUSCLE OR LIGAMENT STRAIN

Repeated heavy lifting or a sudden awkward movement can strain back muscles and spinal ligaments. If you're in poor physical condition, constant strain on your back can cause painful muscle spasms.

#### **BULGING OR RUPTURED DISKS**

Disks act as cushions between the bones (vertebrae) in your spine. The soft material inside a disk can bulge or rupture and press on a nerve. However, you can have a bulging or ruptured disk without back pain. Disk disease is often found incidentally when you have spine X-rays for some other reason.

#### **ARTHRITIS**

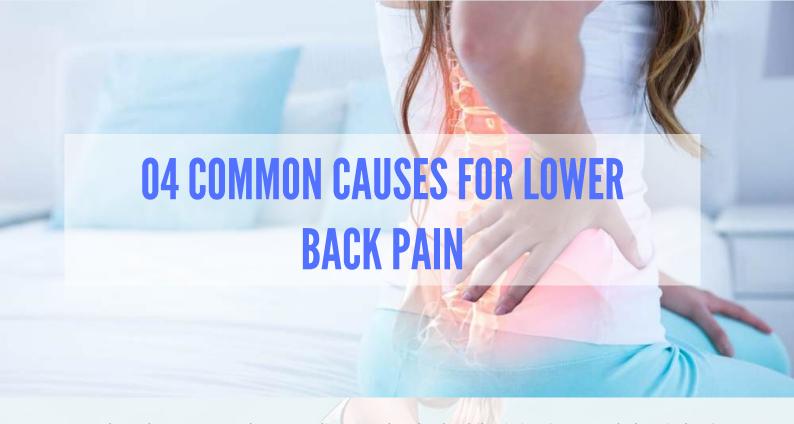
Osteoarthritis can affect the lower back. In some cases, arthritis in the spine can lead to a narrowing of the space around the spinal cord, a condition called spinal stenosis.

#### SKELETAL IRREGULARITIES

A condition in which your spine curves to the side (scoliosis) also can lead to back pain, but generally not until middle age.

#### **OSTEOPOROSIS**

Your spine's vertebrae can develop compression fractures if your bones become porous and brittle.



Neglected postures, such as rounding your low back while sitting for extended periods of time in front of the computer, standing for hours stooped over, sleeping improperly, and lifting poorly, can all lead to chronic back pain. Maintaining the natural lumbar curve in your low back is essential to preventing posture-related back pain. This natural curve works as a shock absorber, helping to distribute weight along the length of your spine. Below are the four most common causes of back pain:

#### **POSTURAL NEGLECT**

- Rounding your low back while sitting for extended hours in front of the computer
- Poor lifting techniques
- Prolonged forward bending while working
- Standing or lying for long periods of time in a poor position

#### **SITTING**

- Slouching while sitting at a restaurant, cafe, or movie theater
- Sedentary office jobs that require endless hours of sitting can overstretch the back muscles, distorting the vertebrae, potentially causing bulging or herniated discs

#### **STANDING (OR POOR LYING POSTURE)**

- Standing (or lying) for long periods of time, the lordosis can become excessive and pain results
- Working in stooped positions when doing yard work or household chores, such as raking, shoveling, or vacuuming

#### **LIFTING**

• Lifting Lifting objects with a rounded back can put unwanted pressure on the vertebral discs. Keeping the body upright, avoiding back flexion, and maintaining a natural lordotic curve is a better option when lifting.

#### **MUSCLE STRAIN OR SCIATICA?**

The kind of back pain that follows heavy lifting or exercising too hard is often caused by muscle strain. But sometimes back pain can be related to a disc that bulges or ruptures. If a bulging or ruptured disc presses on the sciatic nerve, pain may run from the buttock down one leg. This is called sciatica.



#### **PHYSIOTHERAPY**

If back pain has left you inactive for a long time, a rehabilitation program can help you strengthen your muscles and get back to your daily activities. A physiotherapist can guide you through stretches, strength exercises, and low-impact cardio that will help you be fitter without straining your back.



#### SPINAL MANIPULATION

Physiotherapist use spinal manipulation to treat low back pain by applying pressure with their hands to bones and surrounding tissues. Spinal manipulation, also called spinal manipulative therapy or manual therapy, combines moving and jolting joints, massage, exercise, and physical therapy. It's designed to relieve pressure on joints, reduce inflammation, and improve nerve function. It's often used to treat back, neck, shoulder, and headache pain. Your Physiotherapist is trained in treatment and will determine if it's suitable for you.

#### STRENGTHENING THE BACK

Two types of strength-training moves that may benefit the lower back are flexion and extension exercises. In flexion exercises, you bend forward to stretch the muscles of the back and hips. In extension exercises, you bend backward to develop the muscles that support the spine. One example is doing leg lifts while lying on your stomach. Depending on the cause of your back pain, there are some exercises you should not do. If you have back pain, then talk to Physiotherapist.

## 10 MOST EFFECTIVE EXERCISES TO DO AT WORK

Lower back pain is a massive problem in today's modern society. Many of us spend a lot of time sitting down at desks whether it's at work or at home. Office workers in particular, come off worst with 54% of those who work at their desks report suffering from lower back pain due to the sheer amount of time spent sitting in one position and usually with bad posture.

Sitting down not only adds to muscle tension in the back, but add poor posture to that and you have a situation where constriction of blood vessels and nerves cause more lower back pain. This is why lower back pain shouldn't be overlooked as it can be a complicated health issue with not just one cause our muscular system adapts easily to how we sit, with our circulatory and nervous system also being affected.











## STANDING TRUNK EXTENSION STRETCH

- Stand with your feet shoulders width apart.
- Place your hands in the small of your back for support.
- Slowly lean backward increasing the arch of your lower back until you
  feel a mild stretch in the abdominal muscles and slight pressure in the
  lower back.
- You can perform this as a static stretch by holding for 15-20 seconds, then repeating it 3-5 times per session.
- To perform this as an active range of motion exercise, hold for only a few seconds, but perform 10 repetitions per session.





## STANDING QUADRICEPS/HIP FLEXOR

- While standing, hold onto to your desk for support and put one foot up on a chair behind you.
- Depending on your flexibility, you can place the foot on the seat, arm, or back of the chair.
- Make sure that the foot on the ground is pointed forward with the knee bend slightly.
- Slowly push your pelvis forward while contracting your glutes.
- You should feel a stretch on the front of your hip and thigh.
- Hold this position for 15-20 seconds, then repeat 3-5 times on each side.





## **SEATED LATERAL TRUNK**

- While in a seated position, raise one arm over your head.
- Place your other hand on your thigh for support.
- Slowly bend to the opposite side until you feel a comfortable stretch along the side of your trunk.
- Hold the stretch for 15-20 seconds, then repeat 3-5 times on each side.





## **SEATED KNEE TO CHEST**

- While sitting in a chair, raise one knee as if you are marching until you can reach it with your hands.
- Use both hands to pull the bent knee up toward your chest until you feel a gentle stretch in the lower back and back of the hip.
- Your hands can be on top of your knee or behind your knee for comfort.
- Hold this position for 15-20 seconds, then repeat 3-5 times on each side.





## **SEATED HAMSTRING**

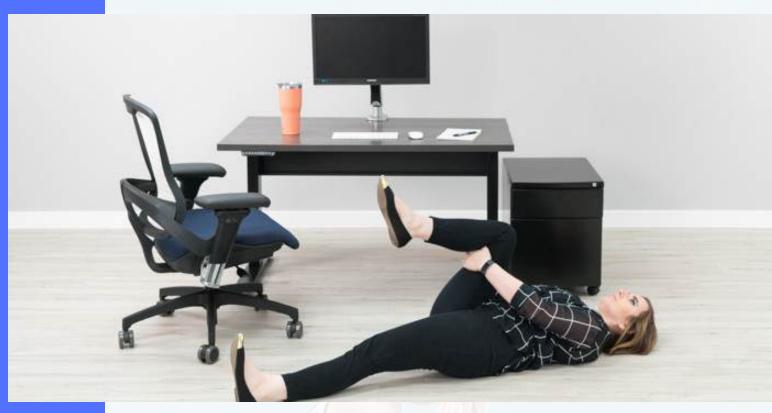
- While seated, rest your heel on the floor with your knee straight.
- Gently lean forward until a stretch is felt behind your knee/thigh.
- You should keep your low back straight to focus the stretch on the hamstring muscles.
- Hold the stretch for 20-30 seconds, then repeat 3-4 times on each leg.





## **SEATED FIGURE 4**

- Seated in a chair, cross one leg on top of the other so that your ankle is sitting over the opposite knee.
- Place one hand on the knee of the crossed leg.
- Gently lean your trunk forward while pressing gently on the crossed knee until you feel a mild to moderate stretch in the hip and buttock area.
- Hold the stretch for 15-20 seconds, then repeat 3-5 times on each side.





## SINGLE KNEE TO CHEST

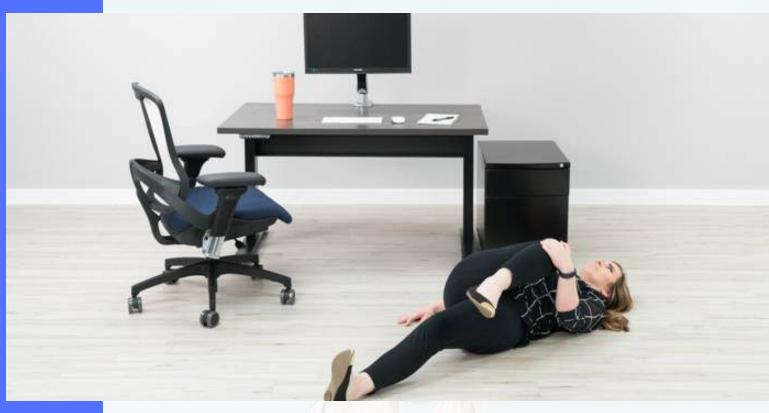
- While lying on your back, slowly bring one knee up toward your chest.
- Grasp the knee with both hands (either on top or under the knee) and gently pull it up towards your chest.
- You should feel a mild to moderate stretch in the low back, hip, and buttock.
- Hold the stretch for 15-20 seconds, then repeat 3-5 times on each side.





## **DOUBLE KNEE TO CHEST**

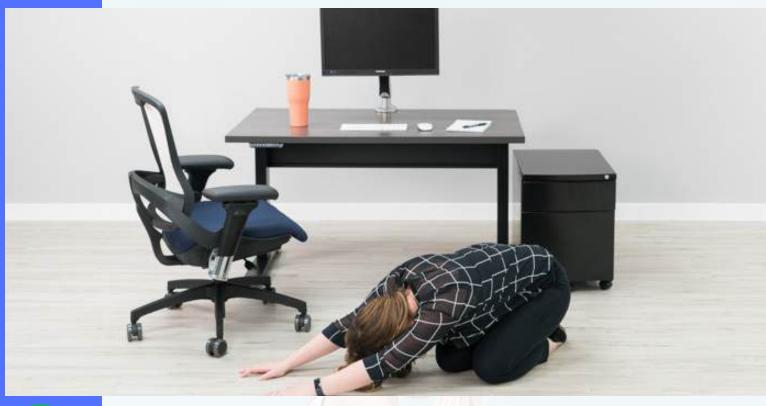
- While lying on your back, slowly bring both knees up toward your chest.
- Grasp the knees with both hands (either on top or under the knee) and gently pull them up towards your chest.
- You should feel a mild to moderate stretch in the low back, hip, and buttock.
- Hold the stretch for 15-20 seconds, then repeat 3-5 times on each side.





## **SUPINE PIRIFORMIS**

- While lying on your back, slowly bring one knee up toward your chest as you did with the single knee to chest stretch.
- Grasp the knee with both hands (either on top or under the knee) and gently pull it up across your body toward the opposite shoulder.
- You should feel a mild to moderate stretch in the low back, hip, and buttock (usually a stronger stretch in the buttock region on this one).
- Hold the stretch for 15-20 seconds, then repeat 3-5 times on each side.







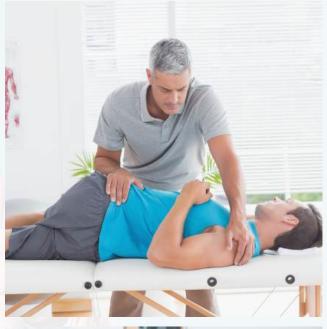
## **LATERAL PRAYER**

- Start on your hands and knees as with the prayer stretch, but place both hands to one side.
- Slowly lower your buttocks towards your feet until you feel a mild to moderate stretch along the opposite side of your mid and lower back.
- To stretch the other side, move your hands to the opposite side and stretch again.
- Hold the stretch for 15-20 seconds, then repeat 3-5 times on each side.

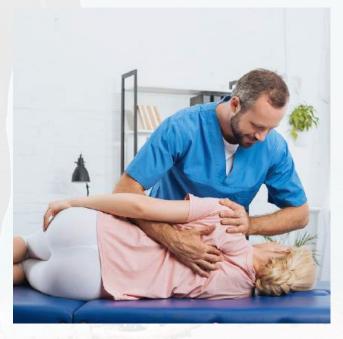
## HOW PHYSIOTHERAPY HELPS YOU SOLVE

Although the pain in your back may feel severe to you, most low back pain is not generally due to a serious problem. Physiotherapists should be able to assess, diagnose and intervene without the use of diagnostic imaging. Back pain manifests itself in many ways. Localized pain is felt in the lower back (above your tailbone) and buttocks. Radiating pain occurs when there is pain in the back as well as down the leg or foot.

This can also occur in the form of numbness and/or tingling and is usually the result of nerves being irritated. Sometimes, symptoms can occur in the leg, without actually being felt in the back. This is called referred pain. More often than not, back pain results from lifestyle factors, such as sitting too much, being in poor physical condition, and bending and lifting improperly.









Early treatment is the key to decreasing your pain and getting back to full activity. Treatment that focuses on exercise, mechanics and posture improves symptoms quickly and reduces your chance for recurrence. A physical therapist will tailor treatment to your specific problem, based on a thorough examination and the probable causes of your low back pain.

The good news is if you seek out a physiotherapist immediately after getting back pain, treatment is extremely effective. The longer symptoms linger, the harder it becomes to treat. Staying active is important, and bed rest should be avoided. Based on your examination, the best treatment options for low back pain are:

#### 1) Manual therapy (hands-on mobilization of the joints in your back)

Physiotherapists skilled in manual therapy use precise hands-on techniques to relieve stiffness and improve movement of the joints and muscles of your spine.

### 2) Movement exercises that restore motion and decrease radiating or referred pain.

Most physiotherapists prescribe these exercises, using a protocol called the McKenzie method. If your pain is chronic, do not fear; physiotherapy can still help! Along with the first two options, chronic low back pain is best managed with progressive strengthening exercises.

### 3) Progressive strengthening exercises that focus on core stability and endurance.

You're probably wondering whether you should bother doing any of these and why not just wait it out? Unfortunately, waiting it out will reduce symptoms, but may not actually fix the reason you got back pain in the first place. That is why it is always important to be assessed by a physiotherapist before attempting to manage back pain yourself. A detailed assessment noting the type of pain, how it occurred, what makes it better and what makes it worse will allow the physiotherapist to prescribe the right treatment option for you.



We are professional Physiotherapist to help you solve your biggest challenge and frustrations. The quality of our staff is what sets us apart as when it comes to working with patients, we are thorough and well focused. We are Locally training Physiotherapists passionate about treating people with a wide variety of issues in getting you results. We are highly qualified and chartered to serve you in every situation you need to bring you back to happier life.

Do you have any query or need injury advice from our team of Physio's? Do you have any question related to your body pain and need to ask?

Then we are happy to answer any of your questions received.

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Nestor Chan Director and Founder of New Age Physiotherapy, completed his Bachelor of Applied Science in Physiotherapy in 2007 and Bachelor of Medical science in 2003 and has since practiced in a variety of private practice and hospital settings in Australia.

Nestor Chan is passionate about enhancing each clients quality of life by correcting their movement dysfunctions and empowering them to manage their own conditions, using his skills and experience in Manual Techniques, Musculoskeletal, Sports and Acupuncture/ Dry Needling Physiotherapy.

Nestor also has special interests in back and shoulder pain. With over 10 years experience in private practice, Age Care and in public hospital setting. Nestor has worked with athletes of different levels. He was Team Physiotherapist for youth premier league soccer clubs for Marconi, Black town City Demons to first-grade Super league soccer team- Parramatta Eagles, AFL physio for Holroyd Parramatta- The Goannas, Jim Beam Club- Mounties Rugby League, East Campbell town Rugby League Club and team physiotherapist for Liverpool Cougars Rugby Union.

Nestor's Motto is "live well, feel well, be well" and with this in mind he aims to provide a hands-on approach to your healthcare and deliver the most effective evidence-based treatments so that you get back to the things you enjoy the most, faster and pain-free.

#### **NEW AGE PHYSIOTHERAPY**

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