

Hamstring Injury and Advice

The hamstrings

The hamstrings are tendons (strong bands of tissue) at the back of the thighs that attach the large thigh muscle to the hone

The term "hamstring" also refers to the group of 3 muscles that run along the back of your thigh, from your hip to just below your knee.

The hamstring muscles are not used much while standing or walking, but they're very active during activities that involve bending the knee, such as running, jumping and climbing.



Hamstring injury

A hamstring injury is a strain or tear to the tendons or large muscles at the back of the thigh. It's a common injury in athletes and can happen in different severities. The 3 grades of hamstring injury are:

Grade 1 – a mild muscle pull or strain

Grade 2 – a partial muscle tear Grade 3 – a complete muscle tear The length of time it takes to recover from a hamstring strain or tear will depend on how severe the injury is.

A minor muscle pull, or strain (grade 1) may take a few days to heal, whereas it could take weeks or months to recover from a muscle tear (grade 2 or 3).



How do I know if I've injured my hamstring?

Mild hamstring strains (grade 1) will usually cause sudden pain and tenderness at the back of your thigh. It may be painful to move your leg, but the strength of the muscle should not be affected.

Partial hamstring tears (grade 2) are usually more painful and tender. There may also be some swelling and bruising at the back of your thigh and you may have lost some strength in your leg.

Severe hamstring tears (grade 3) will usually be very painful, tender, swollen and bruised, making it difficult to walk and stand. There may have been a "popping" sensation at the time of the injury, and you'll be unable to use the affected leg.

What causes hamstring injuries?

A hamstring injury often happens during sudden, powerful movements, such as sprinting, lunging or jumping that overstretch your tendons or muscles. The injury can also happen gradually during slower movements.

Recurring injury is common in athletes and sportsmen, as you're more likely to injure your hamstring if you've injured it before.

Regularly doing <u>stretching and strengthening exercises</u>, and <u>warming up before exercise</u>, may help reduce the risk of injuring your hamstring.

Initial treatment

During the first 2 or 3 days, you should care for your injury using PRICE therapy: PRICE therapy





Rest and recovery from a hamstring injury

Recovering from a hamstring injury may take days, weeks or months, depending on how severe it is.

A completely torn hamstring may take several months to heal, and you'll be unable to resume training or play sport during this time.

Regular painkillers, such as <u>paracetamol</u> or a <u>non-steroidal anti-inflammatory drug (NSAID)</u> cream or gel, may also help relieve the pain.

Short-term use of oral NSAIDs, such as <u>ibuprofen</u> tablets, can also help reduce swelling and inflammation. However, these are not suitable for everyone. Check the leaflet that comes with your medicine to see if you can take it.

The GP may recommend you wear a knee splint for a brief time. This will help stop your leg moving to help it heal.



Gentle Hamstring Exercises and Stretches



- Here are some examples of exercises for you to try. The exercises may be suggested for a condition or for rehabilitation. Start each exercise slowly. Ease off the exercises if you start to have pain.
- You will be told when to start these exercises and which ones will work best for you.
- How to do the exercises

Hamstring set (heel dig)

- slide 1 of 6, Hamstring set (heel dig),
- Sit with your affected leg bent. Your good leg should be straight and supported on the floor
- Tighten the muscles on the back of your bent leg (hamstring) by pressing your heel into the floor.
- Hold for about 6 seconds, and then rest for up to 10 seconds.
- Repeat 8 to 12 times.

Hamstring curl

- slide 2 of 6, Hamstring curl,
- Lie on your stomach with your knees straight. Place a pillow under your stomach. If your kneecap is uncomfortable, roll up a face cloth and put it under your leg just above your kneecap.
- Lift the foot of your affected leg by bending your knee so that you bring your foot up toward your buttock. If this motion
 hurts, try it without bending your knee quite as far. This may help you avoid any painful motion.
- Slowly move your leg up and down.
- Repeat 8 to 12 times.
- When you can do this exercise with ease and no pain, add some resistance. To do this:
- Tie the ends of an exercise band together to form a loop. Attach one end of the loop to a secure object or shut a door or
 it to hold it in place. (Or you can have someone hold one end of the loop to provide resistance.)
- Loop the other end of the exercise band around the lower part of your affected leg.
- Repeat steps 1 through 4, slowly pulling back on the exercise band with your leg

Hip extension

- slide 3 of 6, Hip extension,
- Stand facing a wall with your hands on the wall at about chest level.
- Keeping the knee of your affected leg straight, kick that leg straight back behind you
- Relax, and lower your leg back to the starting position.
- Repeat 8 to 12 times
- When you can do this exercise with ease and no pain, add some resistance. To do this
- Tie the ends of an exercise band together to form a loop. Attach one end of the loop to a secure object or shut a door on
 it to hold it in place, (Or you can have someone hold one end of the loop to provide resistance.)
- Loop the other end of the exercise band around the lower part of your affected leg.
- Repeat steps 1 through 4, slowly pulling back on the exercise band with your leg.

Hamstring wall stretch

- slide 4 of 6, Hamstring wall stretch
- Lie on your back in a doorway, with your good leg through the open door
- Slide your affected leg up the wall to straighten your knee. You should feel a gentle stretch down the back of your leg.
- Hold the stretch for at least 1 minute to begin. Then try to lengthen the time you hold the stretch to as long as 6 minutes
- Repeat 2 to 4 times.
- If you do not have a place to do this exercise in a doorway, there is another way to do it:
- Lie on your back and bend the knee of your affected leg.
- Loop a towel under the ball and toes of that foot and hold the ends of the towel in your hands
- Straighten your knee, and slowly pull back on the towel. You should feel a gentle stretch down the back of your leg.
- Hold the stretch for 15 to 30 seconds. Or even better, hold the stretch for 1 minute if you can.
- Repeat 2 to 4 times.
- Do not arch your back.
- Do not bend either knee.
- Keep one heel touching the floor and the other heel touching the wall. Do not point your toes.

Calf stretch

- slide 5 of 6, Calf stretch,
- Stand facing a wall with your hands on the wall at about eye level. Put your affected leg about a step behind your other leg.
- Keeping your back leg straight and your back heel on the floor, bend your front knee and gently bring your hip and chest toward the wall until you feel a stretch in the calf of your back leg.
- Hold the stretch for 15 to 30 seconds.
- Repeat 2 to 4 times
- Repeat steps 1 through 4, but this time keep your back knee bent.

Single-leg balance

- slide 6 of 6, Single-leg balance
- Stand on a flat surface with your arms stretched out to your sides like you are making the letter "T." Then lift your good
 leg off the floor, bending it at the knee. If you are not steady on your feet, use one hand to hold on to a chair, counter, or
 wall.
- Standing on your affected leg, keep that knee straight. Try to balance on that leg for up to 30 seconds. Then rest for up to 10 seconds.
- Repeat 6 to 8 times.
- When you can balance on your affected leg for 30 seconds with your eyes open, try to balance on it with your eyes
- When you can do this exercise with your eyes closed for 30 seconds and with ease and no pain, try standing on a pillow
 or piece of foam, and repeat steps 1 through 4.











