

Home Therapy Exercises for Pes Anserine Bursitis

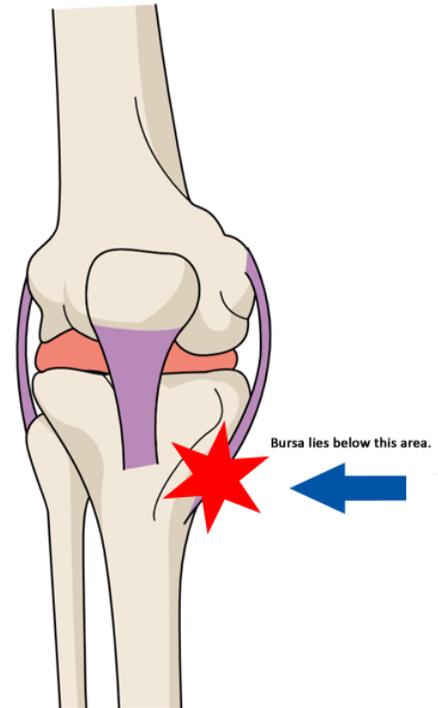


About Pes Anserine Bursitis

If you have osteoarthritis or have undergone a knee replacement, you may experience pain on the upper, inner part of your shin bone (tibia) even several years after surgery. This may be due to a condition called **pes anserine bursitis** - a common condition that can result from muscular instability around your knee, tight muscles, obesity or meniscal tears. It may also occur with running or after walking on uneven ground.

There are many bursae in the body. A bursa is a fluid-filled sac that allows for tendons to glide smoothly along bony points. In the knee, the pes anserine bursa allows three tendons (sartorius, gracilis and semitendinosus) to glide over the bone in this area as they attach to the tibia. When this area becomes irritated, the bursa can become inflamed, swollen and painful.

If you are experiencing this type of pain, we advise discussing these symptoms with your orthopaedic surgeon. An x-ray of your knee may be obtained to rule out other problems such as fracture, knee implant-related problems or other possible conditions.



Treatment

The good news is that conservative treatment is usually all that is necessary. Pes bursitis is usually a result of inflammation; therefore, rest, ice, anti-inflammatory medications and physical therapy exercises are effective treatment options.

- ✓ **REST** – Avoid heavy impact activities and long walks (especially on uneven ground).
- ✓ **ICE** – Apply ice for 15-20 minutes to the affected area every 6-8 hours.
- ✓ **ANTI-INFLAMMATORY MEDICATIONS** – nonsteroidal anti-inflammatory drugs (NSAIDs) may help decrease the pain and swelling. Over-the-counter medications include ibuprofen, naproxen, and meloxicam. You can also try topical creams and gels such as diclofenac, trolamine salicylate or capsaicin.
- ✓ **INJECTIONS** – You may be a candidate for a steroid injection into the bursa to provide temporary relief.
- ✓ **PHYSICAL THERAPY** – An exercise program is recommended. We have provided a general exercise routine in this guide.

Prevention

It is known that “an ounce of prevention goes a long way.” To potentially prevent pes anserine bursitis, it is important to keep good muscular balance around the knee. Additionally, warming up before exercise is advised to include stretching of the muscles along the front, back, and inside portion of the thigh and knee. It is always important after surgery or a period of relative inactivity to *slowly* increase your exercise level over time. This will help prevent bursitis and other conditions that can occur with returning to physical activity too quickly. Remember, “slow and steady wins the race!”

The American Association of Hip and Knee Surgeons (AAHKS) has outlined this home exercise program for you to treat your pes anserine bursitis. The exercises will focus on stretching, strengthening and endurance.

If you do not experience relief after three months of following this routine, a follow up visit with your doctor is recommended. It is ultimately up to you and your surgeon to find a routine that is most appropriate for your recovery. Your surgeon may recommend alterations to this routine. **If you experience any abnormal discomfort or begin to feel ill during any exercise, we advise you to stop exercising and contact your surgeon as soon as possible.**

DISCLAIMER

PLEASE USE THE EXERCISES AS A GUIDE AS IT IS ULTIMATELY BETWEEN YOU AND YOUR SURGEON TO DECIDE WHICH THERAPY SETTING IS RIGHT FOR YOUR TREATMENT COURSE. IF YOU EXPERIENCE ANY ABNORMAL DISCOMFORT, DIZZINESS, OR FEELINGS OF PASSING OUT, PLEASE STOP EXERCISING AND CONTACT YOUR PHYSICIAN AS SOON AS POSSIBLE.



Stretching helps to prevent injury by getting the muscles ready for a workout. Typically, you should spend 5-10 minutes stretching before exercising. A heating pad or warm towel can be used to help relax the muscles in preparation for stretching. Massaging in a topical cream prior starting may also help in the process of getting warmed up. The following stretches can also be performed in between exercises to keep the muscles from getting tight. Your exercise program should start and finish with stretches. Ice can be applied to the knee or sore muscles after exercising.

GENERAL TIPS FOR STRETCHING EXERCISES

- ✓ Warm-up by walking 5-10 minutes to get your muscles ready for exercising.
- ✓ Remember to stretch in a slow and controlled manner: avoid rapid motions.
- ✓ Perform each stretch until you experience a **“tolerable discomfort”** in the muscle – adjust the stretch to your comfort.
- ✓ Try to hold the position for **10-30 seconds**.
- ✓ Slowly return to the starting position.
- ✓ Take a deep breath and **relax for 5 seconds** between repetitions.
- ✓ Cool-down: 5-10 minutes of icing or slow walking to finish workout.

You can expect some muscle soreness when you first start a stretching program.

HAMSTRING STRETCH SEATED



The hamstrings are a group of muscles on the back of your thigh. It is important to stretch these muscles because they can become tight after knee replacement. This stretch is also used during warm-ups to get your muscles ready for other exercises. There are a few ways to perform a hamstring stretch. It is important to try to relax during stretching exercises. Do not hold your breath. Instead focus on taking slow deep breaths while trying to stretch a little bit further. Remember to keep your toes pointed towards the ceiling at all times. These stretches can be performed lying down on your back, sitting or standing. It is important to find a position that works well for you.



1. Begin by sitting in a hardback chair; prop your leg on a stool or chair directly in front of you.

2. While keeping your back straight, slowly reach for your toes while at the same time keeping your knee straight. You will feel a stretch along the muscles in the back of your thigh.

3. Try to hold for **30 seconds**.

4. Slowly return to the starting position.

This exercise should be performed on both legs.



SETS	REPETITIONS	HOLD
3	1	30 Seconds

HAMSTRING STRETCH ADDITIONAL OPTIONS



Here are two other methods of stretching the hamstring muscles that you can do while lying on your back or standing. You can use any position that is most comfortable for you. It is important to try to relax during stretching exercises. Do not hold your breath. Instead focus on taking slow deep breaths while trying to stretch a little bit further.



1. While lying on your back, place a towel or cord around the bottom of your foot.
2. While keeping your knee straight, slowly pull your leg in an upward direction using the towel to pull higher. You will feel a stretch along the muscles in the back of your thigh.
3. Try to hold for **30 seconds**.
4. Slowly return to the starting position.

OR



1. While standing, place your foot on a stool or chair.
2. While keeping your knee straight, slowly bend forward to touch your toe. You will feel a stretch along the muscles in the back of your thigh.
3. Try to hold for **30 seconds**.
4. Slowly return to the starting position.

This exercise should be performed on both legs

SETS	REPETITIONS	HOLD
3	3	30 Seconds

CALF STRETCH



This exercise stretches the calf muscles. These muscles can become tight after knee replacement. This stretch is also used during warm-ups to get your muscles ready for other exercises. You will need **to lean next to a wall or door** to complete this stretch. There are a few ways to perform the calf stretch. It is important to try to relax during stretching exercises. Do not hold your breath. Instead focus on taking slow deep breaths while trying to stretch a little bit further. This stretch can be performed two different ways

1. Stagger your stance with one foot in front of the other.
2. Keep the toes of both feet pointed forward while your hands on the wall/door – be sure to keep your back knee straight with the heel on the ground at all times.
3. Slowly lean forward until you feel a stretch in the back of your calf.
4. Hold for a minimum of 5 seconds and up to 30 seconds for a good stretch.
5. Relax and take a deep breath for 1-2 seconds.
6. Repeat 5 times to complete one set.
7. Switch to the opposite leg and repeat.



This exercise should be performed on both legs.

SETS	REPETITIONS	HOLD
3	3	30 Seconds

QUADRICEPS STRETCH



The Quadriceps are a group of muscles on the front of your thigh. This stretch should be performed several times a day to help keep the muscles flexible. This stretch is also used during warm-ups to get your muscles ready for other exercises. There are two ways to perform the quadriceps stretch. It is important to try to relax during stretching exercises. Do not hold your breath. Instead focus on taking slow deep breaths while trying to stretch a little bit further. For this exercise you will need to use a chair or countertop for balance.

1. Begin by grabbing our knee with your hand as you balance on the opposite foot.
2. Slowly pull your foot toward your buttocks until you experience a tolerable stretch along the front of your thigh.
3. Try to hold for **30 seconds**
4. Slowly return to the starting position

This exercise should be performed on both legs

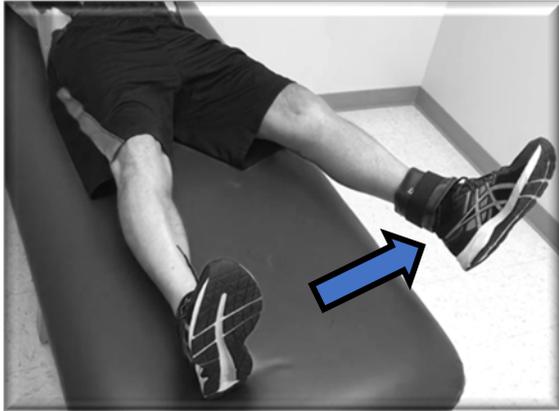


SETS	REPETITIONS	HOLD
3	3	30 Seconds

HIP ADDUCTOR STRETCH



This hip adductors are a group of muscles on the inner part of your thigh. This stretch is also used during warm-ups to get your muscles ready for other exercises. It is important to try to relax during stretching exercises. Do not hold your breath. Instead focus on taking slow deep breaths while trying to stretch a little bit further. This stretch can be performed in two different ways - lying on your back or sitting on the floor.



1. We recommend lying on your back.
2. Remember to keep your toes pointed toward the ceiling and your knee straight
3. Slowly move your leg out to the side until a comfortable stretch is felt in your groin.
4. Try to hold for **30 seconds**.
5. Slowly return to the starting position

OR



1. We recommend sitting on the floor or a firm surface.
2. Put your feet together and sit with your back straight. Place your hands on your knees.
3. Slowly press your knees down towards the floor until a comfortable stretch is felt in your groin.
4. Try to hold for **30 seconds**.
5. Slowly return to the starting position.

This exercise should be performed on both legs

SETS	REPETITIONS	HOLD
3	3	30 Seconds



These exercises can help muscles build strength as well as improve the nerve signals to improve strength and function. It is important to exercise the leg muscles in different ways to improve overall function. Exercise bands or ankle weights can be added to most of these exercises to increase the degree of difficulty.

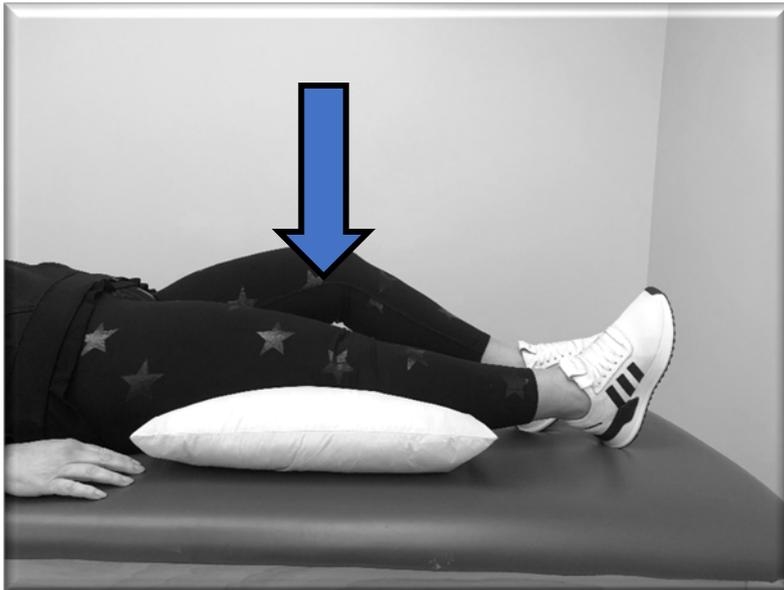
General Tips for Stretching Exercises

- ✓ Strengthening exercises are usually performed **after warm-up and stretching**.
- ✓ Please use the **“Sets, Repetitions, Hold”** as a guide during exercising.
- ✓ Remember to control the muscles to slowly return to the original starting position..
- ✓ Take a deep breath and **relax for 5 seconds** between repetitions.
- ✓ It important to take 5-10 minutes to cool-down after exercising. This should include stretches and applying ice to sore muscles.

Slight muscle discomfort can be expected - these exercises SHOULD NOT CAUSE PAIN. If you do experience pain, back off and modify your technique. If pain is still present, we recommend avoiding the particularly painful exercise.



The Quadriceps are a group of muscles on the front of your thigh. To perform this exercise, we recommend lying on your back on a soft surface or mat. Place a small towel or pillow behind your knee.



1. Keep your toes pointed toward the ceiling and slowly push the back of your knee down into the towel/pillow. You will feel your thigh muscles tighten.
2. Hold the muscle contraction for **5 seconds** before slowly relaxing and returning to the starting position.

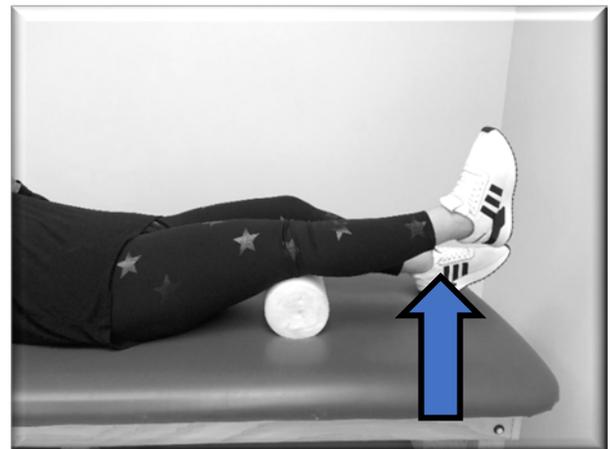
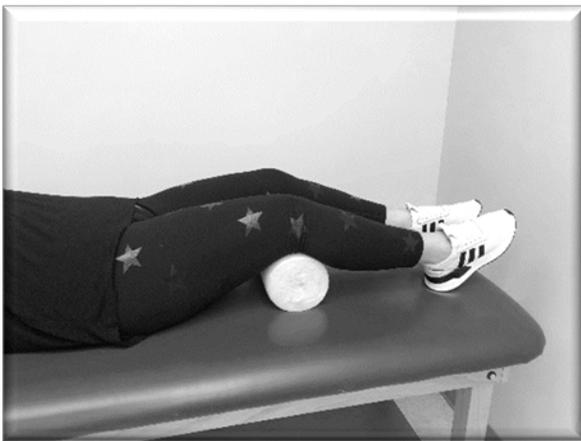
This exercise should be performed on both legs.

SETS	REPETITIONS	HOLD
3	10	5 Seconds



The Quadriceps are a group of muscles on the front of your thigh. To perform this exercise, we recommend lying on your back on a soft surface or mat. For this exercise, place a rolled-up towel or pillow behind your knee that allows your knee to rest in a comfortable bent position.

1. With your toes pointed toward the ceiling, slowly straighten your knee while keeping the back of your knee on the towel/pillow. You will feel your thigh muscles tighten.
2. Try to hold the muscle contraction for **5 seconds** with the knee straight.
3. Next slowly relax the thigh muscles and allow the leg to return to the starting position.



This exercise should be performed on both legs.

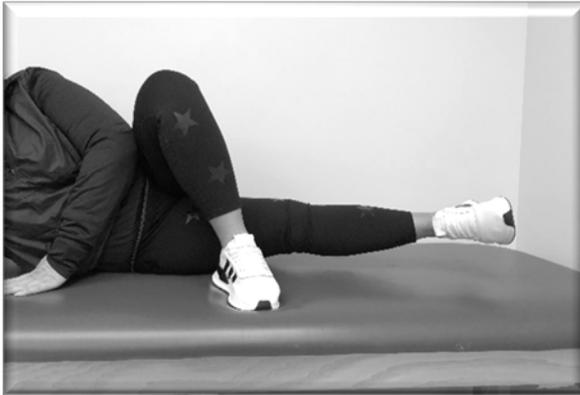
SETS	REPETITIONS	HOLD
3	10	5 Seconds

SIDELYING ADDUCTION

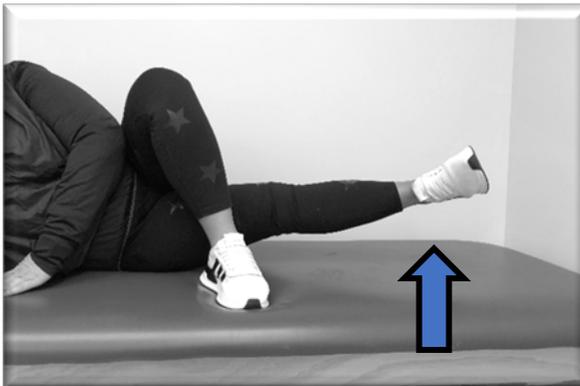


This exercise will work your muscles on the inside of your thigh. We recommend lying on your side on a comfortable mat or firm surface. Remember to keep your back straight for this exercise. You can use your arms for balance during this exercise.

1. Start by crossing your upper leg over your lower leg.



2. While keeping your knee straight, slowly raise your lower leg toward the ceiling. (You will feel your inner hip muscles tighten)



3. Try to hold the end position for **5 seconds** before slowly returning your leg to the starting position

This exercise should be performed on both legs.

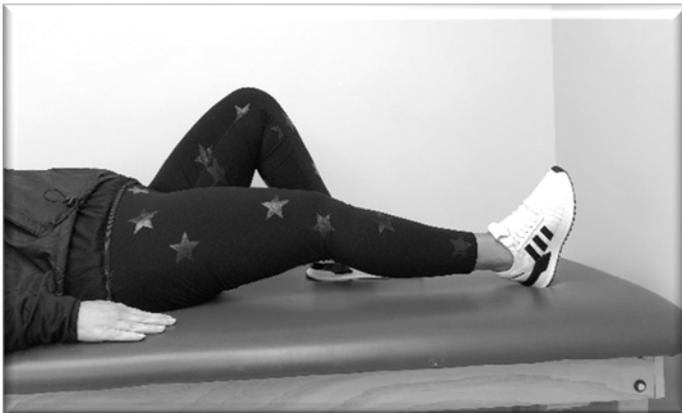
SETS	REPETITIONS	HOLD
3	10	5 Seconds

STRAIGHT LEG RAISE



This exercise works the quadriceps (thigh) muscles. To perform this exercise, we recommend lying on your back on a soft surface or mat. To take pressure off your back, your opposite leg should be comfortably resting in a bent position with the foot on the ground.

1. Begin by tightening your thigh muscles with your toes pointed toward the ceiling.
2. Slowly lift your entire leg off the ground while keeping your knee straight.
3. Try to bring your leg up until your thighs are at the same level.
4. Try to hold your leg up for **5 seconds** and then slowly return your leg to the starting position.



This exercise should be performed on both legs.

SETS	REPETITIONS	HOLD
3	10	5 Seconds

PRONE KNEE BENDS



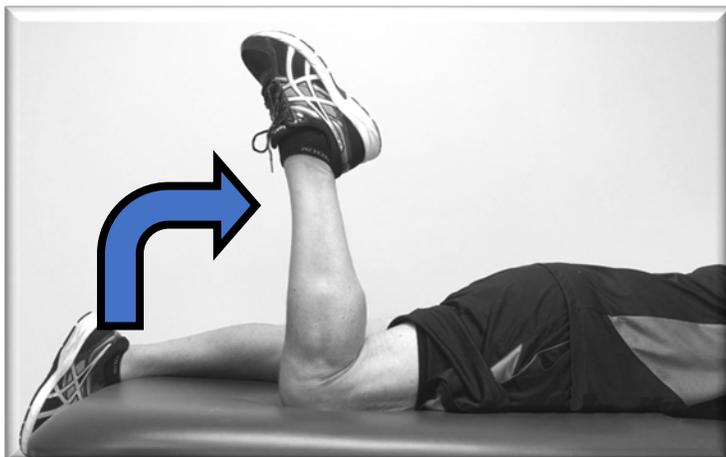
This exercise works the hamstring muscles on the back of your thigh. To perform this exercise, we recommend lying on your stomach on a comfortable surface. Keep the front part of your thigh in contact with the surface at all times. Ankle weights or exercise bands can be added to increase the degree of difficulty.



1. Point your toes away as if you were pushing on a gas pedal

2. Slowly bend your knee up until your lower leg points towards the ceiling.

3. Hold the bend for **5 seconds** before slowly returning your leg to the starting position.

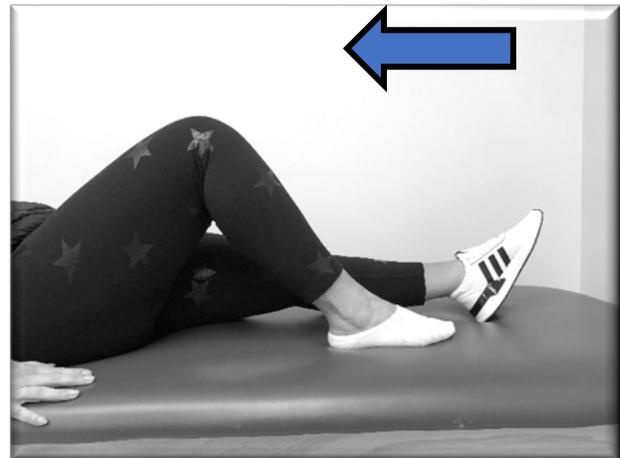


This exercise should be performed on both legs.

SETS	REPETITIONS	HOLD
3	10	5 Seconds



This exercise works the quadriceps (thigh) and hamstring muscles. To perform this exercise, we recommend lying on your back on a soft surface or mat. We also recommend performing this exercise while wearing socks so your foot can slide easier. Remember to keep your knee pointing toward the ceiling at all times.



1. Slowly bend your knee and slide your heel back toward your buttock until a comfortable pull is felt at the front of your knee.
2. Try to hold the position for 5 seconds before slowly pushing your knee straight until the back of your knee rests against the surface.

A strap can also be used to help slide your heel further to increase the stretch on the knee.

This exercise should be performed on both legs.

SETS	REPETITIONS	HOLD
3	10	5 Seconds

WALL SQUATS



This is a common exercise meant to strengthen your back, hips and legs muscles. Using the wall keeps the low back and shoulders in good postural alignment. Holding an abdominal muscle contraction during the exercise helps ensure core muscular conditioning. To make the exercise harder, an exercise ball can be used between your back and the wall.

1. Begin with your feet about shoulder-width apart and about 18 inches from the wall.
2. Start by slowly bending your knees and sliding your back down the wall until your knees are at a comfortable bend.
3. Be sure to keep your back and shoulders against the wall.
4. Try to hold for a minimum of 5 seconds.
5. Slowly return to the starting pose (slide back up the wall).
6. Relax and take a deep breath for 1-2 seconds.
7. Repeat 5-10 times to complete one set.

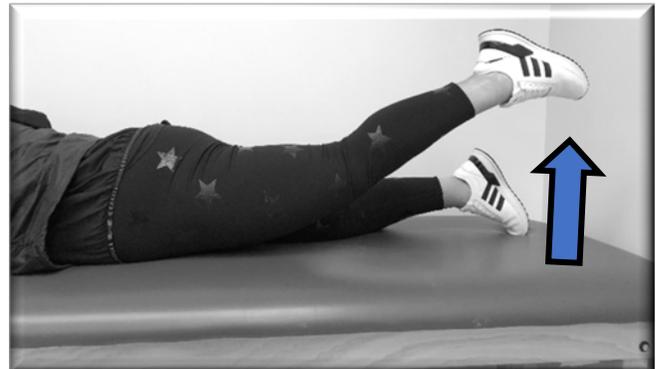


SETS	REPETITIONS	HOLD
3	10	5 Seconds

PRONE KNEE EXTENSION



This exercise works the buttock, hamstring and calf muscles along the entire leg. To perform this exercise, we recommend lying on your stomach on a comfortable surface. Ankle weights or exercise bands can be added to increase the degree of difficulty.



1. Point your toes away as if you were pushing on a gas pedal.
2. Slowly lift your entire leg off the table while trying to keep your knee straight.
3. Hold for **5 seconds** before slowly returning your leg to the starting position.

This exercise should be performed on both legs.

SETS	REPETITIONS	HOLD
3	10	5 Seconds



This exercise will work your muscles on the outside of your hip and thigh. When performing this exercise, we recommend using a chair, counter, or railing for balance. Remember to keep your back straight for this exercise.

Standing

1. Begin by slightly rotating your toes toward the side.
2. While keeping your knee straight, slowly move your leg out toward the side. You will feel the muscles on the side of your hip tighten.
3. Try to hold the end position for **5 seconds** before slowly returning your leg to the starting position.



Sidelying



4. Start by rotating your toes so they are pointing towards the ceiling.
5. While keeping your knee straight, slowly raise your leg toward the ceiling until a comfortable stretch is felt in your groin. You will feel your outer hip muscles tighten.
6. Try to hold the end position for **5 seconds** before slowly returning your leg to the starting position.

Ankle weights or exercise bands can be added to increase the degree of difficulty.

This exercise should be performed on both legs.

SETS	REPETITIONS	HOLD
3	10	5 Seconds