

# Coping with the Pain

Some of the recommended exercises may be difficult due to pain at first, but don't necessarily cause further injury.



<b>Keep Active</b>	Too much inactivity can weaken your muscles, which can worsen joint pain. Find an activity program that is safe for your knees. If you're not sure which motions are safe or how much you can do, talk with your healthcare provider or a physical therapist.
<b>Risk of Falling</b>	A painful or unstable knee can make a fall more likely, which can cause further knee damage. Make sure your home is well lit and use handrails on staircases. Be careful using a ladder or foot stool if you need to reach something from a high shelf.
<b>Watch Your Weight</b>	Eat a well-balanced meal with recommended portion sizes to nourish your body. If you are overweight, losing weight reduces the stress on your knee. Extra weight puts extra pressure on the joints of the hip and knee which can cause more damage and pain. Even small changes (5 pounds) can make a difference.
<b>Consider a Walking Aid</b>	A crutch or cane can take the stress off your knee if walking becomes difficult. Knee splints and braces can also help you stay stable.
<b>Watch Your Shoes</b>	Cushioned insoles can reduce stress on your knees. For knee osteoarthritis, consider special insoles that you put in your shoe. To find the appropriate insole, speak with your healthcare provider or a physical therapist.
<b>High Impact Exercise</b>	High-impact exercises can further injure painful knees. Avoid high impact exercises, such as running, jumping, and kickboxing, if this form of exercise significantly worsens your knee or hip pain. Also avoid doing exercises such as lunges and deep squats that put a lot of stress on your knees. These can worsen pain and may cause injury.
<b>New Symptoms</b>	If your knee pain is new, don't ignore it. See your healthcare provider as soon as possible, so you can prevent any further damage.
<p>If you experience any "red flags" of the following, don't ignore it. Call your healthcare provider:</p> <ul style="list-style-type: none"> <li>You have severe, unexplained joint pain that persists more than 3 days.</li> <li>The joint is significantly swollen.</li> <li>You have a hard time moving the joint.</li> <li>Your skin around the joint is red or hot to the touch.</li> <li>You have a fever or have lost weight unintentionally.</li> </ul>	



This guide is based on the 2020 VA/DoD Clinical Practice Guideline for Non-surgical Management of Hip and Knee Osteoarthritis. For more information, scan the QR code or visit <https://www.healthquality.va.gov/guidelines/cd/oa/>



# Taking Control of Your Osteoarthritis

This patient guide will help you and your healthcare team to develop an action plan for treating your Osteoarthritis (OA). Combining self-management and medical care can help you live a normal, active life.

## Keep Active

### Low-Impact Activities

Choosing the correct activities is important for people with osteoarthritis (OA). Some well tolerated activities include biking, swimming, and water aerobics. Being active may also help you lose weight, which takes pressure off joints. Recreational activities are used for leisure and shaped by individual interest. If favorite activities become painful, ask your doctor or physical therapist about how to modify painful moves. Water exercise takes weight off painful joints. Many community and hospital wellness centers, gyms, and pools offer classes for people with OA.



### How Much Exercise?

Choosing the correct amount and type of exercise is important for people with osteoarthritis. There are exercises you can do at home to maintain or improve your mobility and strengthen your muscles. Some examples are stretching and leg strengthening exercises that can be done at home to help your OA. Thirty minutes of physical activity each day is a recommended goal. Start with a small goal such as 10 minutes every other day. If your pain is tolerable or manageable, exercise more to meet the goal. When you start to exercise, some mild muscle soreness is normal. It is OK to work through this since muscle soreness usually improves with time. Check with your doctor if you want to try over-the-counter pain relievers like acetaminophen, ibuprofen, or naproxen to help the soreness.



### Walking



Even if you have stiff or sore knees, walking may be a great exercise. Start with a slow pace or short distances and keep at it. The movement associated with walking can ease joint pain, strengthen leg muscles, improve posture (stand tall when you walk), and improve flexibility. It is also good for your heart health and other conditions such as diabetes and high blood pressure. It is a good idea to discuss your planned exercise with your provider before you start any new activity or exercise. When starting your new activity or exercise start slowly and increase gradually. Drink plenty of water, especially on hot days and wear comfortable clothes.

### Physical Therapy

Physical therapy can play an important role in the treatment of OA. Goals of physical therapy are to decrease inflammation, improve movement of joints and strengthen the muscles around the joint. A physical therapist will collaborate with you to determine the best plan of care for you. You may not need to see a physical therapist on a regular basis. Treatment from a physical therapist may range from a one-time visit to several visits on a regular basis. A physical therapist can help you choose proper exercises and teach you skills to minimize stress on your joints.



## Home Exercises for Hip OA

Stretching improves range of motion and keeps you flexible



### Standing Straight Leg Raise to the Side

Stand and hold the back of a chair for balance. Place your weight on your left leg. Stand tall and lift the right leg out to the side - keep the right leg straight and outer leg muscles tensed. Hold 3 seconds, then slowly lower the right leg. Do two sets of 10 repetitions. Switch legs after each set.

How often to do this exercise: \_\_\_\_\_

This move helps you bend over or get in and out of cars



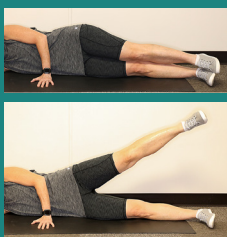
### One Leg Balance

Stand behind your kitchen counter or a back of a chair, without holding on, and slowly lift one foot off the floor. The goal is to stay balanced for 20 seconds without grabbing counter.

Do this move twice, then switch sides.

How often to do this exercise: \_\_\_\_\_

Strengthen hip abductor muscles

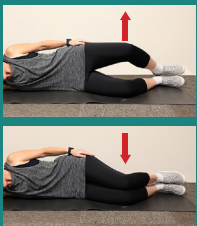


### Side Leg Raise Extension

Lie on your side, stack your hips and extend both legs. Rest your lower arm under your head and your top arm on your top hip. Slowly lift the top leg keeping the feet and knees pointing forward. Lower the leg with control. Repeat 10 times each side for up to three sets. Do not allow low back to extend. Do not lift leg too high (more than 20 degrees).

How often to do this exercise: \_\_\_\_\_

Gluteus medius exercise



### Clamshell

Lay on your side with legs stacked with your knees and hips bent to about a 45' angle. While keeping feet together lift the top knee vertically a few inches to the level of your hips then return to the starting position. Ensure pelvis does not rotate backward and only your knee raises. Engaging abdominal muscles can help if this occurs.

How often to do this exercise: \_\_\_\_\_

For core muscles - abdominals, gluteals, and back extensors



### Bridging

Begin by lying on your back with your arms resting at your sides, your legs bent at the knees and your feet flat on the ground. Squeeze your buttocks, tighten your abdominals and lift your buttocks off the surface while keeping your shoulder blades on the surface. Keep the hips/pelvis level, do not arch your back or hold your breath. The motion is similar to 'scooting yourself up in bed.'

How often to do this exercise: \_\_\_\_\_

## Home Exercises for Knee OA

To get the most out of your stretches, warm up first with 5-minutes of activity like walking or biking.

### Quad Set

Start by lying on the floor. (Put a towel roll under your knee) Keep both legs and heels on ground. Simply tighten the muscle on top of your thigh. Hold the left leg tense for 5 seconds. Keep breathing. Do two sets of 10 repetitions. Switch legs after each set. Do not let your buttock come off the floor/bed.

How often to do this exercise: \_\_\_\_\_

Help to strengthen the quadriceps muscle



### Calf Stretch

Hold onto a chair for balance. Bend your left leg. Step back with your right leg, and slowly straighten it behind you. Press your left heel toward the floor. You should feel the stretch in the calf of your back leg. Hold for 20 seconds. Repeat twice. Then switch legs.

How often to do this exercise: \_\_\_\_\_

Stretching exercises also help prevent pain and injury



### Straight Leg Raise

Lie on the floor, upper body supported by your elbows. Bend your left knee, foot on the floor. Keep the right leg straight, toes pointed up. Tighten your thigh muscles and raise your right leg. Hold for 3 seconds. Keep your thigh muscles tight and slowly lower your leg to the ground. Touch and raise again. Repeat 10 times, then switch legs. Do not raise your straight leg more than 45 degrees.

How often to do this exercise: \_\_\_\_\_

Build muscle strength to help support weak joints

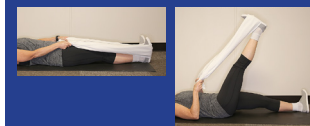


### Hamstring Stretch

Lie down. Loop a bed sheet (or a towel) around your right foot. Use the sheet to help pull the straight leg up and stretch it. Hold for 20 seconds, then lower the leg. Repeat twice. Then, switch legs.

How often to do this exercise: \_\_\_\_\_

Stretching improves range of motion and keeps you flexible



### Squat without Bands

Begin with feet shoulder width apart, toes turned slightly outward. Bend knees and sit back slightly as you descend to about a 45' angle and keep weight through the heels. Rise up by pulling hips forward, pushing the heel into the floor and standing straight up. Push feet outward against the ground as if "spreading the floor" during the movement to ensure good hip muscle engagement.

How often to do this exercise: \_\_\_\_\_

Strengthen quadriceps, gluteus, hip abductors, and adductors

