

# PREPATELLAR (KNEE) BURSITIS

## What is prepatellar bursitis?

Prepatellar bursitis is an irritation or inflammation of a bursa in your knee. A bursa is a fluid-filled sac that acts as a cushion between tendons, bones, and skin.

There are several bursae in the knee. The prepatellar bursa is located just in front of the kneecap near the attachment of the kneecap (patellar) tendon. Prepatellar bursitis is also called housemaid's knee from when maids were injured cleaning floors on their knees. The injury is common in wrestlers, who get it from their knees rubbing on the mats. Volleyball players get it from diving onto their knees for the ball.

## How does it occur?

Bursitis can result from:

- overuse
- a direct blow to the area
- chronic friction, such as from frequent kneeling

## What are the symptoms?

Prepatellar bursitis causes pain and swelling over the front of the knee. You may have pain when you bend or straighten your leg.

## How is it diagnosed?

Your healthcare provider will examine your knee for tenderness over the bursa.

## How is it treated?

Treatment may include:

- using ice packs on your knee for 20 to 30 minutes every 3 to 4 hours for 2 or 3 days or until the pain goes away
- wrapping an elastic bandage around your knee to reduce any swelling or to prevent swelling from occurring
- taking anti-inflammatory medicine (adults aged 65 years and older should not take non-steroidal anti-inflammatory medicine for more than 7 days without their healthcare provider's approval)
- removal by your healthcare provider of some of the fluid within the bursa if it is very swollen
- injection of a corticosteroid medicine into the swollen bursa
- leg stretching exercises

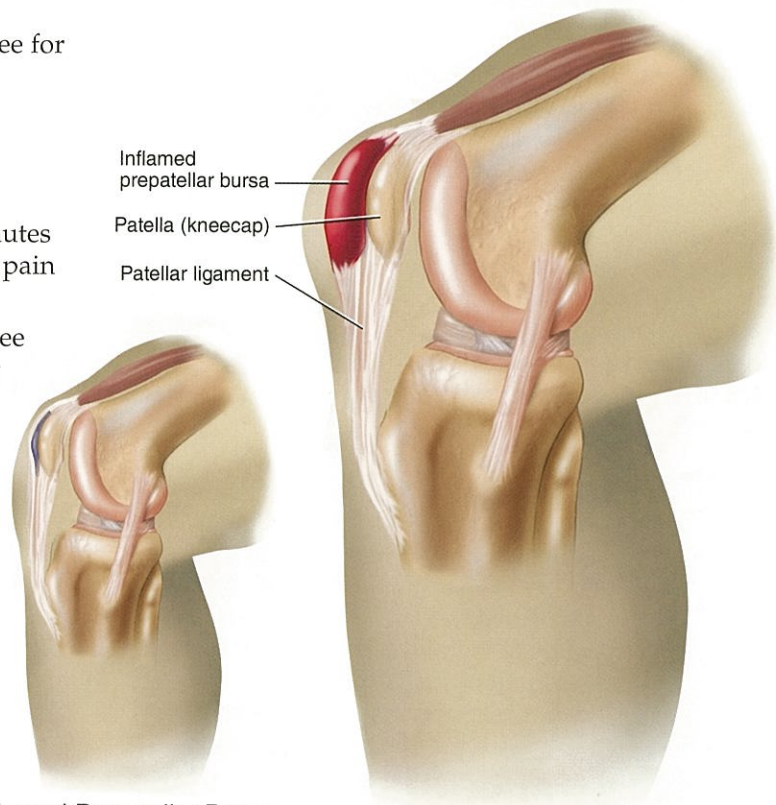
## When can I return to my sport or activity?

The goal of rehabilitation is to return you to your sport or activity as soon as is safely possible. If you return too soon you may worsen your injury, which could lead to permanent damage. Everyone recovers from injury at a different rate. Return to your sport or activity will be determined by how soon your knee recovers, not by how many days or weeks it has been since your injury occurred. In general, the longer you have symptoms before you start treatment, the longer it will take to get better.

You may safely return to your sport or activity when, starting from the top of the list and progressing to the end, each of the following is true:

- Your injured knee can be fully straightened and bent without pain.
- Your knee and leg have regained normal strength compared to the uninjured knee and leg.
- Your knee bursa is not swollen or tender to touch.
- You are able to put pressure on your bursa (such as kneeling) without pain or swelling.
- You are able to jog straight ahead without limping.

## PREPATELLAR (KNEE) BURSITIS



Normal Prepatellar Bursa

- You are able to sprint straight ahead without limping.
- You are able to do 45-degree cuts.
- You are able to do 90-degree cuts.
- You are able to do 20-yard figure-of-eight runs.
- You are able to do 10-yard figure-of-eight runs.
- You are able to jump on both legs without pain and jump on the injured leg without pain.

## How can I prevent prepatellar bursitis?

Prepatellar bursitis is best prevented by avoiding direct blows to the kneecap area and by avoiding prolonged kneeling. Proper protective kneepads will help prevent inflammation of the bursa.

# PREPATELLAR (KNEE) BURSITIS REHABILITATION EXERCISES

You can stretch your leg right away by doing the first 3 stretching exercises. Start strengthening your leg by doing the last 3 exercises.

**1. HAMSTRING STRETCH ON WALL:** Lie on your back with your buttocks close to a doorway, and extend your legs straight out in front of you along the floor. Raise one leg and rest it against the wall next to the door frame. Your other leg should extend through the doorway. You should feel a stretch in the back of your thigh. Hold this position for 15 to 30 seconds. Repeat 3 times.



HAMSTRING STRETCH ON WALL

**2. STANDING CALF STRETCH:** Facing a wall, put your hands against the wall at about eye level. Keep one leg back with the heel on the floor, and the other leg forward. Turn your back foot slightly inward (as if you were pigeon-toed) as you slowly lean into the wall until you feel a stretch in the back of your calf. Hold for 15 to 30 seconds. Repeat 3 times. Do this exercise several times each day.



STANDING CALF STRETCH



QUADRICEPS STRETCH

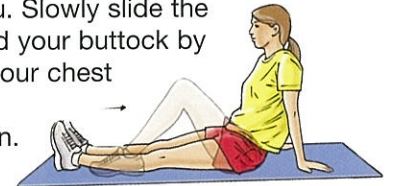
**3. QUADRICEPS STRETCH:** Stand an arm's length away from the wall, facing straight ahead. Brace yourself by keeping one hand against the wall. With your other hand, grasp the ankle of the opposite leg and pull your heel toward your buttocks. Don't arch or twist your back. Keep your knees together. Hold this stretch for 15 to 30 seconds. Repeat 3 times on each side.

**4. QUAD SETS:** Sitting on the floor with one leg straight and your other leg bent, press the back of your knee of your straight leg into the floor by tightening the muscles on the top of your thigh. Hold this position 10 seconds. Relax. Do 3 sets of 10.



QUAD SETS

**5. HEEL SLIDE:** Sit on a firm surface with your legs straight in front of you. Slowly slide the heel of one leg toward your buttock by pulling your knee to your chest as you slide. Return to the starting position. Do 3 sets of 10.



HEEL SLIDE

**6. STRAIGHT LEG RAISE:** Lie on your back with your legs straight out in front of you. Bend one knee and place the foot flat on the floor. Tighten up the top of your thigh muscle on the opposite leg and lift that leg about 8 inches off the floor, keeping the thigh muscle tight throughout. Slowly lower your leg back down to the floor. Do 3 sets of 10 on each side.



STRAIGHT LEG RAISE

**7. SIDE-LYING LEG LIFT:** Lying on your side, tighten the front thigh muscles on your top leg and lift that leg 8 to 10 inches away from the other leg. Keep the leg straight. Do 3 sets of 10.



SIDE-LYING LEG LIFT

**8. WALL SQUAT WITH A BALL:** Stand with your back, shoulders, and head against a wall and look straight ahead. Keep your shoulders relaxed and your feet 2 feet away from the wall and a shoulder's width apart. Place a soccer or basketball-sized ball behind your back. Keeping your head against the wall, slowly squat down to a 45 degree angle. Your thighs will not yet be parallel to the floor. Hold this position for 10 seconds and then slowly slide back up the wall. Repeat 10 times. Build up to 3 sets of 10.



WALL SQUAT WITH A BALL