

**Safety and Education**  
**Vol. 25/23**  
**Avoiding Common Cycling Injuries**

---



---

**How to Avoid Cycling Injuries Before They Sideline You**

SIDESTEP CYCLING INJURIES WITH THIS HEAD-TO-TOE GUIDE TO STAYING PAIN-FREE.

By Selene Yeager / Published April 13, 2022 / [Bicycling.com](https://www.bicycling.com)

A good bike fit is your first step to [pain-free pedaling](#). But it doesn't guarantee you'll avoid a cycling injury. How you fit on your bike frame is only half the equation. The other, sometimes overlooked half is the status of your own body's frame—how robust, mobile, and balanced it is as you ride.

“It frustrates a lot of people. They'll come in and say, ‘I just paid all this money for a bike fit and I still hurt,’” says clinical bike fitter, USA Cycling certified coach, and physical therapy cycling specialist Ellen Foster, D.P.T., of [Beyond Exercise](#) in Cincinnati, Ohio. “Bike fit is the first thing we look at when someone is injured. But it's not a magic cure-all for injuries. It's one part of the picture.”

The rest of that picture includes making sure you practice preventative techniques like [strength training](#), stretching, [foam rolling](#) and/or using massage guns, as well as smart training and riding practices, Foster says.

Broadly speaking, a few key strategies will help you stop a cycling injury before one sidelines you. Here's what to know.

## Strategies for preventing a cycling injury

**Check your fit:** Again, it's not a magic shield against cycling injury, but it's still your first step toward injury prevention and resolution. Remember that your body changes over time, so if it's been a few seasons, it might be time for a tune up with a professional fitter.

**Check your riding schedule:** Cycling is non-impact, so it's easy for most people to do—and *overdo*. “What does your training plan look like? Did you go from not riding at all to pushing it every day? If you're putting more stress on your body, you need to have rest and [recovery periods](#) to let your body adapt to that stress,” Foster says.

“We see a lot of clients from [Peloton](#), because they're looking for a workout and they're smashing Power Zone rides every single day.” It's also easy to overdo it with [Zwift](#) because users get hooked on the hard rides and races and don't allow for enough recovery, she says. Stick to the general rule of only doing two to three truly hard rides per week.

**Strength train:** [Strength training](#) doesn't have to be about building big muscles. “You do squats, deadlifts, lunges, and [kettlebell swings](#) to make tendons, cartilage, bone, and all the tissues you don't see in the mirror—as well as your muscles—strong and resilient,” Foster says. Aim to get into the gym two to three days a week to lift in the offseason and then, as the bike intensity goes up, you can switch to maintenance mode. To sustain your progress, you can do as little as 15 to [20 minutes of strength training](#) twice a week.

**Warm up:** Most of us just hop on our bikes and start riding. But, to prime your muscles and connective tissues to pedal, you should move them first. “It doesn't have to be time consuming. Just two minutes of activating your muscles and taking your joints through a full range of motion can help get your muscles ready for action and avoid soreness and injury,” Foster says. Try [her pre-cycling warm up](#) before your next ride.

**Move around:** Cycling can be a very static activity, forcing your muscles into the same position for hours on end. The repetition of this position increases injury risk. “Make a conscious effort to move around on the bike. Sit up and extend through the spine. Twist a bit from side to side. Rotate your pelvis forward and back. Get out of that same position,” Foster says. “That's especially important when you're on the trainer because that's a very locked in position and can lead to injury.”

## How to avoid the most common cycling injuries

There are certain body parts that are more susceptible to cycling injuries. Pay special attention to these areas in your preventative care techniques. And by all means, if you're experiencing pain or suffering from an injury, seek the help of a physical therapist who can devise a custom plan.

## Cyclist's Knee (Patellofemoral pain syndrome, PFPS)

**How it shows up:** pain under and/or around the kneecap during activity and/or while at rest

**How to prevent it:** Take the pressure off your knees by keeping your supporting muscles, especially the quads, supple. The quads attach to the shin bone through the knee cap (or patella), so the forces you generate while pedaling put a lot of load on that area in a small range of motion, Foster says. To keep your quads mobile, try:

»**A quad stretch:** Stretch your legs when you get off the bike with a simple standing quad stretch.

*How to do it:* Start standing, holding onto a stable object for support with your left hand. Grab your right ankle with your right hand and draw the foot towards your butt without arching the low back. Tuck your pelvis forward slightly to deepen the stretch. Hold 30 seconds. Repeat on the other side.

»**Roll or massage your legs:** Massage your leg muscles (especially those quads) in the evening with a massage gun, foam roller, or [other tool](#) to reduce tension, improve blood flow, and facilitate recovery. You can find foam rolling moves for every cycling muscle [here](#).

»**Stretch the supporting cast:** Your quads don't work in isolation. Stretch out your hips and glutes with [a reclining pigeon pose](#).

*How to do it:* Lie faceup on the floor. Cross your right ankle over left thigh. Extend your right arm through your legs and your left arm around the outside of your left leg. Clasp your hands around your left thigh and draw your left knee toward your chest. Hold the pose for one minute. Switch sides and repeat.

## Low back pain

**How it shows up:** aching, burning, stabbing pain, and stiffness are all hallmarks of [low back pain](#), which can occur on one or both sides of your back

**How to prevent it:** Work on your spine mobility, stability, and strength. "The folded forward position we're in while we ride can be stressful on the muscles that stabilize our spine," Foster says. You can help [prevent back pain](#) by strengthening your posterior chain muscles that hold up your back, including the glutes, erector spinae, and hamstrings. To strengthen your posterior chain and keep back pain at bay, practice these activities two to three times a week:

»**Mobilize your spine.** Take your spine through its full range of motion and relieve tension with cat/cow pose, which stretches the spinal muscles in both forward and back bends.

*How to do it:* Start on your hands and knees, hands directly under shoulders and knees under hips, back flat. Inhale and tilt your head and pelvis up while dropping your chest and abdominals toward the floor. Exhale and drop your head, tucking chin toward chest and tailbone forward while arching your back and pulling belly button toward the ceiling. Continue alternating for about a minute.

»**Activate the glutes.** Your glutes stabilize your pelvis in the saddle, so your back muscles don't have to work overtime preventing you from rocking from side to side. Activate yours with these key moves, performing them two to three times a week:

- **Banded fire hydrant:** Wrap a resistance band loop above your knees. Start on all fours with your hands under your shoulders and knees under your hips. Keeping your hips level, raise your right knee out to the side as high as you can. Pause, lower back to the starting position and repeat for a full set. Then switch legs. Do 12 to 15 reps.
- **Single leg deadlift:** Hold a weight, like a kettlebell or dumbbell, in your left hand. Stand on your right leg. Keeping that knee slightly bent, hinge at the hip, extending your left leg behind you for balance. Continue lowering the weight until you are parallel to the ground. Press your right foot into the floor to return to the starting position. Repeat for a full set and then switch sides. Depending where you are in the season, go heavy enough that you can only eke out 6 to 8 reps or lighten up and perform higher reps (12 to 15) to fatigue.
- »**Build muscular endurance.** "People will often say, 'I feel fine until mile 60 when my back starts killing me,'" Foster says. "That's because those supporting muscles fatigue." To avoid back pain during long events, you need to increase your muscular endurance. Side plank exercises work great for not only building endurance in the obliques and the muscles surrounding the spine, but also the glutes that hold you stable in the saddle.
- *How to do it:* Position yourself on your right side with your right forearm on the ground, forming a straight line from your head to your feet. Stack your feet, hips, and shoulders. Then lift the hips off the floor. Hold for 20 to 30 seconds, then switch sides. You can find other [side plank variations here](#).

## Neck pain

**How it shows up:** pain at the base and/or sides of the neck; difficulty turning your neck from side to side; pain while holding up your head

**How to prevent it:** [Proper bike posture](#) is essential here. "You want a mostly neutral neck position and to look forward with your eyes, not by tilting your whole head up," Foster says. Also strengthen your shoulder and upper back muscles, because if those muscles that support you on the bike start to fatigue, your neck bears more burden than it's built to handle.

***"The folded forward position we're in while we ride can stress the muscles that stabilize our spine."***

The following moves, done two to three times a week, will help [strengthen your shoulders](#), mid and lower trapezius muscles, rhomboids, and other small muscles in your upper back:

»**Reverse fly:** Sit on the edge of a chair with your feet close together and a dumbbell in each hand. Hinge forward from your hips and let your arms hang down next to your calves with your elbows bent slightly and your palms facing each other. Keep your back flat. Lift your arms up and back until they are in line with the shoulders, squeezing shoulder blades together as you go. Keep your elbows slightly bent throughout. Pause, then slowly return to the starting position. Start with 5-pound dumbbells and perform 3 to 4 sets of 10 reps.

»**Row:** Hold a dumbbell with your right hand. Hinge forward at the waist and support your weight by putting your left knee and hand on a bench (or seat of a sturdy chair) so that your back is flat and parallel to the floor. Let your right arm hang straight down with the palm facing the bench. Pull the dumbbell up to your rib cage, with your elbow pointing straight up to the ceiling. Use your back to pull the weight, keeping shoulders down away from ears. Pause and then lower the weight. Repeat, then switch sides. Start with 15-pound dumbbells and perform 3 to 4 sets of 10 reps.

### Lateral hip pain

**How it shows up:** achiness, irritation, burning in the hip

**How to prevent it:** Keep your hip flexors, rotators, and [stabilizers](#) mobile (especially the piriformis, which is a small muscle of your butt, located beneath the glutes) so the muscles in your glutes and hips [don't tighten up](#) and trigger pain. [Stretching](#) and trigger point release with a lacrosse ball can help. While you can do the moves for low back pain to help with hip pain, you can also try the following exercises:

»**Figure-4 trigger point:** Sit on the ground. Cross one ankle over your opposite bent knee. Place a firm ball under your figure-four side glute (the leg that's lifted off the ground). Press into the ball and roll in a circular motion over it for about 30 seconds. Repeat on the opposite side.

»**Kneeling lunge:** Kneel on the ground, right foot in front of you and left knee on the floor, under your, both knees bent 90 degrees. Press your hips forward, keeping the front knee bent at a 90-degree angle. Feel a stretch in the left hip. Hold for 30 seconds, then switch sides.

### Achilles tendonitis

**How it shows up:** pain and stiffness along the back of the heel, Achilles tendon, and/or bottom of your calf

**How to prevent it:** Keep your calves and Achilles tendon conditioned to withstand the load of pushing big gears in sprints and grinding up long, hard climbs. Also, pay attention to your [pedaling mechanics](#). Too much ankling—or pedaling with your ankle, rather than holding

the ankle stable to serve as a platform—is the primary culprit behind this pain, Foster says. To avoid Achilles pain:

»**Pedal naturally:** “For years cyclists were told to pedal like you’re scraping mud off the bottom of your shoe. So many riders drop their heel on the downstroke, effectively pedaling the bike with their calf and Achilles, which are not the most efficient muscles. That puts a lot of stress on the Achilles and overtime, especially when you get older and the tendons get stiff, can lead to injury,” Foster says. Instead, pedal with a stroke that feels natural, and avoid dropping the heel too much.

»**Eccentric calf raises:** Stand on the edge of a step and press up onto your tip toes on both feet. Shift your weight and lower down slowly on only one foot, until your heel drops below the level of the step and you feel a stretch. Press back up and repeat. Then switch sides. Perform 15 reps slowly on each leg, two to three times per week.

-----

Okay riders, that’s it for this week. Get out there and exercise....and then ride. Until next time,

Make Every Ride Epic,

Darryl