

Recreational cycling has gone from strength to strength in Australia over the past few years, with increasing numbers of people taking up the sport. While generally considered a safe, low risk form of exercise due to the lack of impact, the high volumes of repetition of quite similar movement of the lower limb and the quiet sustained posture of the trunk and upper limb can still result in overload and injury.



A relatively simple program of exercises to maintain mobility and strength in a few key areas can often dramatically decrease your chances of having time out of the saddle due to common cycling injuries. Below is a list of some of the more common complaints seen in the clinic and a few great exercises to try to avoid them.

### **Low Back Pain**



Low back pain on the bike is a common complaint. This can result from excessive flexion (bend) of the lumbar spine, often because of excessive hamstrings tightness. A simple hamstring stretch shown below, allows for greater mobility of the hip that is required to reduce flexion stress on the low back. While stretching your hamstrings is important, ensuring appropriate strength of the hamstrings and surrounding muscles will have them coping better with training loads and stop them from tightening up so much in the first place. A great exercise for keeping your hamstrings and your bum strong is doing a single leg bridge, shown below.

<https://vimeo.com/576978521>

### **Neck Pain**

Neck pain on the bike is another common complaint. Often this occurs due to a stiff, rounded midback placing excessive stress on the joints of the neck when in the aero position on the bike. Most of us tend to spend more time bending forward than stretching backwards and could be more mobile through the midback. Poor sitting posture and long periods in the saddle are common contributors to a stiff midback. The stretches below are a great way to get those stiff segments of the middle of the back moving well and decreasing compression and stress on the bottom of the neck.



Midback towel stretch

- Firmly roll up a towel to the desired size
- Lay with the towel across the back at the level of the shoulder blades
- Head should be resting on the ground and ideally arms out to the side to open the chest and stretch the pecs
- Lay for 3-5 mins

<https://vimeo.com/576976639>

Weakness of the stabilising muscles of the shoulder blade is another common issue that may result in overload to the muscles and joints of the neck. Given the long periods of time supporting yourself through your arms on the handlebars, maintaining good strength of these muscles is imperative. A simple way to achieve this is by doing some planking. It is important to note that when performing this exercise, most of the work and load should be felt through the shoulders and not in the neck. If you feel overload to the neck, it may be a good idea to check in with your physio to ensure that you are performing the exercise correctly or to see if a different exercise may be more appropriate for you.



- Lay on your stomach, resting on your elbow, with fingers locked together.
- Engage your core and then raise your trunk up off the ground
- Attempt to maintain a straight plank position of the trunk
- Hold for 30 sec and repeat x 4

## **Knee Pain**

Most cyclists will at some point experience some form of knee pain. While pain may arise from a variety of structures in the knee, the injury and overload will generally arise due to tightness, poor motion control of the knee or both. Tight quads and IT bands are common amongst cyclists and may result in poor tracking or excessive compression of the patella or kneecap. A simple quad stretch and making friends with your foam roller can restore normal tone in this tissue and decrease stress on the knee.



## **ITB roller**

- Lay over the foam roller as shown.
- Roll back and forth from the hip to the knee to release any tightness.
- Focus more attention on the most painful areas
- Repeat 2 mins



## Quad stretch

- Lay on your back and tuck one foot back towards your bum.
- Rest the trunk back onto the elbows until you feel a good stretch in the front of the thigh
- Hold 20 sec and repeat x 5



## Quad Stretch

- Stand on one leg and tuck the heel of the opposite leg towards your bum.
- Gently pull the foot towards the bum with your hand to increase the stretch in the front of the thigh
- Hold 20 sec and repeat x 5



The knee acts like a hinge between hip and ankle and poor motion control of this hinge, is often a by-product of weakness or poor control elsewhere, particularly the hip. Weakness of the stabilising muscles of the hip, often results in the knee rolling in or out through the pedal stroke. This places a torsional force on the knees, which it is much more poorly suited to. Ensuring you keep your glutes strong is vital to ensuring appropriate motion control and loading of the knee. There are a multitude of great exercises for the glutes but the one below;

<https://vimeo.com/576981573>

<https://vimeo.com/576979487>

While certainly not an exhaustive list, the exercises above provide a good base for managing many of the common cycling injuries seen in the clinic. As always, there can be many factors involved including poor bike set up and poor techniques. Should you fail to be able to control your pain or injury with any of the above exercise, thorough investigation into the cause of your issues with a well trained physio should provide the plan and framework to keep you spinning your wheels pain and injury free.

**Article by Jim Burke**