Since the 1800s when bicycles first made their appearance, cycling has become popular for commuting, recreation, exercise, and sport. Today, there are about 80 million cyclists in the United States. Studies estimate that large numbers of these cyclists experience physical problems: 48 percent in their necks, 42 percent in their knees, 36 percent in the groin and buttocks, 31 percent in their hands, and 30 percent in the back. No matter why they use a bicycle, young people can follow some basic safety principles to avoid common cycling injuries.

What are common cycling injuries and how can they be prevented?

Knee Pain

The knee is the most common site for overuse injuries in cycling. Patellofemoral syndrome (cyclist’s knee), patella and quadriceps tendinitis, medial plica syndrome, and iliotibial band friction syndrome are a few of the more common knee overuse injuries. The first four injuries mentioned involve pain around the kneecap, while the last condition results in outer knee pain. Shoe implants, wedges beneath the shoes, and cleat positions may help prevent some overuse injuries.

Head Injuries

One of the most common injuries suffered by cyclists is a head injury, which can be anything from a cut on the cheek to traumatic brain injury. Wearing a helmet may reduce the risk for head injury by 85 percent. The majority of states have no laws governing the use of helmets while riding a bicycle, but helmets are readily available for purchase and typically low in cost.
CYCLING INJURIES

Neck/Back Pain
Cyclists most likely experience pain in the neck when they stay in one riding position for too long. An easy way to avoid this pain is by doing shoulder shrugs and neck stretches that help relieve neck tension. Improper form also leads to injuries. If the handlebars are too low, cyclists may have to round their backs, thus putting strain on the neck and back. Tight hamstrings and/or hip flexor muscles can also cause cyclists to round or arch the back, which causes the neck to hyperextend.

Stretching these muscles on a regular basis will create flexibility and make it easier to maintain proper form. Changing the grip on the handlebars takes the stress off of over-used muscles and redistributes pressure to different nerves.

Proper cycle fitting and seat height adjustments can also prevent many of these overuse injuries.

Wrist/Forearm Pain or Numbness
Cyclists should ride with their elbows slightly bent (never with their arms locked or straight). When they hit bumps in the road, bent elbows will act as shock absorbers. This is also where changing hand positions will help reduce pain or numbness. Two common wrist overuse injuries, Cyclist’s Palsy and Carpal Tunnel Syndrome, can be prevented by alternating the pressure from the inside to the outsides of the palms and making sure wrists do not drop below the handlebars. In addition, padded gloves and stretching the hands and wrists before riding will help.

Urogenital Problems
One common complaint from male riders who spend a lot of time riding is pudendal neuropathy, a numbness or pain in the genital or rectal area. It is typically caused by compression of the blood supply to the genital region. A wider seat, one with padding, a seat with part of the seat removed, changing the tilt of the seat, or using padded cycling shorts will all help relieve pressure.

Foot Numbness and Tingling
Foot numbness and tingling are common complaints, and shoes that are too tight or narrow are often the cause. In addition, foot numbness can be due to exertional compartment syndrome. This arises from increased pressure in the lower leg and resulting compression of nerves. The diagnosis is made by pressure measurements and is treated with surgical release. Bikes should be professionally tuned annually inspected for proper tire inflation and loose bolts and parts regularly to prevent accidents.

When should I seek care from a physician?
Head injuries generally result from a fall while cycling and can result in a concussion or more severe head injury. Should list signs and symptoms for concussion and advise to seek medical follow-up if present.

Any injury that is accompanied by bleeding, severe pain, loss of sensation, or increased weakness should be seen by a physician. Other pain due to overuse or mild injuries can be treated by rest and taking pain relievers such as ibuprofen or acetaminophen. Swelling and pain can also be treated with alternating ice and heat therapy.

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