

TOP 5 COMMON RUNNING INJURIES AND HOW TO PREVENT THEM

A GUIDE TO STAYING INJURY-FREE AND
RUNNING STRONG



DR. PADEN WOLFE



INTRODUCTION

The Frustration of Running Injuries

Running is supposed to be liberating—a time to clear your mind, challenge your body, and enjoy the rhythm of movement. But for many runners, it's also a cycle of frustration.

Nagging pain, recurring injuries, and discomfort that interrupts training are all too common. Just when you feel like you're making progress, an ache in your knee, tightness in your Achilles tendon, or sharp pain in your shins forces you to slow down, adjust your training, or stop running altogether.

The Cycle of Injury: Why Do Injuries Keep Coming Back?

If you've ever been sidelined by pain, you might have tried resting, icing, or stretching, hoping it would go away. Sometimes it helps—but only temporarily.

Many runners experience recurring injuries because they never address the root cause. They take time off, feel better, and then return to running without making any changes—only to have the same pain creep back in a few weeks or months later.

But here's the good news: most running injuries are not random or inevitable. They can be prevented.

The Importance of Injury Prevention

Running injuries don't just happen because you're running too much—they happen because of how you're running and how well your body is prepared for the demands of the activity.

- Are your running mechanics efficient, or is your body absorbing too much stress?
- Are you warming up properly, or jumping straight into intense workouts?
- Are your muscles strong enough to support your running form, or are imbalances leading to excess strain?

By understanding what causes injuries and making a few key adjustments, you can stay ahead of the pain and keep running without setbacks.

What You'll Learn in This Guide

This guide will help you identify the most common running injuries, understand why they happen, and—most importantly—how to prevent them.

With the right training habits, biomechanics, and recovery strategies, you can break the cycle of pain and keep doing what you love—**running strong, pain-free, and with confidence.**

ABOUT MILE HIGH PHYSICAL THERAPY

Mile High Physical Therapy: Helping You Run Better, Faster, and Pain-Free

Located in the heart of Denver, CO, **Mile High Physical Therapy** is dedicated to helping runners of all levels improve performance, prevent injuries, and optimize movement mechanics—without unnecessary surgeries or medications.

We understand how frustrating it is to deal with nagging pain, inefficient running mechanics, or recurring injuries. Whether you're training for a race or simply want to run more efficiently, the way your body moves plays a huge role in performance and injury prevention.

That's why we take a comprehensive approach, combining cutting-edge techniques, technology, and personalized running assessments to address the root cause of inefficiencies—**so you can run stronger, longer, and pain-free.**



www.milehighphysicaltherapy.com

ABOUT DR. PADEN WOLFE

Meet Dr. Paden Wolfe: 30+ Years of Experience in Biomechanics & Running Performance

With a career spanning over three decades, Dr. Paden Wolfe, MSPT, DPT, has helped thousands of runners and athletes improve their form, efficiency, and performance while avoiding injuries.



His expert understanding of biomechanics, human movement, and sports science allows him to develop customized solutions for each runner.

His approach often includes:

- **Video running gait analysis** to identify inefficient movement patterns
- **Biomechanical assessments** to pinpoint weaknesses affecting speed and endurance
- **Manual therapy & hands-on techniques** to enhance flexibility and mobility
- **Dry needling** for targeted muscle relaxation and recovery
- **Custom training programs** to strengthen key muscle groups for optimal running mechanics

If you've been struggling with persistent aches, inefficient running mechanics, or want to enhance your performance, Dr. Wolfe's evidence-based approach can help you move more efficiently and run at your best. **Take the next step toward stronger, smarter, and pain-free running.**

WHY RUNNERS GET INJURED: THE REAL CAUSES BEHIND PAIN & SETBACKS

Running is a high-impact, repetitive activity. While the body is built to handle this stress, small mechanical flaws, improper training habits, and overlooked warning signs can add up over time, increasing the risk of injury.

Repetitive Stress & Overuse

Many running injuries develop gradually due to repetitive motion and strain on the same muscles and joints. When form isn't efficient, certain areas absorb more impact than they should, leading to inflammation, muscle imbalances, and overuse injuries.

Lack of Proper Warm-Up & Cool-Down

Runners often skip or rush through warm-ups and cool-downs, jumping straight into workouts or stopping abruptly after a run.

Without properly preparing the muscles, joints, and connective tissues, the body isn't as resilient against the demands of running, increasing the risk of strain or tightness that lingers long after the run is over.

Gait & Biomechanical Issues

Every runner has a unique stride, but subtle inefficiencies—such as overstriding, poor knee alignment, or improper foot strike—can create excess stress on certain joints and muscles. These small imbalances may not cause immediate pain, but over time, they contribute to chronic injuries.

Ignoring Warning Signs

Many runners try to push through minor discomfort, stiffness, or pain, assuming it will go away. But pain is often a sign of an underlying issue that, if left unaddressed, can escalate into a more serious injury. Catching and correcting small problems early is key to preventing long-term setbacks.

The Good News?

Most running injuries aren't random—they are preventable. By making simple adjustments to form, training habits, and recovery routines, runners can reduce strain on their bodies, stay pain-free, and continue doing what they love for years to come.

THE 5 MOST COMMON RUNNING INJURIES & HOW TO PREVENT THEM

Running injuries can develop gradually over time due to repetitive stress, muscle imbalances, and improper biomechanics.

Over the next pages, we are going to explore **the five most common injuries** runners experience, along with key prevention strategies to help you stay pain-free.



#1 PATELLOFEMORAL SYNDROME (RUNNER'S KNEE)

Symptoms: Pain around or behind the kneecap, especially when running downhill, going up or down stairs, or after prolonged sitting. The pain may worsen with activity and ease with rest.

Causes: Weak quadriceps and glutes can lead to poor knee tracking, causing excessive stress on the patella (kneecap). An improper foot strike, overstriding, or weak hip stabilizers can also contribute to misalignment and increased knee pain.

Prevention Strategies:

- Strengthen quads, glutes, and hip stabilizers to provide better support and knee alignment.
- Improve running mechanics by keeping the knees aligned with the feet and avoiding overstriding.
- Incorporate low-impact cross-training (cycling, swimming) to reduce knee stress while maintaining endurance.

#2 ILIOTIBIAL BAND SYNDROME (ITBS)

Symptoms: A sharp or burning pain on the outside of the knee, which may worsen after extended periods of running, particularly downhill or on uneven surfaces. Some runners feel a clicking sensation in the knee when bending it.

Causes: Weak hip stabilizers and glutes can lead to excessive inward knee movement, increasing friction on the iliotibial (IT) band. Overpronation, poor running form, and a lack of mobility in the hips and thighs can also contribute.

Prevention Strategies:

- Strengthen hip abductors and glutes to improve knee stability and prevent excessive movement.
- Focus on proper foot placement and knee alignment to reduce stress on the IT band.
- Use foam rolling and mobility exercises to release tension in the IT band and surrounding muscles

#3 PLANTAR FASCIITIS (PF)

Symptoms: A sharp, stabbing pain in the heel, often felt during the first steps in the morning or after prolonged periods of standing or running. The pain may subside with movement but return after rest.

Causes: Tight calf muscles and poor foot mechanics can increase tension on the plantar fascia, the ligament that supports the arch of the foot. Improper footwear with insufficient support or suddenly increasing mileage can also contribute.

Prevention Strategies:

- Stretch and strengthen the foot arch and calf muscles to reduce tension on the plantar fascia.
- Wear supportive running shoes with adequate arch support and replace worn-out footwear regularly.
- Gradually increase mileage and intensity to allow the feet to adapt to training demands

#4 MEDIAL TIBIAL STRESS SYNDROME (SHIN SPLINTS)

Symptoms: Pain and tenderness along the front or inside of the shin, which worsens with activity. The pain may start as mild discomfort but can progress to sharp pain if left untreated.

Causes: A sudden increase in mileage or intensity can overload the shin bones and surrounding muscles, leading to inflammation. Running on hard surfaces or wearing unsupportive footwear can also contribute.

Prevention Strategies:

- Strengthen lower leg muscles (calves, tibialis anterior) to improve shock absorption and reduce strain on the shins.
- Gradually increase training load by no more than 10% per week to prevent overuse.
- Ensure proper foot strike and running mechanics to distribute impact forces more effectively

#5 ACHILLES TENDONITIS

Symptoms: Pain, stiffness, or swelling in the Achilles tendon, often most noticeable in the morning or after a run. The discomfort may improve with movement but worsen after prolonged activity.

Causes: Tight calf muscles and overuse are the primary culprits. A sudden increase in running speed, distance, or hill training can overload the Achilles tendon, leading to irritation and inflammation.

Prevention Strategies:

- Stretch and strengthen calves and the Achilles tendon to improve flexibility and reduce strain.
- Use eccentric strengthening exercises (slow, controlled heel drops) to build resilience in the tendon.
- Avoid rapid increases in speed or hill running, allowing the body to adapt gradually.

By understanding **these common injuries and their causes**, you can take **proactive steps** to prevent setbacks and **keep running strong, pain-free, and injury-free**.

ESSENTIAL INJURY PREVENTION STRATEGIES

Preventing running injuries isn't just about avoiding pain—it's about optimizing movement, maintaining strength, and ensuring longevity in the sport. Incorporating proper warm-ups, efficient running mechanics, and recovery routines into your training can help reduce stress on the body and keep you running strong.

Proper Warm-Up

A proper warm-up is crucial for preparing the muscles, joints, and nervous system for the demands of running. Skipping this step can leave the body stiff and unprepared, increasing the risk of strains and overuse injuries.

- Activates key muscle groups, improving flexibility and circulation.
- Helps increase range of motion and joint mobility, allowing for smoother movement.
- Reduces the risk of tightness and stiffness that can lead to inefficient running form.

A dynamic warm-up should include functional movements such as leg swings, hip circles, high knees, and controlled lunges to get the body ready for efficient movement.

CORRECTING GAIT MECHANICS

Many running injuries stem from subtle inefficiencies in movement patterns, such as overstriding, improper foot placement, or poor posture. These small flaws may not cause immediate discomfort, but over time, they create excess stress on the joints and muscles, leading to overuse injuries.

- Refining foot strike and knee alignment helps distribute impact forces evenly.
- Improving cadence and stride efficiency minimizes braking forces and reduces energy waste.
- Strengthening the core and hip stabilizers promotes better posture and overall stability.

Addressing gait mechanics early can prevent long-term movement issues and improve running efficiency.

COOLING DOWN & RECOVERY

Just as warming up prepares the body for movement, cooling down is essential for proper recovery. Stopping abruptly after a run can lead to stiffness, tightness, and a slower recovery process.

- **Post-run stretching** maintains flexibility and prevents muscles from tightening.
- **Foam rolling** can help reduce tension and improve blood flow to tired muscles.
- **Gradually reducing intensity** at the end of a run allows the heart rate and blood flow to return to normal safely.

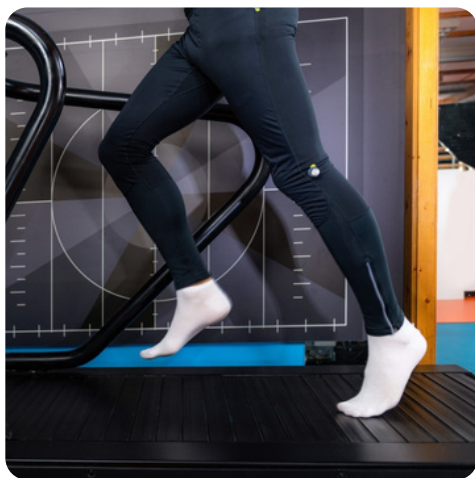
Recovery goes beyond just stretching—it includes hydration, proper nutrition, and adequate rest to ensure the body is fully prepared for the next run. Ignoring recovery can lead to fatigue, slower muscle repair, and an increased risk of injury over time.

By prioritizing warm-ups, refining gait mechanics, and incorporating proper recovery, runners can stay injury-free, maintain peak performance, and enjoy running without setbacks.

HOW GAIT ANALYSIS CAN HELP YOU PREVENT RUNNING INJURIES

Running injuries don't happen overnight—they develop over time due to inefficient movement patterns, muscle imbalances, and repetitive stress. Even minor flaws in running mechanics can create excess strain, increasing the risk of knee pain, shin splints, Achilles issues, and more.

A running gait analysis is a powerful tool for identifying these issues before they turn into injuries. By evaluating how your body moves while running, you can make precise adjustments to improve efficiency, reduce impact forces, and protect yourself from preventable injuries.



WHAT A RUNNING GAIT ANALYSIS EVALUATES

At Mile High Physical Therapy, Dr. Paden Wolfe uses advanced video analysis to assess key movement patterns and detect mechanical inefficiencies that contribute to injuries. A gait analysis provides an in-depth evaluation of:

- **Foot strike and stride mechanics** – Identifying whether you're overstriding, heel-striking, or landing in a way that increases stress on your joints.
- **Hip, knee, and ankle alignment** – Ensuring that these joints move efficiently to reduce excess strain and promote smooth motion.
- **Muscle imbalances and weaknesses** – Pinpointing areas that may be overcompensating, leading to poor movement patterns and overuse injuries.
- **Overall movement efficiency** – Making sure your body is working in sync, reducing unnecessary stress, and improving endurance.

WHO CAN BENEFIT FROM A GAIT ANALYSIS?

Many runners assume that gait analysis is only for elite athletes, but anyone who runs regularly can benefit—whether you're recovering from an injury or trying to prevent one.

- **New runners** who want to develop good habits and avoid common form mistakes.
- **Experienced runners** looking to refine their mechanics and improve efficiency.
- **Injury-prone runners** who want to identify movement patterns contributing to recurring pain.
- **Competitive runners** who need to optimize their stride for better performance and longevity in the sport.

By understanding how your body moves and where small inefficiencies exist, you can make adjustments that help you run stronger, longer, and pain-free.

Book Your Running Analysis Today!

MEET DR. PADEN WOLFE & THE WOLFE FAMILY – RUNNING IS IN THEIR BLOOD

When it comes to running expertise, **Dr. Paden Wolfe and his family live and breathe the sport.**

 **Dr. Paden Wolfe and his wife, Dr. Debbie Maass, have been running since junior high school** and have dedicated their careers to helping runners move better and perform at their best.

 **Dr. Debbie Maass ran at Colorado State University, earning two All-American awards** in the indoor mile and was inducted into the CSU Hall of Fame in 2024.

 **Their son, Parker Wolfe, is one of the fastest distance runners in University of North Carolina history**—an NCAA Champion in the outdoor 5K and Bronze medalist at the 2024 Olympic Trials.

 **Their daughters, Baylor and Kinley Wolfe, are D1 college runners** at the University of Kentucky and the University of North Carolina.

 **Dr. Paden Wolfe himself began competing in the Senior Games in 2020** and has worked with high school, collegiate, and elite runners for over 20 years.

🏆 Family mile times:

- Parker Wolfe: 3:54 (Olympic Trials Bronze Medalist, NCAA 5K Champion)
- Debbie Maass: 4:46 (CSU Hall of Fame Inductee)
- Kinley Wolfe: 4:51 (UNC)
- Baylor Wolfe: 5:05 (UK)
- Paden Wolfe: “Late bloomer” 5:27

The Wolfe family understands running at every level—from youth racing to Olympic competition. When you work with Dr. Paden Wolfe, you’re learning from someone with a lifetime of experience.



Conclusion and Next Steps

Running injuries don't have to be inevitable. With the right mechanics, strengthening exercises, and recovery strategies, you can reduce injury risk and keep running strong.

Take the First Step Toward Injury Prevention Today



Don't let pain or discomfort disrupt your running routine. Whether you're aiming to increase mileage, recover from an injury, or simply run more efficiently, proactive injury prevention is the key to long-term success.

[BOOK A RUNNING ANALYSIS TODAY!](#)

<https://www.milehighphysicaltherapy.com/request-a-running-analysis-appointment/>

We're here to help beyond this guide. Visit our website or reach out directly for movement assessments, expert recommendations, and personalized injury prevention strategies. Stay strong, run smart, and enjoy every mile ahead.



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