



Golf Warm-Up and Stretching Program

Golf continues to be a popular pastime with more than 29 million people playing in the United States alone. Many golfers and spectators consider the game a low-risk sport for injury. However, the repetitive motion and traumatic impact associated with the golf swing can cause injuries to the lower back, shoulder, knee, elbow and wrist. Injuries also stem from reduced flexibility and conditioning, and poor swing mechanics. An appropriate warm-up, accompanied by proper swing mechanics, are crucial to helping prevent injury.

Dr. Steven Chudik, orthopaedic surgeon and sports medicine physician with the Steven Chudik Sports Medicine Injury Clinic and founder of the Sports Medicine Teaching/Research Foundation (OTRF), recommends a dynamic stretching warm-up before playing golf to help prevent injury. Long-standing research shows dynamic stretching and maintaining flexibility can help decrease injury. Stretching is considered dynamic when the athlete is moving through the stretch instead of holding the stretch for an extended period of time. Recent studies further support this noting passive static stretching actually can be detrimental to immediate golf performance, while active dynamic stretching can increase club head speed and ball speed resulting in a straighter swing path and better impact points on the ball. Additionally, a separate study suggests a dynamic stretching routine paired with ten minutes of resistance training, such as band exercises, can give golfers even greater performance benefits such as increased maximum driving distance, smash factor (the ratio between ball speed and club speed), and the number of consistent ball strikes.

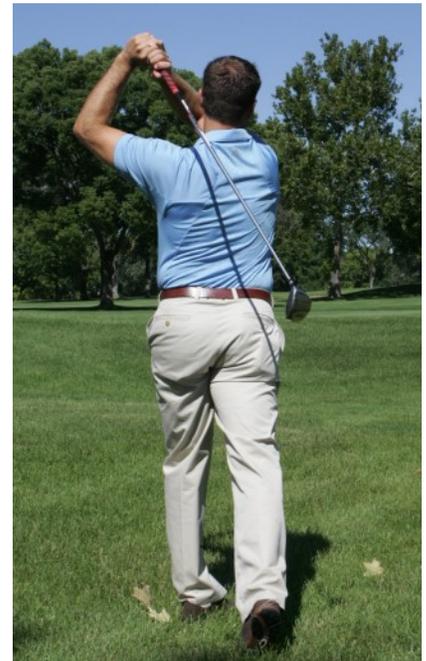
Our golf warm-up and stretching program on the following pages demonstrate nine dynamic stretches for golfers to perform before hitting the first tee. These stretches should be followed by a gradual progression from gentle swings with lower irons to full swings with the driver. For more significant performance improvements, we recommend any golfer incorporate strength and conditioning programs, as well as a flexibility program, after golfing, or on off days.

Precautions

As with any exercise program, it is essential to maintain proper technique during the warm-ups to receive maximum benefits and prevent injury. Seek professional help on swing mechanics to learn pointers and stay injury free.

Common Golf Injuries

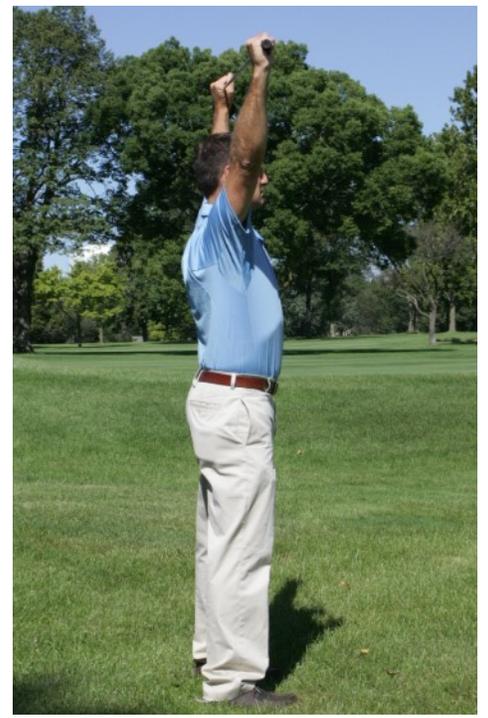
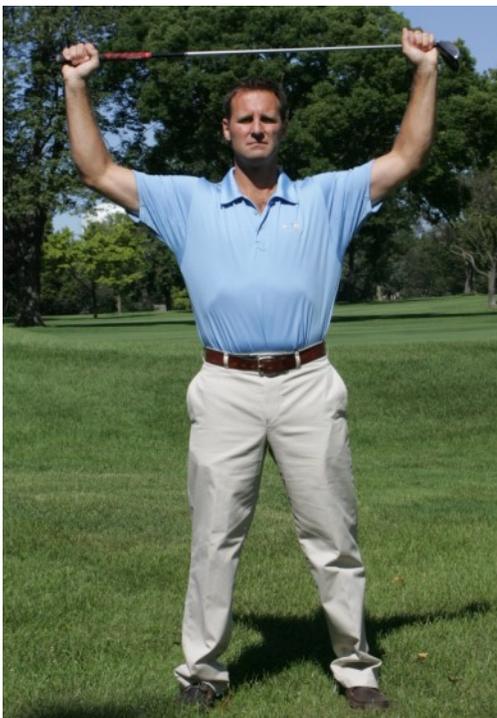
- **Golfer's Elbow** (medial epicondylitis): Wear and tear (tendinosis) of the wrist flexor and forearm pronator tendons where they connect the muscles to the bone on the inner side of the elbow.
- **Tennis Elbow** (lateral epicondylitis): Wear and tear (tendinosis) of the wrist and finger extensor tendons where they connect the muscles to the bone on the outer side of the elbow.
- **Impingement Syndrome** (rotator cuff tendinitis, bursitis): Irritation or inflammation of the rotator cuff tendons and the bursa between the rotator cuff and the bony-ligamentous roof of the shoulder.



Overhead Shoulder Stretch with Club



1. Grasp the club in both hands.
2. Stand up straight with your feet shoulder width apart, keeping the head and chest up.
3. Slowly raise both hands overhead until a good stretch is felt.
4. Lower the club back down in a controlled manner, keeping it above your head.
5. Repeat the exercise 5 to 10 times.

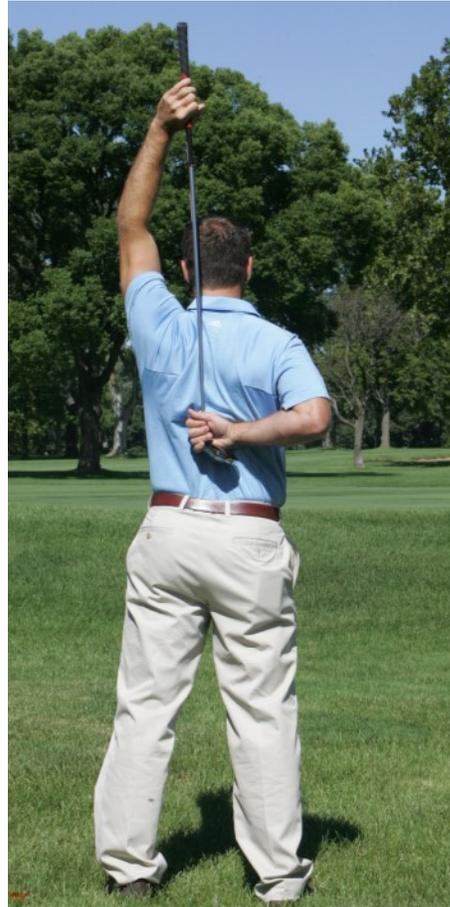


Bent Over Arm Extension Stretch



1. Stand with your feet shoulder width apart and place the golf club behind your hips.
2. Grasp the club with both hands and keep the arms relaxed, as shown.
3. Slowly bend forward at the hips. Remember to keep the back flat.
4. Slowly begin to raise both arms away from the back until a good stretch is felt in the shoulders.
5. Hold that position for 2 to 3 seconds, then lower the arms down to the starting position.
6. Repeat the exercise 3 to 5 times.

Shoulder Internal Rotation Stretch



1. Grasp the grip of the club with the left hand, as shown.
2. Grasp the bottom of the club with the right hand, as shown.
3. Slowly pull the club upward with the left hand until a good stretch is felt.
4. Hold for 3 seconds, then slowly lower the club.
5. Repeat the exercise 3 times on both sides.

Standing Shoulder Abduction with Club



1. Grasp the head of the golf club with the right hand.
2. Grasp the grip end with the left hand.
3. Slowly begin to raise your right arm over your head as shown.
4. Push the club up with your left hand to feel an increased stretch in your right arm.
5. Hold the stretch for 3 seconds, then lower the arm.
6. Repeat the exercise 3 times on both arms.

Shoulder External Rotation Stretch

1. Grasp the club head with the right hand and place it over your right shoulder, as shown.
2. Grasp the shaft of the golf club with the left hand in front of your body.
3. While holding onto the club, slowly begin to raise your left arm. This will cause your right arm to externally rotate (rotate backwards behind your head).
4. Continue increasing the rotation until a good stretch is felt in your right shoulder.
5. Hold the stretch for 3 seconds, then return to the resting position.
6. Repeat this exercise 3 times on both arms.



Standing Hip Rotations with Club

1. Grasp the club and place it behind your back so it rests over your elbows.
2. Stand up straight with your head up and chest out and your feet shoulder width apart.
3. Slowly begin to rotate your hips to the right until you feel a stretch.
4. Hold the stretch for a 2 to 3 seconds, then slowly return to the starting position. Make sure to keep your toes on the ground while rotating.
5. Repeat the exercise to the left.



Back Step Pivot



1. Stand up straight with feet shoulder width apart.
2. Hold the club in both hands at waist level.
3. While keeping your feet planted and facing forward, begin to rotate your hips to the left.
4. During the rotation, bring your left leg behind your right leg and place it about one foot from your right leg.
5. With your feet planted, rotate your hips to right for a good stretch in the left hip flexor.
6. Return to the starting position and repeat the exercise on the opposite side.
7. Repeat the exercise 5 to 10 times on each side.



Deep Side Squat



1. Stand up straight with you head up and chest out.
2. Turn the club upside down and straddle the club with both feet. Place feet slightly wider than shoulder width, as shown.
3. Use the club only to help you balance. It will not support all of your weight.
4. Hinge backward slightly from the hips and begin to shift your weight onto your left leg.
5. While keeping your right leg straight, slowly begin to squat with your left leg.
6. You should feel a stretch in the inner thigh.
7. Hold this stretch for 2 to 3 seconds, then return to the original position.
8. Repeat the sequence on the opposite leg
9. Repeat the exercise 5 times on each leg.

Standing Scorpion Twist with Club



1. Stand up straight, with your head up, chest out, and feet a little wider than shoulder width apart.
2. Grasp the club in both hands, as shown. The club should remain parallel to the ground and at chin level during the entire exercise.
3. Once balanced, bring your right leg behind the left leg so that your right knee is directly behind your left leg.
4. While keeping your upper body facing forward and your arms extended, slowly bend both knees until your right knee rests on the ground.
5. Slowly stand and return to the straddle position.
6. Repeat the exercise with your left leg behind your right returning to a straddle position.
7. Repeat the exercise 5 times on each side.

Sports Medicine, Injury Prevention Expertise Provided by Team Chudik

The goal of Dr. Steven Chudik and his health performance team, Larana Stropus and Keith Tesch, is to provide athletes of all ages and abilities with reliable and proven training information to help them compete and perform at their highest level and ability.

The *Golf Warm-Up and Stretching Program* is based upon research that found golfers should perform specific exercises prior to playing and throughout the week, if possible, help minimize injuries and improve their game. To maximize the benefits of this program, it is important to follow the recommended number of sets and repetitions while maintaining proper form at all times. Failure to do so could result in an injury.



Steven C. Chudik, MD

Board-certified physician in orthopaedics and sports medicine with the Steven Chudik MD Sports Medicine Injury Clinic, Dr. Chudik is a pioneer in arthroscopic shoulder and knee surgery. He is the founder and president of the Orthopaedic Sports Medicine Teaching and Research Foundation (OTRF), a clinical assistant professor at Loyola University Medical Center and a research associate at Argonne National Laboratories.



Keith Tesch, CSCS, CNT

For more than 16 years, Keith has been a personal trainer in the fitness industry. He provides post-therapy training in a physical therapy setting helping individuals and athletes gain strength, lose weight and improve their lifestyles through healthy habit changes. Keith focuses on achieving results through research-based programs and techniques.



Larana Stropus, MS, ATC/L

A certified and licensed athletic trainer, Larana holds a B.S. in Kinesiology and M.S. in Exercise Science. She has more than 11 years of experience in athletic training, personal training and teaching. She also served as the athletic trainer for the Olympic Development Women's Soccer program and helped develop exercise prescriptions and training programs for elite athletes including the Chicago Blackhawks.

Important Notice

Not all exercises are suitable for everyone. Consult your physician before beginning this or any other exercise program. Also, always warm up for several minutes before beginning any workout and **NEVER** exercise beyond the level at which you feel comfortable. If at any time you feel you are exercising beyond your current fitness abilities, or feel discomfort, discontinue exercise immediately and reconsider your participation in this program.

The golf warm-up stretching program provided in this publication should not be attempted by anyone who does not meet minimum fitness requirements, or who has a history of hip, knee, ankle, shoulder, elbow, wrist or spinal (neck or back) problems. **THIS WARNING IS NOT TO BE DISCOUNTED.** There are many other fitness alternatives if you have weaknesses or are prone to injuries. The user assumes all risks of injury in the use of this program.



Orthopaedic Surgery & Sports Medicine Teaching & Research Foundation

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Sports Medicine Injury Clinic

Monday
Evenings

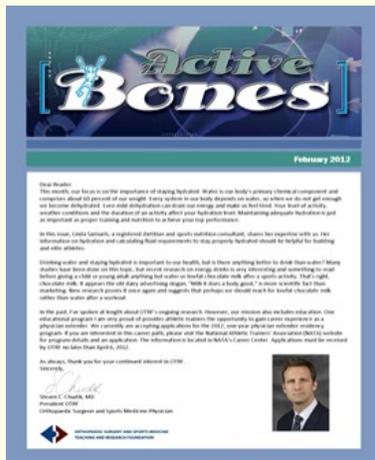
Call 630-324-0402
for an appointment

Sports Medicine Injury Clinic

As further assistance to coaches, athletic trainers, players and parents, Dr. Chudik has a Monday evening Sports Medicine Injury Clinic in his Westmont office. During this time, athletes can be seen and treated by Dr. Chudik, a board-certified orthopaedic surgeon and sports medicine physician. An added benefit to athletes seen in the Clinic is the availability of an X-ray suite and an open-bore, high-field magnetic resonance imaging (MRI) machine. This onsite diagnostic capability eliminates the need of added appointments and delayed diagnosis and treatment. To schedule an appointment with Dr. Chudik call 630-324-0402.

Sign Up Today!

Don't miss another issue of **Active Bones**, the monthly email newsletter from OTRF. Each issue contains information to help you stay healthy and live an active life with tips on injury prevention, nutrition, sports conditioning, research and newsmakers.



Simply email us at: contactus@chudikmd.com to receive the next issue of **Active Bones**.

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