



Proper Warm-up and Stretching Exercises Help Prevent Pickleball Injuries

Pickleball is the fastest growing sport in the world. According to the Sports & Fitness Industry Association (SFIA), in 2017 there were more than 2.8 million pickleball players in the United States. In 2022, *Statistica* reported the number had grown to 4.8 million players. By comparison, there are approximately 22 million tennis players.



Like tennis, pickleball can be played indoors or out, but that is where the similarity ends. A pickleball court is much smaller than a tennis court and the pickleball net is shorter at the center. Pickleball racquets are smaller than tennis racquets and have a solid face. Also, a pickleball is plastic with holes so it resembles a Wiffle Ball®.

Because pickleball has grown faster than researchers have been able to collect and study injury data, physicians are proceeding under the presumption that pickleball injuries will be similar to other racquet sports.

Based on his 20 years in practice, Dr. Steven Chudik provided examples of other racquet sport injuries that could be similar in pickleball such as sprains/strains of the lower and upper extremities, and possibly some torso and lower back muscle strains. But since pickleball is played more underhand than tennis, shoulder injuries are a lesser concern than falls on an outstretched hand or arm. “That doesn’t mean pickleball is safer than tennis or without injuries,” he cautioned.

“I also would expect to see ankle sprains, Achilles tendon calf strains or ruptures, wrist and finger fractures, and acute knee injuries involving the meniscus and ligaments,” Dr. Chudik explained. “Treatment of these injuries can range from rest, icing, compression and elevation (RICE) to non-weight bearing, bracing, physical therapy or possibly surgery depending upon the severity,” he added.

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Dr. Chudik's foundation, the Orthopaedic Surgery and Sports Medicine Teaching and Research Foundation (OTRF) developed this warm up and stretching program available as a PDF that can be downloaded from the Foundation website at: <https://www.otrfund.org/sports-performance-programs/>.

In addition to this program for pickleball, you will find many other sport-specific programs that also could benefit pickleball athletes such as ACL injury prevention, overhead racket sports, volleyball, sprint interval training and more.



Important Note on Technique

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

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Warm-Up & Stretching Exercises

Exercises	Sets	Time/Reps	Notes
Jumping Jacks	1	30	
Arm Circles	1	10 forward 10 backward	
Calf Stretch	2	30 seconds	
Thoracic Rotation	2	10	
Wall Slides Facing the Wall	1	15-20	
M,T,W	1	10	To increase the difficulty/intensity, use a band with more resistance.
Diagonal 1 (shoulder PNF)	2	10	Light resistance band
Leg Swings	1	15 forward 15 backward	
1 Leg Toe Touch (balance)	2	10	
Skipping	2	30 feet forward 30 feet backward	
Wrist Stretch Top of Forearm	2	30 seconds	

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 a 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 warm-up and stretching exercises for pickleball 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.

Jumping Jacks

Sets	Time/Reps
1	30



1. Stand up straight with both legs together and arms at your sides.
2. Jump up and simultaneously spread your legs apart and bring both hands overhead.
3. Jump again and simultaneously lower both arms down to your sides and bring both feet back together to complete one repetition.
4. Repeat this sequence 30 times.

Arm Circles

Sets	Time/Reps
1	10 forward 10 back-ward



1. With both arms out to the side at shoulder height and palms down, begin to make forward, circular movements with your arms for ten repetitions.
2. Start small and fast, then gradually make circles larger and slower.
3. Repeat this circular motion backwards with your palms up for ten repetitions.

Calf Stretch

Sets	Time/Reps
2	30 seconds



1. Stand with feet split apart and hands placed against a wall/fence.
2. With both heels down, lean into the wall with your hands until you feel a stretch in the back of your calf.
3. Switch your feet and repeat on the other leg.

Thoracic Rotation

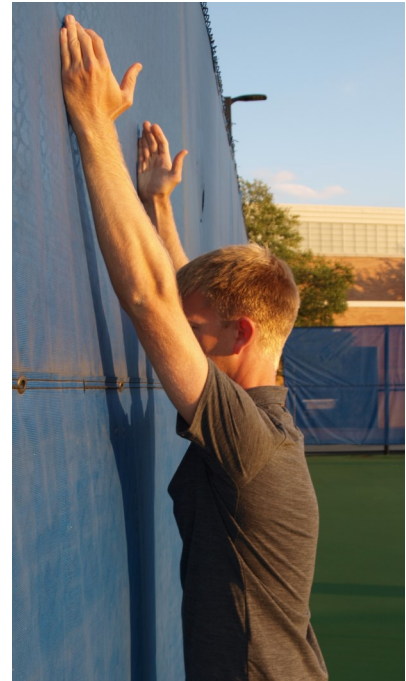
Sets	Time
2	10



1. Kneel on your hands and knees, place your right hand behind your head.
2. Rotate your shoulders and torso to the left until your right elbow is as far as you can go without rotating your hips.
3. Repeat same motions with left hand behind head.

Wall Slides

Sets	Time/Reps
1	15-20



1. Stand with your feet almost touching the wall/fence.
2. Place your hands on the wall at shoulder height.
3. Lightly press into the wall as you slide your hands up and then back down to starting position.
4. Repeat this motion for 15 to 20 repetitions.

M,T,W

Sets	Time/Reps
1	10

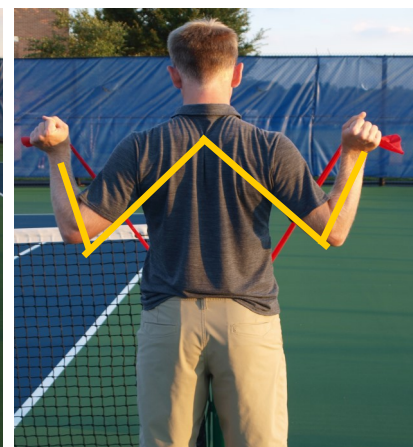
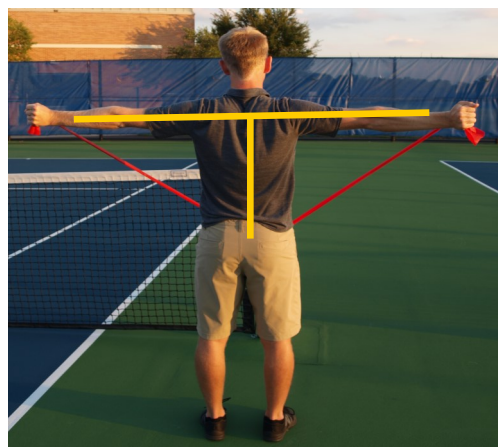


1. Anchor a resistance band to a fence or pole.
2. Stand with your feet shoulder-width apart and hold the band with your arms just below shoulder height.

M: Keeping your arms straight, pull your hands apart while squeezing your shoulder blades together, until your hands are even with your hips. Your upper body should take the form of an “M” during the exercise. Slowly return your hands to their starting position and perform ten repetitions.

T: Keeping your arms straight, pull your hands apart while squeezing your shoulder blades together, until your arms are even with your shoulders. Your upper body should take the form of a “T” during the exercise. Perform ten repetitions.

W: Raise your hands bending your arms at the elbows until your hands are even with your shoulders and your shoulder blades are squeezed together. Your upper body should take the form of a “W” during the exercise. Perform ten repetitions.



Diagonal 1 (shoulder PNF)

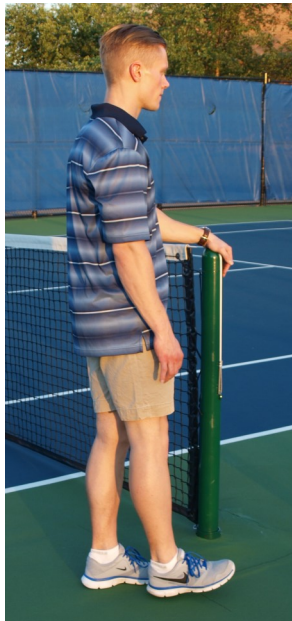
Sets	Time/Reps
2	10



1. Wrap a resistance band around a fence, pole, or net.
2. Position yourself about four to five feet from the fence standing so your shoulders are perpendicular to the fence and your feet shoulder-width apart.
3. Grasp the band with the hand furthest from the fence by extending your arm across your body (as shown).
4. Pull the band across your body until your arm is fully extended toward the ground.
5. Slowly return your arm in a controlled manner to the original position. Perform ten repetitions.
6. Change arms and repeat sequence to complete one set.

Leg Swings

Sets	Time/Reps
2	15 forward 15 backward



1. Stand on one leg and swing the other leg forward and backward.
2. As you swing backward, bend your knee as if trying to kick your glutes with your heel.
3. Gradually increase the height of your leg when swinging forward.
4. Repeat with opposite leg to complete first set.

Alternate version: Swing legs side to side crossing your swinging leg in front of your stance leg.

1-Leg Toe Touch

Sets	Time/Reps
2	10



1. Stand on your left leg and slightly bend your knee.
2. Reach down with your right hand and touch your left foot.
3. Slowly return to the starting position and repeat the sequence to perform ten repetitions, then switch legs and perform ten repetitions to complete first set.

Skipping

Sets	Time/Reps
2	30 feet forward 30 feet backward



1. Stand with both feet together.
2. Bend your left knee and bring it forward while hopping forward on your right leg.
3. Quickly step on your left leg, bend your right leg and hop on your left leg repeating the hopping forward and stepping motion.
4. Swing the opposite arm forward of your bent leg on each hop.
5. Try to push off your toes to get a bounding effect.
6. Keep your head and chest up during the entire exercise.
7. Skip 30 feet forward and 30 feet backwards and repeat.

Wrist Stretch: Top of Forearm

Sets	Time/Reps
2	30 seconds



1. Grab the back of your right hand with your left and pull your fingers toward the ground.
2. Hold in this position for 30 seconds.
3. Switch hands and repeat.

Sports Medicine, Injury Prevention Expertise Provided by Team Chudik

The goal of Dr. Steven Chudik and his health performance team is to provide you and your athletes with reliable and proven training information so they can compete and perform at their highest level and ability and limit the risk for injury.

This program is based upon research which found athletes need to incorporate specific exercises into their schedules not only to help minimize injuries. To maximize the benefit of this program, it is important for players to follow the recommended programs and maintain proper form at all times. Failure to do so could result in an injury.

About OTRF

Steven Chudik, orthopaedic surgeon and sports medicine physician with the Steven Chudik Shoulder and Knee Injury Clinic, founded the Orthopaedic Surgery and Sports Medicine Teaching and Research Foundation (OTRF) in 2007. OTRF is a nonprofit, 501(c)(3) organization dedicated to funding research and education for the purpose of keeping people active and healthy.

Dr. Chudik has seen a growing demand by patients, athletic trainers and clinicians for up-to-date medical information and unbiased research on injury prevention—as well as information on injuries, arthritis (wear and tear) to joints, cartilage, tendons, ligaments, etc. To fulfill these requests, OTRF produces and distributes an E-newsletter, shares information about health performance-related issues like nutrition and fitness, hosts athletic training educational programs, conducts seminars for healthcare providers and the community and most important, funds unbiased research and development particularly in emerging areas such as arthroscopic and minimally invasive surgery for injuries to the meniscus, labrum, rotator cuff, ACL and cartilage.

However, none of this is possible without ongoing financial support. We are extremely grateful to all those who have contributed in the past. Many donations come from patients or their family members who benefited from Dr. Chudik's expertise. If you are interested in helping OTRF fund education and research programs, please contact Dr. Chudik at 630-324-0402, or visit otrfund.org and click on the contributions tab at the top. Also, many companies sponsor programs that match charitable donations made by employees. Some even match retirees' and/or spouses' donations. Matching gift programs are a great way to double your generosity. Regardless of the amount, every contribution helps make a difference today and for years to come.

Pickleball In-Season Warm-Up and Exercise Program

Steven Chudik, MD
Publisher

otrfund.org

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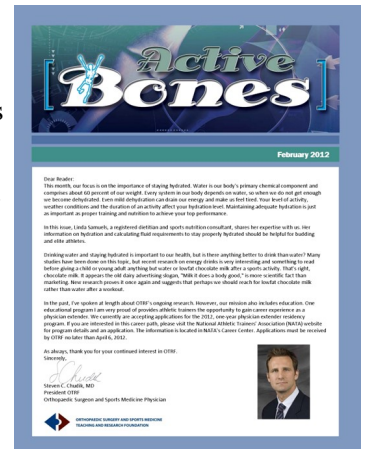
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Sports Medicine Injury Clinic

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