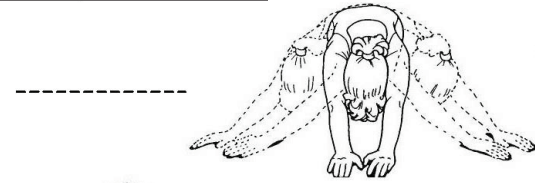


Pre-Participation Golf Stretches

Back Stretch

While crouching on your hands and knees, reach out in front of yourself as far as you can. Keep your chest as low to the floor as possible. Hold for 30 seconds and perform 2 repetitions. Repeat while out to each side.



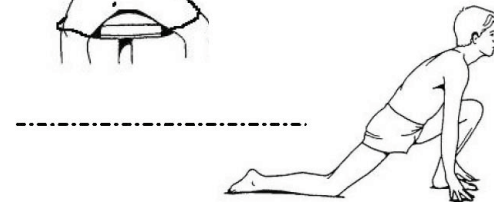
Trunk Rotation Stretch

While sitting upright and keeping your hips and legs still, gently rotate your trunk side to side in a small, pain free, range of motion. Hold for 30 seconds and perform 2 repetitions on each side.



Hip Flexors Stretch

Slowly push your pelvis downward while slightly arching your back until a stretch is felt in the front of the hip. Hold for 30 seconds and perform 2 repetitions on each side.



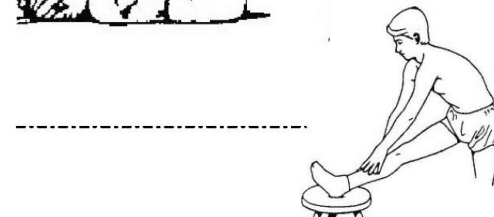
Hip Rotators Stretch

While lying on your back or seated in a chair, cross your right ankle over your left knee. Pull your left knee toward your chest. Hold for 30 seconds and perform 2 repetitions on each side.



Hamstrings Stretch

Place foot up on a bench or step. While keeping your back straight, slowly lean forward and reach down your shin until its felt in the back of the thigh. Hold for 30 seconds and perform 2 repetitions on each side.



Chest Stretch

Stand in a corner with your hands and forearms flat against the wall. Your hands should be placed at head level and feet approximately 2 feet from the corner. Slowly lean forward until a comfortable stretch is felt across the chest. Hold for 30 seconds and perform 2 repetitions.



Shoulder Rotators Stretch

Pull your left arm up behind your back by pulling the club upward with your right arm (internal rotation). Hold for 30 seconds and perform 2 repetitions on each side. Then pull your right arm down behind your back by pulling the club downward with your left arm (external rotation). Hold for 30 seconds and perform 2 repetitions on each side.



Head Rotators Stretch

Turn your head slowly to look over your left shoulder until a slight stretch is felt. Hold for 30 seconds and perform 2 repetitions on each side.



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**some of this information has been adapted from
PTT Golf course material level 1 and 2

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Started
Getting

Golfing

Training Guide



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Stretch, Strengthen and Swing!



With spring comes the advent of golfing season. For optimum game performance and injury reduction, it is important to think about preseason training for flexibility and strength.

The golf swing puts extreme forces through the body, especially at ball impact. Major injuries can take golfers out of their game for 4 weeks or longer. Even though we are blessed with a relatively long season on the west coast, for some, a month off golf is inconceivable! Early season preparation, a solid warm-up routine and proper technique can offset many of the injuries.

Many golfers will experience back pain at some point in their career.

Back pain is the #1 golfing injury for men, followed by elbow and shoulder injuries. For women, the wrist is most often injured, closely followed by elbow and lower back injuries. Even though the areas injured differ from player to player, there are often common mechanisms for injury.

Both professional and amateur golfers will be affected by repetitive practice. Hitting balls at the driving range should be built up slowly in the early season. Golfers should practice swinging or hitting a few balls in the opposite direction than usual. This will help decrease asymmetries in the body. Not only that, but it will give golfers a fair chance at hitting that awkward ball by a bush that may force him or her to do a shot from the other side!

In addition to repetitive strain/practice injuries, amateur golfers also can become injured due to poor technique and poor conditioning. As many golfers play more into their retirement, advanced age also can have certain effects. It is a good idea for one's score and one's body to have a session with a golf pro. They have been trained

to analyze a person's golf swing and can use video images to show the golfer what part of the swing may be problematic. Physiotherapists who have been trained to analyze biomechanics of the golf swing can relate those weaknesses to potential areas of injury.

It is also important to recognize that for most amateurs, approximately 75% of the distance comes from the small muscles. Most people get caught up in working the big muscles and try to hit the golf ball as far as possible, which has adverse effects on the accuracy of the ball and on the body. Feel and sensitivity are vital to the game, especially when one considers that 75% of the shots are within 50 yards of the green! Ideally, the short game should be practiced 50 to 70 % of the time to establish the fundamentals of the swing without all the torque through the body. Among other things, fundamentals include mastering the address, as a large portion of the swing is dictated by the setup! A proper setup can go a long way in reducing golfing injuries.

Back Health in Golf



1. *Fitness, warm-up and club transport.*

Nearly full spinal range of motion and trunk strength will improve performance and help decrease injuries. Doing exercises to increase trunk strength and flexibility when off the course will help with shots on the course. Getting to the course early to practice twisting to both sides and to work up through the golf clubs is key to warming up both the mental and physical game. Don't forget to practice putting as it comprises about 40% of the total score!

Carrying clubs can be hard on the back. Ideally, a light-weight bag with a double shoulder strap can help distribute the weight. Better yet, rent or invest in a cart. Push the cart on flats and slight uphill and pull the cart behind on downhills to reduce body twist.

2. *Address*

Without going into the intricacies of proper ball address (which would take a while), it should be understood that subtle changes in the set-up can make a large difference on the stress to the spine. Even turning the feet out slightly can help allow greater hip movement, therefore, greater trunk rotation. Pre-setting the abdominal muscles before starting the back-swing will help provide trunk control and reduces shear force through the spine.

3. *Finish position*

The finish position can contribute greatly to stress on the spine – and often it is held for too long after the ball has been hit. Excessive extension through the back can occur when the golfer's hips slide forward and the upper back extends backwards to counter the movement. Excessive side bend also creates too much strain in the back. This can be seen by the inward lean at the end of the swing that results in one shoulder being significantly lower than the other. Ideally, one is looking for a relaxed, upright finish to help reduce spinal stress.

4. *Turn and swing plane*

Most of the stress on the lower back during the golf swing occurs while the spine is moving at maximum velocity at impact. The back is rotating, side bending and extending to various degrees at this stage. When side bending is combined with the other forces, it can greatly increase stress on the back. The more vertical the swing plane, the more the hips tend to slide laterally. This causes more of a side bend in the spine versus a rotation moment.

As golfers age, it is recommended that they flatten the swing plane to help reduce some of these shearing forces. This can be achieved by keeping the trailing elbow (right arm for right golfers) in a bit closer to the trunk during the back swing. Another way to flatten the swing is to stand with the knees more slightly bent, effectively getting the golfer's trunk into a more upright position.

Weight transfer is also important to reduce hip slide and shear spinal forces. After about 50/50 weight distribution at the address, about 60% of the weight should transfer to the inside edge of the back (right for right golfers) foot at the top of the back-swing. The golfer should have almost all of his or her weight on the front foot at the finish position.

Ideally, the abdominal muscles initiate the downswing. If the hips lead, there will be increased hip slide and lower back stress. The abdominal muscles are the most important golf muscles in the body as they powerfully rotate the trunk while protecting the spine. The transverse abdominus and multifidus muscles work with the internal and external obliques to create the powerful rotation and protective forces necessary for golfing performance.



Did You KNOW:

- Pre-season is the perfect time to ask a physiotherapist to create a core strengthening and overall flexibility program to help improve performance and to reduce injuries.