Many amateur golfers play the game of golf for the sheer enjoyment of the sport and for the benefits of physical activity. Despite the fact that golf is a non-impact sport, both amateur and professional golfers are at risk of sustaining sports-related injuries. Injuries to the low back, the shoulder, the wrist, and the hand are frequently experienced by amateur and professional golfers (7, 8). An epidemiological study has found as many as 57% of amateur golfers risk injury in any one year period (1).

The biomechanics of the modern golf swing has been cited as the reason for the high number of injuries experienced by professionals and amateurs. High torques, shear and lateral bending forces, and compression loads to the spine increase the risk of lumbar muscle strains and disc herniations (6). Compression loads alone are eight times one’s body weight during the golf swing (6).

Including Plyometrics in a Strength Training Program

Participating in a comprehensive strength and conditioning training program may help to improve the golfer’s game and reduce his or her risk of injury. Each training program should include plyometric exercises. Plyometric forms of exercise consist of a rapid deceleration of movement followed by a rapid acceleration in order to develop explosive power (2). Research has demonstrated that the integration of plyometrics into a golf training program increases club head speed and driving distance (4, 5). Plyometric training may also help to protect the body from potentially injurious forces and loads, ultimately reducing the risk of sustaining a golf-related injury.

This article presents a basic plyometric training program that is appropriate for most golfers. In a forthcoming issue I will present an advanced golf plyometric training program.

### Table 1. Basic Plyometric Training Program for Golfers

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Sets</th>
<th>Repetitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standing Horizontal Throws (each side)</td>
<td>1–3</td>
<td>10</td>
</tr>
<tr>
<td>Seated Horizontal Throws (each side)</td>
<td>1–3</td>
<td>10</td>
</tr>
<tr>
<td>Overhead Ball Throw</td>
<td>1–3</td>
<td>10</td>
</tr>
<tr>
<td>Lateral Jumps over Barrier (or cone)</td>
<td>1–2</td>
<td>15</td>
</tr>
<tr>
<td>Front-to-Back Jumps over Barrier (or cone)</td>
<td>1–2</td>
<td>15</td>
</tr>
<tr>
<td>Jump from Box (small height)</td>
<td>1–2</td>
<td>8</td>
</tr>
</tbody>
</table>

Basic Plyometric Training Program

The program presented in table 1 should be performed one to two days a week with 48 to 72 hours rest in between sessions. Between each set rest for approximately one minute and rest up to five minutes between each exercise.

Standing and Seated Horizontal Throws (Figures 1 & 2)

Position yourself perpendicular to a rebounder approximately eight to ten feet away. While standing (figure 1) or in a seated position, throw a light plyoball or medicine ball across your body toward the rebounder. As the ball rebounds back to you, catch it, and quickly throw it back toward the rebounder. Repeat this sequence for the desired number of repetitions. When sitting on a physioball (figure 2), maintain an upright, neutral spine posture.
Overhead Ball Throw
Face the rebounder holding a light ply- 
oball or medicine ball overhead. Throw 
the ball towards the rebounder, catch 
it off the bounce, and quickly throw it 
back to the rebounder again. Repeat for 
the desired number repetitions.

Lateral Jumps and Front-to-Back Jumps Over a Barrier (Figures 3 & 4)
Place a cone or small barrier on the 
ground (approximately four to six inches 
high). As fast and as safely as you are able, 
jump side-to-side (figure 3) or front-to- 
back (figure 4) over the barrier/cones for 
the desired number of repetitions.

Jump from Box (Figure 5)
Stand on the top of a six inch step or box 
 figure 5). Take a step off of the box, land 
on the ground with both feet, followed 
by immediately jumping straight up as 
high as you can. Repeat for the desired 
number of repetitions.

It is recommended that before an athlete 
performs lower extremity plyometrics 
he or she should be able to perform five 
squat repetitions, squatting 60% of one’s 
body weight, in five seconds. At the bot-
tom of each squat, the thighs should be 
parallel to the ground (3).

Conclusion
All golfers should consider participating 
in strength and conditioning training 
program. Inclusion of plyometric exer-
cises can not only improve facets of a 
golfer’s game, it can help to reduce the 
risk of becoming injured.

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