

10 common mistakes in your pushaway

The pushaway is your key to perfect timing in the approach and delivery of the bowling ball. How you start your pushaway is how you end up at the foul line: Start right and you finish right.

Beware of the following 10 common mistakes that may be lurking in your pushaway (and have a friend check you out):

1. Failure to begin your pushaway in line with the shoulder at the correct height and not starting your bowling foot simultaneously ruins any possibility of attaining consistent timing. The key to excellent bowling is timing, which constitutes 80-90 percent of an effective ball delivery.

Start your pushaway by holding your bowling ball in line with your bowling shoulder and hip at a ball height that is right for you. The normal height is in the area from waist to shoulder for a four-step delivery, shoulder high for the slower and three-step delivery, and below the waist for the faster and five-step bowler. Your pushaway begins simultaneously with your first step; the ball is pushed out and downward at the same time.

Your bowling foot and ball must begin together in the pushaway to initiate the proper and correct timing sequence. If you start the ball and your bowling foot together, the other steps in your delivery will automatically follow in the proper timing sequence.

2. Keep your arm muscles out of the pushaway. To ensure a free pendulum swing, you push the ball forward and away from your bowling shoulder and into a slightly downward arc. Do not stiffen or lock the elbow.

At the top of the pendulum, the downward swing continues as you re-

lax your forearm muscles to allow the ball and arm to attain a totally free pendulum swing from the shoulder.



3. Pushing your ball upward at the beginning of the pushaway will delay your ball swing on the first step. This is double trouble. Pushing the ball unduly upward complicates the correct downward movement of the arc; it forces you to walk under the ball as you move forward. This delays the swing, causes late timing, and creates a shorter backswing.

4. Your pushaway is incomplete if you have not pushed the ball completely away from your bowling shoulder in the pushaway. Keeping the ball close to your shoulder will shorten the pushaway and will cause your ball to drop into the downswing prematurely and behind the bowling foot. This produces early timing (and the ball swing will go left of the target at release for a right-handed bowler and right of the target for a left-hander).

Note: A small child or elderly person may need to hold the ball at shoulder height and in close to the shoulder for balance. A three-step delivery may be more desirable for these bowlers with a drop-away type of pushaway, where on the first step the ball drops and swivels directly from the top of the

Illustrations by Walt Steinsiek

shoulder, down, and in front of the left starting foot of the right-handed bowler and in front of the right starting foot of the left-hander.



5. Overextending your arm (locking the elbow) in the pushaway will create late timing. The extension of the bowling arm beyond its natural length of the first step pushes the ball too far in front of the bowling foot on the first step and forces the body balance forward, which delays the swing and creates late timing.

The key is for you to shorten the pushing out of the ball by using both hands for additional support and gently *place* the ball at the top of the pendulum swing slightly in front of the bowling foot without tightening the forearm muscles. At this point, you remove the assisting hand and "let it happen."

O. Failing to maintain your bowling arm shoulder in a raised or leverage position. Your bowling shoulder should not be allowed to drop unnecessarily in the pushaway and swing. A dropped shoulder encourages the swing to be late and not straight. The resulting late timing will cause the ball to go right at release.

Dropping the ball in the pushaway to get a higher backswing disrupts the natural timing of your pushaway and backswing. A less harmful way to get a higher backswing is to hold the ball higher at the beginning of the pushaway.



7. Leaning into your pushaway. This is helpful to some bowlers, but it is beneficial only to the degree you are

able to maintain your body balance as you lean forward.

8. Carrying the ball before completing the first step of the pushaway is a widespread problem that may sneak into your game while you are under pressure. Many of us bowlers, consciously or unconsciously, carry our ball into the delivery phase on the approach before beginning the pushaway, and then we are forced to use muscles to compensate for the late tim-

In stressful situations, such as when attempting to pick up the 10-pin or needing a strike to win a match, we concentrate so hard on beginning the pushaway correctly at just the right moment that we unknowingly hold onto the ball too long. Be aware of the stress potential, relax, and think only of beginning the ball and foot movement together at the same instance. To help you relax, take a deep breath, exhale, and then push away.



9. Not keeping your bowling arm in line with your shoulder and close to your side will encourage a "flying elbow" and an erratic swing. Keeping the elbow in is especially helpful if you are a bowler who tends to push the ball inward or outward at the start of the pushaway.

10. Rushing the line will result from a too-vigorous pushaway. The number one problem nationwide is reported to be rushing the line. Be aware that rushing the line is merely a mirror of rushing the pushaway.

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Elements of the free pendulum swing

The pendulum swing is the basic foundation of your bowling delivery and style. The main reason to perfect your pendulum swing, other than for accuracy and predictability, is to unconsciously ensure your delivery steps will fit the ball swing and not the ball swing to the steps. A good sound repeatable swing is therefore a double bowling dividend in your delivery: It keeps the feet moving and synchronized with a gravity dependable and constant swing.

Listed below are elements of the free pendulum swing and suggested practice exercises to help you perfect it.

1. Keeping your arm muscle out of the pushaway will ensure a free pendulum swing from the shoulder. A pendulum swing goes straight out, straight back, and straight forward, similar to a pendulum on a clock. You place or push the ball directly forward from your shoulder to the top of the pendulum swing, which is about an arm length away, and into a slightly downward arc. You do not lock or stiffen the below. At the top of the pendulum, gravity takes over and the downward swing of the ball continues. You totally relax your forearm muscle at this point to allow the ball weight and arm to experience a totally free and fluid pendulum swing from the shoulder.

Practice swing: Standing in your pushaway posture and without moving the feet or body, push the ball out to the top of the pendulum swing and relax the forearm muscle. Let the ball swing freely down, back, and forward from the bowling shoulder. Return the ball to your starting pushaway position. Do this practice swing many times until your pushaway swing is natural, straight in front of your shoulder, smooth, and totally controlled by the free-swinging weight of the ball. It will pay great dividends in your bowling delivery and release.

2. Let the weight of the ball determine your natural pendulum swing momentum. Gravity at the top of the pendulum swing determines the natural swing of an un-muscled ball, and left alone, the swing will repeat itself on a consistent basis. Consistency is necessary to acquire a repeatable shot.

Practice swing: Do the same practice swing you did above, but now concentrate only on the "feeling" of your ball freely swinging from the shoulder at the top of the pendulum swing, straight down, straight back, and straight forward without using the arm muscles. The swing follows the basic rhythm of the actual swing in the four-step delivery—out on the pushaway, down in the downswing, back in the backswing, and ahead in the forward swing and release.

3. The shoulder is the pivot point of the pendulum swing. Keeping your shoulder in an up position versus letting it drop assures a straighter arm swing and increase leverage at the correct ball release point directly under the bowling arm shoulder.

Practice swing: Repeat the same practice swing as you did above, but now concentrate on the "feeling" of your shoulder being level or in an up position. The up position of your bowling shoulder adds leverage at the release and helps provide a straighter swing. When the shoulder drops at delivery, the arm is not straight, and the thumb will not release at the correct time. The altered arm swing encourages a late release outside of the target.

4. Forcing the forward armswing is the number one swing problem that destroys consistency. I put this last as a reminder of above first item. All bowlers, including the pros, are guilty of wanting to add that little extra effort to our shot. Using muscles and forcing the forward armswing to add zip to our best shot will destroy any possibility of having a consistent game.

Enough said!

- Harlin Matkins

ADDITIONAL INSTRUCTION ON THE INTERNET: Visit www.ncaba.org to read Harlin Matkins' "My ideal bowling drill: The one-step delivery" and additional articles.