"Finding Your Perfect Stance" Dr. Dave Alciatore, PhD

Supporting narrated video (NV) demonstrations, high-speed video (HSV) clips, technical proofs (TP), and all past articles are available online at <u>billiards.colostate.edu</u>. Reference numbers used in the articles help you locate the resources on the website.

Are you happy with your pool stance? Do you think it is the best possible stance for you as an individual? If you are not sure about the answers to these questions, you have come to the right place. Recently, I posted online video <u>NV J.21</u> that offers lots of good stance advice. Be sure to watch this video because it demonstrates everything described in this article.

Before beginning, I want to make it clear that the stance can be a very individual thing, and you need to do what works best for you, and not just do what some book or video prescribes. The important aspects of any good stance are stability, good and consistent visual alignment, good and consistent stroke plane alignment, stroke clearance, straight-line motion of the cue during the stroke, and comfort over the long term. The ideal feet placement, body position, knee bend, head height, and other stance mechanics issues can vary a lot from one person to the next based on the person's height, flexibility, body shape and anatomy, comfort level, and any physical issues.

First, let's look at the generally accepted "textbook" pool stance shown in **Photo 1**. The ball of the back foot is on the line of the shot (shown with the blue tape on the floor). It can be anywhere between 45° and perpendicular to the shot line. This angle can vary for individuals, especially if one is duck-footed or pigeon-toed. The back-leg knee is locked. The other foot is forward about 45° and points in the direction of the shot or at a slight angle. The front-leg knee can also be locked or have a slight bend. Locked knees can help some people with stability. The feet should be at least shoulder-width apart. The upper body is bent down at the waist to get the head lower to the shot. The bridge arm is fully extended. The legs and bridge form a stable tripod, with only a little weight on the bridge hand or arm and the remaining weight shared equally between the feet. As shown in **Photo 2**, ideally, the shoulder, entire arm, bridge, cue, and vision center should be in the vertical plane of the shot. As shown with the white lines in **Photo 1**, the cue should be as level as possible and the forearm should be perpendicular to the cue at cue ball (CB) address. Finally, there should be clearance between the body arm, and cue during the entire stroking motion.



Photo 1 "Textbook" pool stance

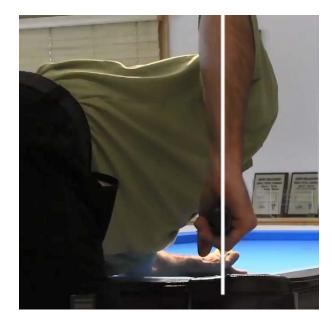


Photo 2 Everything in the vertical plane

Now let's look at a typical snooker stance show in **Photo 3**. The body is more open, and the front foot is only a little in front of, or even adjacent to, the back foot. Both feet generally face the shot, but they can be at slight angles. The front leg is typically bent a little more. Snooker players have their head low with the cue in contact with chest and chin to help ensure consistent visual alignment, and to constrain and guide the cue to move straight during the stroke. An open stance can allow your face to be more square to the shot with less neck twisting. This can make it easier to get the head lower, which can make aiming and sighting more consistent and accurate, which is especially important on a snooker table that is larger and has smaller pockets. The open posture also allows you to use your standard stance when your body is up against the table to reach a shot, which can happen more on large snooker tables. Some people claim you can't generate enough power with a snooker-style stance. This might be true for a pool break shot, but it is total nonsense otherwise.



Photo 3 Typical snooker stance

Regardless of which type of stance you use, it is best to have your head as low as possible. This helps you better visualize the line of the shot, the tip contact point on the CB, and the target position at the object

ball (OB) without needing to move the eyes very much. One way to get low is to bend at the waist more, but this can cause neck and hamstring strain, tension, and pain. A good alternative, especially if you are tall like me, is to bend the knees and/or spread your feet as shown in **Photo 4**. Bending the knees allows you to bring everything down without any body or neck contortion. An athletic bent-knee stance can be just as solid as a locked-knee stance; although, as with any stance, you do need to be careful to keep your head and body still during the stroke. Bending the knees can cause more tiring in the thighs if you play for long periods of time (especially if you are not in good shape); but this is better than neck, back, and/or hamstring strain, which can become chronic and make it difficult and uncomfortable to play. As shown in **Photo 5**, it is also best to have your face as square to the shot as possible with your eyes as level as possible, with your vision center over the cue. For reasons why, see the articles, videos, and other information on the "vision center" resource page in the FAQ section at *billiards.colostate.edu*.



Photo 4 Bent-knee stance



Photo 5 Eyes level with face square

For some people, especially those with an open stance, it can be difficult to position the upper arm and shoulder in the shot plane. You might need to pull your shoulder back and/or add body and neck twist and turn, which might not be comfortable. But this might not be necessary. If the elbow and forearm are in the shot plane, you can still create a straight stroke. The problem with an out-of-plane forearm is the stroke will move the grip hand in an arc, and the cue will not go straight. One way to find the best shoulder and elbow position for you is to shake, wiggle, and swing your arm like a "wet noodle" to find how the arm likes to hang and swing so the cue goes straight. The elbow is not a simple pin joint or hinge, and you can create a straight stroke in many directions, but it is best to find the direction that is most natural for you. It can also help to attempt to find natural feet, knee, hip, and body position to get your face and eyes in the right place. To do this, get down in your stance and dance around, changing everything until you settle into what feels the most stable and comfortable. It can help to do this in front of a mirror where you can verify that your face is as square to the shot as possible, with your eyes as level as possible. Try to keep your head still while you dance around, like a chicken. If you have a problem with stroke body clearance, you can swivel your hips or move your feet to create space. Once you find a stance that feels good, make sure you verify that the cue moves straight during the stroke. A good place to do this is over the straight edge of the cushion on the rail. You can also set up a donut (self-adhesive hole reinforcement label) in front of the CB where the cue tip should finish. This will help verify that your stroke and follow through are straight.

Sometimes you will need to modify your stance to deal with different shot situations. Sometimes you need to reach for a long shot, lean over the side of the table, elevate the stance quite a bit, or have a leg up on the table. In all these cases, it is important to try to keep the head and forearm in the ideal positions as closely as possible. In online video <u>NV J.21</u>, notice how I keep my head and forearm fairly still and consistent even with these radically different stance contortions.

I hope the information in this article and online video <u>NV J.21</u> help you find your personal best pool stance. The stance is the foundation of your entire game, so it is important. Again, be sure to watch the video, which demonstrates everything in this article. Also check out online videos <u>NV J.13</u> and <u>NV D.7</u> that contain additional stance technique advice.

Good luck with your game, Dr. Dave



<u>NV J.21</u> – How to Find the Perfect Pool/Snooker/Billiards Stance <u>NV J.13</u> – Top 10 Things Pool Players Do Wrong ... and How to Fix Them <u>NV D.7</u> – Pool Fundamentals – The Stance – from Vol-I of the Billiard University instructional video series

<u>PS</u>:

 I know other authors and I tend to use lots of terminology, and I know not all readers are totally familiar with these terms. If you ever come across a word or phrase you do not fully understand, please refer to the <u>online glossary</u> at <u>billiards.colostate.edu</u>.

Dr. Dave is a PBIA Advanced Instructor, Dean of the Billiard University, and author of the book: <u>The</u> <u>Illustrated Principles of Pool and Billiards</u> and numerous instructional DVD series, all available at: <u>DrDaveBilliards.com</u>.