

## Stroke “Best Practices” Routine

[billiards.colostate.edu](http://billiards.colostate.edu)

Here is an example set of **suggested “best practices”** you might consider if you are having trouble with **stroke consistency or accuracy**:

1. When in your stance, the cue should be **set** in the desired aiming line direction with the cue tip at the desired cue ball (CB) contact point, with only a small gap between the cue tip and ball. It helps to have a low stance, with your head close to and over the cue, to better visualize your aim. (Although, most of your “aiming” should have been done while standing, before getting down into your stance.) Your forearm should be perpendicular to the cue at CB contact, and the cue should be as level as possible. (For a nearly horizontal cue, the forearm will be hanging nearly straight down.) Keep the cue still at the CB while making small adjustments and verifying both the aiming line and your tip contact point.
2. Take several slow **warm-up** strokes to ensure you are relaxed and settled, to ensure your aim will remain true during motion, and to judge the stroke length you want based on the desired shot speed. You can move your eye gaze between the CB and the object ball (OB) during the warm-up strokes (e.g., focus on the CB during the forward stroke and the OB during the backstroke), or just stay focused on the CB. Regardless, be sure to focus on the CB at the ends of the forward warm-up strokes to help prevent you from hitting the CB prematurely by accident. This also helps you verify that the tip is still aligned with the desired contact point on the CB.
3. **Pause** (i.e., set again) at the CB on your last warm-up stroke and verify the aiming line and CB contact point. If any adjustments are required, make the changes and repeat step 2. When everything looks good, it is generally recommended to shift your eye gaze from the CB to your target (e.g., the center of the ghost ball, desired contact point, desired ball-hit fraction, or a point on the cloth or cushion) before the final backstroke. Note - for shots where the cue-tip contact point is critical (e.g., jump shot, masse shot, when elevated over a ball, when the CB is frozen to a rail), focusing on the CB tip-contact point (instead of the OB target) during the final forward swing can be helpful to some people.
4. Smoothly and slowly **pull back** the cue and “**pause**” (even if only for an instant) at the end of your backstroke. You should still have your focus and **gaze** on the target at this point. Some people recommend a deliberate or distinct pause at the end of your backstroke (i.e., before your final forward stroke) to help prevent you from rushing the final backstroke and the transition to the final forward stroke. Some people also prefer shifting the gaze from the CB to the OB during the pause, but this isn’t recommended unless you have a long pause (e.g., 2-3 seconds). If you don’t use a deliberate pause, be very careful to have a smooth and non-rushed transition to the final forward stroke. A jerky transition can create stroking errors.
5. Smoothly **accelerate** to impact, and **follow through**, keeping everything still except below your elbow. Some people and with some shots (e.g., power shots), prefer to drop their elbow during the stroke; in this case, the shoulder must also flex enough to keep the cue tip from coming up. Most people have trouble maintaining consistency with elbow drop, so it is not generally recommended ... unless the drop reliably occurs after CB contact. Concerning the importance of follow-through, it has no direct effect on the CB, because the tip is in contact with the CB only for an instant. However, if you don’t have much follow-through, then you are probably somehow constraining your stroke ... and this might affect consistency and accuracy (and power for fast speed shots). The bridge and stroke lengths should generally be shorter for softer shots and longer for power shots.
6. **Freeze** after your stroke, keeping your body, head, and cue still and down well after impact.
7. If the shot is missed, immediately try to **diagnose** what went wrong (e.g., check your follow-through direction for stroke steer or unintentional elbow drop, check your grip pressure to make sure you didn’t tense up, decide if squirt/swerve/throw was not adequately accounted for if English was used, etc.).

A detailed acronym one can use to summarize this list is **SWPPPGAFFD** (pronounced "swap-gaffed"): **set, warm-up, pause, pull-back, pause, gaze, accelerate, follow-through, freeze, diagnose**. I know this acronym is a bit ridiculous in length, especially if you hope to remember what all of the letters mean; so if you want something simpler, use **SPF (set, pause, finish)**, which was coined by Randy Goettlicher and is taught by many BCA-certified instructors. This acronym is a lot snappier and easier to remember.

For more information and demonstrations, see [“stroke” in the FAQ section of the website](#).