

# *Coach, Tell Me About My Stick...*

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## **Introduction**

Second only to the skates, a hockey player's most important tool is his/her stick. It is, after all, the part of the hockey player's equipment that links the player to the puck. The hockey stick's four main parts are the shaft (the part you hold), the heel (round part that connects the blade to the shaft), the blade, and the toe (the outer end of the blade).

## **Stick Construction**

Originally, sticks were made of a single carved piece of ash, maple, or elm. For years, wood served as the single material used for sticks. The problem with wood was that even though the same material was used, stiffness and flex varied greatly among sticks, which required constant adjustment by players. In the 1970s, the rockered blade was introduced rather than the previously used "square cut" blades. This added another dimension of versatility for the player and increased the effective range for puck handling. In the 1980s, aluminum shafts were introduced with replacement wooden blades. These sticks became very popular, although most shafts were too stiff for younger players and most recreational players.

Recent aluminum designs now offer a variety of stiffness and support a variety of players' needs. The latest designs, introduced in the 1990s, have incorporated composite fiber shafts with wooden replacement blades. The composite shafts are proving to be the lightest and most consistently designed sticks available--they are also the most expensive. I have no doubt, the future will introduce composite blades with varying levels of stiffness to meet player needs.

## **So what should we look for in a stick?**

**The first thing to consider** is the stiffness of the shaft. Most manufacturers list the stiffness right on the shaft ("extra stiff, stiff, medium, or flexible"). As a general rule, you can shoot a harder wrist/snap shot with a "less stiff" shaft, but a harder slap shot with a "stiff" shaft. The puck is more difficult to stick handle with a "less stiff" shaft, but you must be physically stronger to control the puck with a "stiff" shaft. Most young players favor sticks with a "medium" or "flexible" shaft.

**The second consideration** is the stick lie. The lie of the stick describes the angle that the heel of the blade forms with the shaft. The higher the lie number, the greater the angle. Skaters tend to favor lies 5, 6, or 7 while goalies favor lies 13, 14, or 15. A stick with a higher lie is more upright and brings the blade closer to your feet, while a lower lie places the blade further away from you. In theory, the closer the blade is to your body, the better for stickhandling and puck control. However, theory also tells us that a more powerful shot can be taken with longer shafts because of greater leverage on the stick.

## **Do Sticks Lie???**

The introduction of the rockered blade has reduced the importance of the stick lie since rockered blades actually bow upward at the heel and toe of the blade and allow good contact with the ice and puck both close to the body and with arms extended.

**One method to check what lie is best** suited for you is to look at the bottom of your tape on the stick you're now using. If the tape is evenly worn from heel to toe then you have a stick with the

proper lie. If the heel's tape is worn more than the toe, then you need to decrease the lie of your next stick (pick a 5 instead of a 6). If the tape near the toe is worn more than the heel, then a stick with an increased lie may be needed (select a 6 instead of a 5).

**Stick length is the third consideration** and always brings a number of opinions with it. The conventional wisdom is that the stick should be cut so that it reaches the player's nose while in shoes or reaches the player's chin while standing in skates. This is a good starting guideline and one that I subscribe to for younger players. As the player develops his/her skills, he/she may begin to experiment with the length of the stick to find a comfortable "feel." As the stick length is reduced (shaft cut shorter), ability to control the puck increases. But, if the stick is cut too short, your hands get too close to the body and make stickhandling or shooting more difficult. In addition, a shorter stick reduces the overall power of your shot because of the reduced energy one can transfer in a shorter shaft. I encourage older players to try different style sticks and shaft lengths (cost permitting). However, one word of caution. If shortening your stick, do it a little at a time, you can't add to the length once you've chopped it off and sticks are too expensive to throw away.

### **Why do player tape their sticks?**

A final thought involves the use of tape on the stick. The end of the shaft should be covered with a knob of some kind. They sell plastic covers for the end of the shaft or you can make one yourself using tape. The knob should not be too big, but it should be big enough so that it aids you in picking up your stick when it falls to the flat surface of the ice surface. Try picking up your stick with your gloves on, if you can, you've got the proper size knob on the end of your stick.

Tape on the blade is used to assist in control of the puck. It keeps the puck from sliding too easily off the end and also adds spin to the puck when a shot is taken. Most players start taping their blades from the heel and work out toward the toe. This causes the outer layer of tape to be at the end of the blade and makes it less likely to scrape snow off the ice while playing.

Some players add wax to their tape on the blade. Wax allows the tape to move smoother on the ice and also prevents the tape from becoming saturated with water. Stick wax is sold in pro shops, or one can purchase skateboard or surfboard wax which works just as well. However, don't use tape or wax that easily flakes off or tears since it will fall onto the ice and create a hazard for you and other players.

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Now you have a little more knowledge on what makes up a hockey stick. It's one of your most important pieces of equipment and should be well taken care of. Remember that the stick is also a dangerous piece of equipment. When it is used improperly, serious injury can occur. Always keep the blade of your stick down on the ground when carrying it to reduce the chances of cutting someone with the blade.

Finally, always be aware of where your stick is relative to other players and people. Avoid the chances of accidentally hitting someone with it--keep your stick down! The best hockey players know how to use their stick, take care of their stick, and protect others from injury. Remember that the only time I should see the blade of your stick above your waist is while celebrating after you or your teammate has scored a goal.