



Proper Throwing Mechanics in Baseball

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Introduction

Every sport is different, requiring different thought processes, muscle and skills training. However, one thing remains constant in all of this; a solid fundamental skill base is necessary in order to improve. There are few sport skills more basic than throwing; babies begin to pick up and throw objects within their first year of life. Just because people have all been doing it our whole life does not mean they are all good at it.

The ability to be able to play catch with a partner is often overlooked by coaches and taken for granted, but it is time to rethink this. At the beginning of every practice, coaches should take the time to emphasize proper throwing mechanics and eventually players should be able to play catch with one another without having balls being thrown away every five seconds.

So, what are these ever so important throwing mechanics? There are a few vital mechanics that will improve players' accuracy and velocity while also keeping their arms healthy.

Proper Grip

Grip is the very first thing to think about when throwing a ball and it can have quite an impact on the direction of the ball when it's thrown. The most important aspect of the grip is to ensure that the ball is always in the centre of the fingers. There should be two fingers (or three if fingers are smaller) along the top of the ball and the thumb on the bottom. Every time a player throws the ball while playing a position other than pitcher, they should use a 4-seam grip. A 4-seam grip is the one that will go in a straight line and will in turn have more velocity. In order to throw with a 4-seam grip, the player should find a "C" or horseshoe shape on the ball and then put their top fingers across it. The thumb then must be on the bottom of the ball, centering it. The player should hold the ball loosely in their fingers so that they can throw with more velocity. The ball can spin better when it is on the tips of the fingers because it comes out of the hand with more spin towards the target. When compared to a change-up grip, you can see the difference in grips, and how the change-up – which is a slower pitch – is held in the back of the hand so that it comes out of the hand slower while having the same arm speed.



Figure 1: 4-Seam Grip



Figure 2: Change-up Grip



Staying on Top of the Ball

When running our Summer Clinics Program, the first thing instructors ask the players is how high they should hold their elbow when they throw the ball. The answers received are usually pretty good – a lot of players do say at a ninety degree angle with the shoulder. The instructors' answer back to them is that the elbow should be at least shoulder height or higher and never below the shoulder. There are a couple of reasons for this. When the elbow is below the shoulder, the ball is going to be off to the side of the throwers' body. This causes the ball to spin out of the hand sideways, usually leading to the ball tailing away from the intended target. The other reason we tell players to have their elbows at least shoulder height is even more important – it's necessary to preserve their arm health. When the elbow drops below the shoulder, it puts more stress on the elbow which can lead to injuries in both the elbow and shoulder. Notice the difference in finger position relative to the ball in the two pitchers. The sidearm pitcher's fingers are not over top of the ball which means he might get more movement on his pitch but the other pitcher will be more accurate, along with having a healthier arm.



Figure 3: Sidearm Pitcher



Figure 4: Overhand Pitcher

Separation and Pointing Toward Target

Accuracy is a huge factor to consider when throwing because without accuracy you will never know where the ball is going. The player's glove side of their body has the biggest effect on accuracy. The front shoulder of the player should point toward the target, along with either the front elbow or the glove pointing towards the target as well. So, to be in this position, the shoulders of the player should be perpendicular to their target. When the player points toward the target, there are two shapes they can make with the arms, either a big "C" (with the elbow toward the target) or a "T" (with the glove toward the target). As the player gets ready to throw, they should reach their throwing arm back as far as they can with the ball pointing away from their body. The fingers should be directly behind the ball as it gets thrown (the ball will naturally rotate into that position). If a coach is having issues getting players to reach back far enough, or cannot get them to hold their elbow high enough, use the rotation of a wheel as a visual description. If players are told to trace the path of a wheel with the ball in hand, the players should acquire the correct motion.



Follow Through and Staying Closed

Another of the most important things to teach young players about throwing is to have a “strong” glove as you follow through and it should end up into your chest, or as our instructors have told players, in their armpit (rather than down by their knee or behind their back, which would be considered a “weak” glove). By having their gloves end up in their chest or armpit, the players are keeping their body closed, which means that they keep their shoulders in-line with the target and keep them close together. Staying closed serves another purpose; it saves the thrower’s power so that it all gets transferred toward the target at the end of the motion. If the player opens their body up early, they have already wasted some of their power by using it too early. Throwing relies a lot on rotation of the shoulders, trunk and hips, and without those body parts rotating together, the arm is left to create much of the power. When the arm has to create most of the power, it can quickly lead to fatigue and eventual injury.



Figure 5: Staying Closed

The following picture shows Josh Beckett in his motion as he gets ready to throw. His front foot is directly in line with his target, staying closed, with his front shoulder and elbow also toward his target. If we saw the next frame, his glove would end up in his chest as he is keeping his front shoulder closed.



Figure 6: Josh Beckett's Pitching Delivery

Conclusion

While it takes patience to teach these points to each player, if every Mosquito coach on PEI did this, we would have a generation of baseball players within five years who collectively would be better players than in the past. If we start instilling these values into our players at a young age, we will set them up for success in both pitching and defense. It is the hope of Baseball PEI that each coach takes this role seriously and together, we can make a massive difference.



Image Credits

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