

Hitting Fundamentals

Player Coverage Area

Young players tend to develop poor hitting techniques when hitting from a tee or when hitting slow pitching. These techniques can provide positive results for slow pitching or hitting from a tee but do not work well as pitching speeds increase. It is difficult for coaches to get young players to change their swings particularly when they are getting good results. However, as pitching speeds increase, the poor hitting techniques become a greater and greater liability. Here are some of those poor techniques and why they do not translate well to faster pitching:

- The exaggerated wind up or negative move (pulling the arms and shoulders back, with little control, before the swing) increases the distance the bat has to cover to reach the hitting zone, and contributes to late, sweeping swings.
- The long stride and early shifting of weight to the front foot locks the hips. As a result, the lower body and legs contribute little towards the quickness and power necessary to hit faster pitches and the player puts herself in a position (with all her weight on her front foot) to be totally fooled by the change-up.
- An early extension of the arms, whether preceded by an exaggerated wind up or not, results in a sweeping swing with no hip turn. The result is slow bat speed and loss of the power generated by the lower body and legs.
- The uppercut, generally preceded by dropping the hands before the swing, reduces the chances of making contact with the ball and, when contact is made, results in weak pop-ups.

It is important to teach the proper hitting techniques from the start in the Kindergarten and Clinic Divisions because it is very difficult to change bad hitting techniques after they have been used for several years and have become habits. These techniques must be reinforced in every division until they are ingrained. The following describes the proper techniques:

Grip

- The knocking knuckles of both hands should line up and the bat should be gripped in the fingers, not the palms.
- The top hand grip should be somewhat loose. To achieve this, the index finger should be loosened somewhat and can be extended upwards against the side of the bat instead of around the bat.

Stance

- Assume an athletic position. Stand upright with the feet not much wider apart than the shoulders. Put slightly more weight on the balls of the feet. Bend slightly forward at the waist. The knees should not be locked.

- The stance should be balanced and comfortable with slightly more weight on the back foot.
- The hands should be positioned just above the back shoulder and next to the back ear.
- The back elbow should be comfortable and not forced up in the air away from the body. The arms should form an upside down V.
- The barrel of the bat should be pointed straight behind the player or slightly back towards the catcher. It should be almost be parallel to the ground.

Load

- When the pitcher starts her windup, the hitter should make a slight move back towards the catcher. This is a lateral move and not a twisting motion.
- The shoulders should remain parallel to the pitch.

Stride

- After the load and before the pitch is released, the batter should make a positive move to toe touch.
- The batter should move her stride foot forward (no more than 2 - 3 inches) with the toes pointing out at a 45° angle to the pitcher.
- The batter's weight should still be on the back foot.
- This completes the lateral movement of the body.
- The front hip should be used as the axis of rotation.
- After toe touch, the batter should slam the heel down.
- The batter's hip rotation should begin at the heel plant.

Swing

- The left elbow should lead the hands.
- As the batter moves the knob of the bat and hands towards the ball, the arms naturally begin their extension, but should not reach full extension until the bat reaches the hitting zone in front of home plate.
- The batter should watch the ball hit the bat.
- The right palm should be behind the bat at contact.
- The back heel should be up at contact. The batter remain balanced through the swing.
- The weight should stay behind the front leg.
- At extension, the bat should point toward the pitcher, fully extended.

Finish

- The batter's hands and bat should follow through to a position above the left shoulder.

Bunting Fundamentals

Young players tend to develop poor hitting techniques when hitting from a tee or when hitting slow pitching. These techniques can provide positive results for slow pitching or hitting from a tee but do not work well as pitching speeds increase. It is difficult for coaches to get young players to change their swings particularly when they are getting good results. However, as pitching speeds increase, the poor hitting techniques become a greater and greater liability. Here are some of those poor techniques and why they do not translate well to faster pitching:

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- An early extension of the arms, whether preceded by an exaggerated wind up or not, results in a sweeping swing with no hip turn. The result is slow bat speed and loss of the power generated by the lower body and legs.
- The uppercut, generally preceded by dropping the hands before the swing, reduces the chances of making contact with the ball and, when contact is made, results in weak pop-ups.
- It is important to teach the proper hitting techniques from the start in the Kindergarten and Clinic Divisions because it is very difficult to change bad hitting techniques after they have been used for several years and have become habits. These techniques must be reinforced in every division until they are ingrained. The following describes the proper techniques:

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Stance

- Assume an athletic position. Stand upright with the feet not much wider apart than the shoulders. Put slightly more weight on the balls of the feet. Bend slightly forward at the waist. The knees should not be locked.
- The stance should be balanced and comfortable with slightly more weight on the back foot.
- The hands should be positioned just above the back shoulder and next to the back ear.
- The back elbow should be comfortable and not forced up in the air away from the body. The arms should form an upside down V.
- The barrel of the bat should be pointed straight behind the player or slightly back towards the catcher. It should be almost parallel to the ground.

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Base Running Fundamentals

Having good speed does not make you a good base runner. A good base runner must also be aware of the count on the batter, the number of outs, the score and the inning, the coach's signals, and the location of the defensive players. All runners must understand the mechanics of base running but they also must understand the different game situations that change the way they run the bases.

Home to First There are four basic components in running from home to first: sneak a peak, run full speed through the base, look right, and break down.

- Sneak a peak – The runner should not watch the ball as she runs to first. However, the runner should check to see where the ball is on her way. After the ball is hit, the runner should run full speed towards first base until she is 10-12 feet away from home plate. At that point, she should take a quick look to see where the ball was hit but should not slow down in the process.
- Run Full Speed – The runner should run full speed toward first base. The runner should stay to the right of the foul line and run in a straight line towards the safety base. As the runner is running towards first base, she should be listening for instruction from the first base coach. The first base coach will indicate whether the runner should overrun first base, make her turn towards second base, or continue on to second base. When overrunning first base, the runner should touch the front of the base with the foot that comes up first and should sprint through the base with a few additional steps before slowing down.
- Look Right – As soon as the runner crosses first base, she should look to the right, turning her entire head in that direction. With her head turned to the right, she should look for the ball, searching for a possible overthrow and an opportunity to advance to the next base.
- Breakdown – After crossing the base and taking one or two steps full speed, the runner should begin to brake by bending her knees and crouching slightly to lower her center of gravity. In the case of an overthrow, the runner can pivot and head to second base. If there is no overthrow, the runner should return to first base quickly with her eye on the ball and second base. She has the possibility of advancing if the defense forgets to cover second base or if the ball is overthrown. The runner should remain in foul territory if returning to first base.

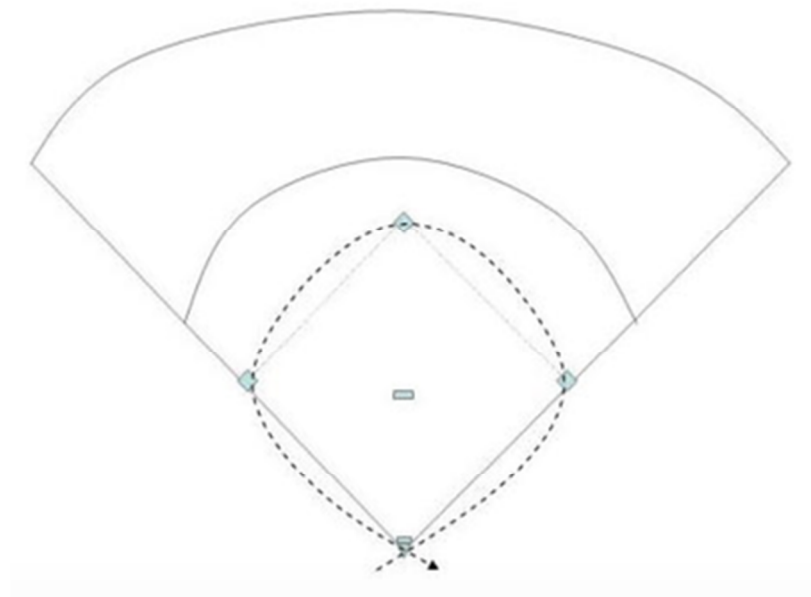
These components are used in all divisions. However the Kindergarten division does not advance more than one base on any play. Therefore, they do not need to consider rounding first base or looking for the overthrow to advance to second base.

Rounding a Base The runner should round a base when she clearly will be safe and there is no play being made at that base. Rounding the base puts the runner in position to possibly advance to the next base.

When rounding a base, the runner should lean toward the infield as she touches the inside corner of the bag with either foot. She should take 3-4 steps more and stop, crouching low with her feet apart to see if she can advance further or return to the previous bag. As indicated above, the Kindergarten division does not advance more than one base on any play and do not need to be taught to round the base.

Touching all the Bases When a ball is hit to allow either the batter or a base runner to advance more than one base, the runner should run in a path that will allow her to advance around the base path as quickly as possible. The figure below shows the correct path the runner should take when touching all of the bases. The first base coach will provide instruction to the runner while she is traveling from home to

second base. The third base coach will provide instruction to the runner while she is traveling from second base to home. As indicated above, the Kindergarten division does not advance more than one base on any play and do not need to be taught this concept.



Tagging Up With fewer than 2 outs, a runner may not advance on a fly ball until it is caught. However, a runner can tag up on a fly ball. To tag up, she should have one foot on the base, in a crouched position, ready to advance to the next base once the catch is made. A runner may tag up on a fly ball and fake advancing to the next base. This is called “drawing the throw” and is done when the ball is not hit deep enough to advance on a normal tag up. In this situation, the runner should tag up and sprint three to five steps only to stop. The runner should attempt to convince the fielder she is advancing to get the fielder to hurry the throw. If the fielder hurries the throw, there will be a higher likelihood it will be off-line allowing the runner to advance. If a good throw is made, the runner should return to the bag.

Leading In the Travel Division, the runner is allowed to leave the base as the ball leaves the pitcher’s hand. In all other divisions, leading is not allowed and the runner must remain on the base until the ball reaches the batter. When leading, the runner should attempt to get 3-5 steps off the bag when the ball is pitched. This gives the runner a good head start in advancing to the next base in the case of a batted ball or a past ball. When 3-5 steps off the bag, the runner should be facing the ball in a crouched position with feet wide apart. From this position, the runner is prepared to advance to the next base or quickly return to the previous base.

Stealing Stealing is allowed in the Travel, Senior, and High School Divisions. However, in the Senior and High School divisions, the runner must remain on the bag until the ball reaches the batter. In the Travel Divisions, the runner can leave the bag as soon as the ball leaves the pitcher’s hand. Some keys to stealing bases are getting a good jump, running hard, and sliding to avoid the tag.

- **Getting a Good Jump** – For the Travel Divisions, a perfectly timed jump is one in which the runner’s foot leaves the base just as the ball is leaving the pitcher’s hand. In the Junior, Senior,

and High School Divisions, a perfectly timed jump is one in which the runner's foot leaves the base just as the ball reaches the batter. The runner will be called out if she leaves the bag early.

- **Running Hard** – The runner should take 4-5 explosive steps towards the next base and then peak back at home plate while still running full speed. The reason for peaking back to home plate is to see if the ball was hit, where it was hit, if it was caught by the catcher, or if it was a past ball. If the ball is hit on the ground, the runner should continue towards the next base, be prepared to make a good hard turn, and look for opportunities to go to the next base on the throw to first. If the ball is hit in the air in the infield, the runner should brake hard and head back towards the previous base. If the ball is hit in the air in the outfield and looks to be caught, the runner should brake hard and wait approximately halfway between the bases to see if the ball is caught. If caught, the runner should proceed back to the previous base. If not caught, the runner should continue to the next base and look for opportunities to advance further. If caught by the catcher, the runner should continue running hard into the next base and be prepared to slide if there is a throw. If the ball gets passed the catcher, the runner should continue towards the next base, be prepared to make a good hard turn, and look for opportunities to go to the next base if the catcher does not get to the ball quickly.
- **Slide to Avoid the Tag** – The runner should slide when there is a throw even if the throw is going to be a little late. The runner does not want to risk overrunning the base and getting tagged out after a late throw.

Sliding should be taught to all divisions except Kindergarten and Clinic. There are three basic types of slides: the popup slide, the hook slide, and the head first slide. The hook slide and head first slide are more advanced and will not be addressed in this section.

The correct body position for the popup slide is as follows. The player should be in a sitting position leaning slightly to the left and backward. The right leg should be fully extended but the knee should not be locked. The left leg should be bent at the knee and folded under the right leg. The left ankle should be positioned under the knee of the right leg. Both arms should be raised up with the palms facing out. The head should be turned away from the direction of the throw. This protects the players face from poor throws and allows her to see overthrows giving her an opportunity to advance to the next base. When sliding, the player should hit the ground prior to reaching the bag. She should slide into the bag with her right foot, using the bag and her left leg for leverage to pop up off the ground.

Watch for poor fundamentals that can lead to injury. It is important that these bad habits be broken early in the player's development. Make sure the player begins her slide prior to reaching the bag. Starting the slide at the bag can lead to a leg or ankle injury, particularly if the bag is anchored down. Make sure the player is not sitting on the left ankle as she slides. This can lead to scrapes or other injuries to the knee. Make sure the players arms are up high. Players have a tendency to land on their hands as they begin their slide to break their fall. This can lead to hand or wrist injuries.

Many young players fear sliding because they think they are going to get hurt. For this reason, it is one of the most difficult skills for a coach to teach. Since sliding is so difficult to teach, plan on teaching it in segments across several practices. Do not attempt to teach sliding at full speed on day 1. See the Sliding Drills section for a recommended progression.

Fielding Fundamentals

Catching a Ball Players should receive the ball on the midline of the body using two hands to make the catch whenever possible. This reduces the chances of missing the ball and positions the throwing hand to throw more quickly. However, it is sometimes impossible to catch the ball the midline using two hands. In these instances, the player should use the forehand catch or the backhand catch. The forehand catch allows the player to reach for the ball on the on the glove side of the body and the backhand catch allows the player to reach for the ball on the throwing side of the body.

Glove Positioning The glove should be positioned differently depending on where the ball is in relation to the body. If the ball is caught above the waist, the fingers of both hands should be pointing upward. If the ball is caught below the waist, the fingers of both hands should be pointing downward. As soon as the ball enters the glove, the throwing hand should be used to secure the ball.

Fielding Ground Balls in the Infield Ready Position – The infield ready position consists of keeping the body low with the feet apart so the player can move quickly in any direction. The feet should be wider than hip-width and the knees should be bent. The player should have the feeling of sitting slightly, and her hands should be close to the ground. Her head should be up and her eyes should be focused on the ball.

Moving to the Ball – The ball is rarely hit in a location where the fielder does not have to move. If the ball is hit slowly, she should charge the ball. If the ball is hit to either side of her, she should either shuffle to the ball or use a cross over step to get to the ball. Players should make every attempt to field the ball on the midline of the body using two hands. If unable to get the body in front of the ball, the forehand catch or the backhand catch should be used.

- If the ball is hit directly at the player, the player's feet should be slightly staggered with the glove side foot slightly in front of the throwing side foot. Her feet should be apart and she should watch the ball all the way into the glove. The glove hand should be open with the fingers pointing toward the ground. The throwing hand should be positioned over top of the glove with the fingers pointing upward, the palm open and facing the direction from which the ball is coming. As soon as the ball moves into the glove, it should be secured with the throwing hand.
- **Backhand Play** – If the ball is hit to far to the player's throwing hand side to enable the player to get in front of the ball, she should use the backhand technique. From the ready position, she should take a cross over step with the foot on the opposite side of the ball. The waist should remain bent while quickly moving to intercept the ball. The player should reach out to the ball and field it just off her glove side foot. She should take one more step with her throwing side foot and plant it firmly to stop her momentum in that direction. She should then step toward the target with her glove side foot and begin the throwing motion.
- **Forehand Play** – If the ball is hit to far to the player's glove hand side to enable the player to get in front of the ball, she should use the forehand technique. From the ready position, she should take a cross over step to her glove side and remain bent at the waist while quickly moving to intercept the ball. The player should reach out to the ball with her glove hand to field the ball and then position her body for the throw.

Preparing to Throw – In one smooth motion, the player should bring the ball up across her body with two hands and back past the shoulder to throw. As the hands reach the throwing shoulder, the player should separate the ball from the glove hand and the glove hand should be moved to point to the target. The player should continue moving her throwing hand back past the shoulder and into position to make the throw. She should take as few steps as necessary to get into position to throw.

Fielding Ground Balls in the Outfield Outfielders like infielders should approach ground balls head on whenever possible. The outfielder should drop to one knee when fielding routine balls to prevent the ball from getting by. When dropping to one knee, the player should position herself with the ball at the center line of the body and drop to one knee as she is moving down to field the ball. If the ball is hit to either side of the outfielder, she should run laterally in an effort to circle the ball and field it while moving toward the infield.

Receiving the Throw for the Force Out Proper body positioning is essential for infielders making force outs in the infield. In preparing to receive the throw, the player should remain balanced, and be positioned on the ball side of the base. Her feet should be about hip width apart and her throwing-side heel should be within a few inches of the edge of the base. The player should wait until the throw is made before beginning to stretch for the ball. If the player stretches for the ball before it is thrown, she will not be able to move quickly enough to prevent off line throws from becoming an overthrow. If the throw is significantly off line, the player should leave the base to prevent the ball from becoming an overthrow. The infielder should catch the ball as far out in front of her body as possible. She should place the ball of her throwing-side foot along the inside edge (not on top) of the base and should step toward the throw with her glove-side foot. She should take a large stride toward the ball while remaining balanced enough to make the catch. Both arms should be extended to make the catch with two hands.

Receiving the Throw for the Tag Out As with the force out, proper body positioning for the tag out is essential. In preparing to receive the throw, the player should remain balanced facing the ball, and should position her feet on opposite sides of the base. Neither foot should be positioned on the side of the bag facing the runner. As the throw arrives, the player should catch the ball with two hands (if possible) and then quickly sweep the glove between the base and the base runner. The throwing hand should hold the glove closed as the tag is made. This will help prevent the ball from being kicked out of the glove. If the throw is significantly off line, the player should leave the base to prevent the ball from becoming an overthrow. If the throw is late and the runner is going to make her turn or advance to the next base, the fielder must step out of the runner's path to avoid interfering with the runner.

Making the Relay Throw A relay throw is used when more than one throw is needed to reach the target base from the outfield. The infielder should position herself between and in a straight line with the outfielder and the intended target base. The player covering the target base should help the player performing the relay get into the proper position by yelling left or right as she is setting up. The player covering the target base should also yell cutoff instructions as the ball is arriving for relay. The infielder receiving the relay throw should turn towards the glove hand as she receives the throw to be in good position to make the relay throw.

Fielding Fly Balls Fielding Position – Whenever possible, the player should position herself directly under the ball to make the catch. The fly ball should be received with two hands thumb to thumb, directly above the forehead. The glove side foot should be staggered slightly ahead of the throwing side foot on

the catch.

Dropping Back – A drop step should be used for a ball hit over a fielder’s head. The player should step back with the foot that is on the side that the ball is hit. To execute the drop step, the player should shift her weight onto the foot opposite the ball. The foot on the side of the ball should be raised while rotating the entire body in that direction. The raised foot should be put down facing backward, opposite its starting position. The player should push off the back foot and begin to run back towards the ball. The player should either watch the ball the entire time when running back to the ball or should periodically look back to the ball to remain on course with the ball’s trajectory.

Throwing Fundamentals

There are a number of different ways to throw. They all fall into two main categories; overhand throw and underhand throw. The overhand throw has a couple of variations; the full overhand throw, the quick snap throw and the side arm throw. The quick snap throw and the side arm throw are generally used by infielders where there is little time and the throwing distance is short. Underhand throws that consist of short tosses and flips are also used by infielders when quick plays are needed and the intended target is a short distance away (usually less than 12 feet).

GripThe player should hold the ball in the fingers and should not press the ball against the palm of the hand. The player should spread the three middle fingers on one side of the ball with the pads of the fingertips on a seam. The player's little finger should fit comfortably along side the ball for stability. Her thumb should take a position on the ball that is opposite the three middle fingers. The grip pressure should be different for an infielder and outfielder. The grip of an infielder should be slightly firmer than the grip of an outfielder. If held with proper tension, the ball can be easily pulled out of the outfielder's hand. Mild resistance should be felt when attempting to pull the ball out of the infielder's hand.

Full Overhand Throw The overhand throw consists of the windup, the throw, and the follow-through. **The Windup** – The windup is designed to put the body in the best position to throw the ball. The windup starts with the player facing the intended target with both hands together and chest high. The right handed player should shift her weight onto her left foot and step toward the target with her right leg. As she steps, she should point her right foot outward so she can rotate her body to the right with her left side facing the target. As the player's body rotates to the right, her hands should separate and move in opposite directions. The glove should point at the target with the arm extended. The throwing hand should traverse a downward arc past the right hip and to a position behind the body and above the shoulder with the elbow bent at a 90-degree angle. At this point, the ball should be facing opposite the target. As the hands separate to these positions, the left leg should be lifted off the ground with the knee bent slightly.

The Throw – The throw begins from the ending windup position. The player should begin with all of her weight on her right leg while the left leg is up in the air with the knee bent in preparation to step. As she steps towards the target with her left leg, the shoulders and trunk should rotate around to the left, simultaneously bringing the throwing shoulder forward while the glove hand drops to a position along the left hip, with the elbow bent. The right elbow should lead the throwing arm forward with the upper arm perpendicular to the ground and the hand behind and slightly under the ball so the wrist is cocked. The player's weight should be transferred onto the front foot. The player's hand and wrist should snap through the ball to complete the throwing phase.

Follow-Through – After the player releases the ball, her weight should be forward and on her left foot. The throwing arm should become relaxed and the hand should continue a path across the front of the body, ending at the opposite hip. The player should bend forward at the waist and should slightly bend the left knee. The right foot should come up off the ground and the right leg should bend slightly. Upon completion of the throw, the player should momentarily remain balanced on the front leg before stepping down with the right leg to fully ground her body.

Quick Snap Throw The quick snap throw is executed with the elbow, forearm, wrist, and fingers of the throwing hand. The player should stand facing the target with her hands together at chest level and her

feet approximately hip-width apart. The throw should begin by shifting the weight onto the right foot while stepping with the left foot toward the target. Simultaneously, the player's hands should separate and the glove arm should extend with the glove pointing at the target. The right hand should be taken up over the shoulder with the arm bent at a 90 degree angle allowing the elbow to face out (upper arm parallel to the ground) and placing the ball at a position even with the right ear. The player should make the throw with the right elbow leading the arm forward, followed by a pronounced snap of the wrist and roll of the fingers forward under the ball. The player's glove hand should drop to a comfortable position at the left hip with the elbow bent.

Side Arm Throw The side arm throw is executed by an infielder in her fielding position. The key is to get the infielder to stay low to the ground. After fielding the ground ball, the player should keep her knees and waist bent and should rotate her trunk around to the right, taking both hands back to her throwing shoulder. Her right elbow should be bent and extended out to the rear. The upper arm should be parallel to the ground. She then should step with her left foot toward the target and should pull her glove arm out, pointing the glove at the target. The elbow should lead the arm forward to begin the throw. The glove arm should bend and should tuck the glove near the left hip and she should snap the wrist to complete the throw.

Underhand Throw The underhand toss is usually made from the fielding position. The key to the underhand toss is to stay low to the ground with knees and waist bent. With the ball in the right hand, the player should keep the arm straight and should swing the arm back in a pendulum motion taking care not to bring the arm above waist level. At this point, the player's hand should be behind the ball. The player should step toward the target with her left foot and should swing her right arm forward, pushing the ball toward the target. The player should not snap the wrist or bend the fingers. The player should toss the ball at the waist level of the receiver.

Backhand Toss The backhand toss is also made from the fielding position. The player should keep low to the ground and should field the ball with two hands. While gripping the ball, she should rotate her throwing hand around to a position inside the ball. She should then step toward the target with her right foot and leads with a bent right elbow. Her wrist and forearm should remain stiff as she pushes the ball toward the target with her fingers. She should be careful not to flip the wrist or bend her fingers. The ball should be flipped at the waist level to the receiver.

Pitching Fundamentals

Windmill pitching fundamentals vary for different types of pitches. Fastballs, curve balls, screw balls, rise balls, drops, change ups, etc. may use different grips and fundamentals. The following provides some fundamentals for getting started in pitching fastballs. The fundamentals of other pitches are different. The following is not a substitute for professional instruction. If a player shows talent, she should attend pitching clinics periodically or receive one-on-one instruction so an expert can offer advice and correct the inevitable flaws that can hinder progress. To become effective pitchers, girls must practice 3-4 days per week.

Getting Started In the Denville Recreation league, players do not begin pitching until they are in the Instructional Division (3rd and 4th grade). On the travel teams, players at the 10U and older divisions pitch. However, it is not too early to teach a player the mechanics of windmill pitching at the age of six or seven, particularly if that player expects to pitch in the travel division. As the player learns to pitch, she should throw as hard as possible while still using correct mechanics. The player should not sacrifice mechanics for speed or accuracy. It will only hinder her development. Correct arm speed, wrist snap, body rotation, balance, stride length, and follow-through are the prerequisites to becoming a great pitcher.

The following instructions describe how a typical pitcher executes the windmill style pitch in fast pitch softball. Subtle differences will be seen from pitcher to pitcher or instructor to instructor but this serves as a useful guide to teaching the basic techniques. The instructions are written for a right-handed pitcher.

Setting up to Pitch Amateur Softball Association (ASA) rules indicate the pitcher must initially stand behind the pitching rubber with both hands apart. The ball may be in either the bare hand or the glove hand. She then may step on the rubber. Before initiating the pitching motion, both feet must be in contact with the pitching rubber. The right heel should be placed over the front edge of the rubber. The left toe should touch the back edge of the rubber. The feet should be comfortably apart. The ball should be gripped with the padded parts of the fingertips and thumb resting on seams. The ball should not rest in the palm. There should be space between the ball and the hand in the area between the thumb and index finger. The thumb should be opposite the fingers to the extent possible. ASA rules indicate the pitching hand and glove hand must touch for at least one second before initiating the pitching motion.

Initiating the Windmill Motion After the pitcher's hands touch (usually at or below the waist near the right hip), she should shift her weight to the back foot. The pitcher should initiate the forward motion by extending the arms towards the catcher while beginning the stride forward with the back foot. The pitching arm should remain extended (but not locked) throughout the pitching motion. The elbow should be relaxed (but not bent). When extending the pitching arm forward, the hand should be on top of the ball or on the outside of the ball, but not under the ball. As the arm travels in a circle upward, back, down and forward towards the target, the wrist should rotate to present the ball towards third base and then second base (at the top rear of the arc). The glove hand should be pulled back and down past the left hip as the pitching arm approaches the right hip for delivery. The wrist should cock naturally on the downward swing of the pitching motion. The arm circle should remain true to the line between the pitcher and catcher. The arm speed should increase throughout the pitching motion with the highest speed occurring as the hand approaches the release point. There should be no hesitation in the pitching

motion once it begins.

Body Rotation At the beginning of the pitching motion, the pitcher's hips should be square to the catcher. The hips should open (towards third base) as the arms and stride leg are extended forward and until the ball is released. Full rotation is generally around 45 degrees but may be as great as 90 degrees. The hips should return to a closed or square position (facing the catcher) after release of the ball. The shoulders and hips must rotate together back to the square position.

Leg Stride The pitcher should get as much leg drive forward as possible while keeping the upper body balanced. The stride length should be aggressive, yet comfortable. The right foot should stay in contact with the ground as it is being pulled forward by the momentum generated by the leg stride. The left foot should be planted at a point on the line between the pivot foot and the catcher and the toe should be aimed at a point halfway between third base and the catcher. The right foot should plant so that the toe hits the ground first, then the heel.

Wrist Snap A proper wrist snap is the key to control and speed. The pitcher's wrist should naturally cock on the downward swing of the arm. The pitcher should follow that with a strong snap of the wrist at the bottom of the arm circle just off the right hip. The inside of the pitcher's right forearm may actually brush the side of the hip as the wrist snap occurs. The snap of the wrist should be firm, but relaxed.

Balance The pitcher's body should be in an upright posture and balanced between the feet as the ball is released. After release of the ball, the pitcher's forward momentum should carry her weight forward while she drags her right foot towards the left foot. The pitcher's weight should remain balanced between the feet. The pitcher should plant her toe first, then her heel of her stride foot to help achieve the proper balance.

Follow Through After releasing the ball, the pitching arm should follow through in a natural motion. The hand should extend out towards the catcher's glove and end up in a position near the right shoulder. As pitchers begin throwing a variety of pitches (e.g., drop, curve, rise ball), different follow-through positions will be used to create the spin necessary to achieve the desired pitch.

Catching Fundamentals

Catcher Fundamentals do not apply to the Kindergarten or Clinic divisions because the catchers in these divisions do not receive pitched balls.

Ready Position

The catcher should take a position as close to home plate as possible without interfering with the swing of the batter.

Down Position

The catcher may assume a down position when there is no threat of a stolen base. In a down position, the catcher is in a squat with the feet approximately hip width apart. The weight is on the balls of her feet, the glove hand is extended away from the body to give the pitcher a larger target. The throwing hand should be positioned behind her back or behind the throwing side leg.

Up Position

The catcher may assume the up position when there is a threat of a stolen base. In the up position, the catcher's feet are approximately hip width apart with the feet staggered slightly in anticipation of a throw. The catcher's back should be nearly perpendicular to the ground with her back portion of her body raised. The throwing hand should be positioned behind her back or behind the throwing side leg.

Setting the Target

The catcher's glove is the target for the pitcher. The catcher's glove should be positioned opened with fingers pointed up. As the pitcher's target, the glove should be positioned at the desired destination of the pitch. In the Instructional and Junior Divisions, this is lined up with the point of home plate and just below the batter's waist. In the Travel, Senior, and High School divisions, the target will move depending on the count, the characteristics of the hitter, and the type of pitch thrown.

Receiving the Pitch

In addition to setting the target for the pitcher, how the catcher receives the ball can influence the umpire's ball or strike call. On pitches in the strike zone or near the strike zone, the catcher should make the catch and "frame" the pitch without a great deal of movement behind the plate. The catcher should smoothly move her glove to the ball and make the catch while holding the glove steady in the strike zone. For pitches slightly off the plate to the catcher's right, the catcher should smoothly slide her body to the right, rolling her right shoulder toward the pitcher, and sliding the glove 1 or 2 inches toward the plate as she makes the catch. For pitches slightly off the plate to the catcher's left, the catcher should smoothly slide her body to the left, rolling her left shoulder toward the pitcher, and sliding the glove 1 or 2 inches toward the plate as she makes the catch. On pitches clearly outside of the strike zone, the catcher should quickly move her body in front of the ball, keeping her shoulders perpendicular to the path of the ball. This will help the catcher keep the ball in front of her even if she does not catch it cleanly with the glove.

Throwing Out Runners

When a runner attempts to steal a base, the catcher receives the ball from the pitcher while stepping and transferring her body weight to her back foot. Her feet should be positioned parallel to the target. She should take the glove hand back to meet throwing hand over the opposite shoulder to a point just behind the ear. She should then step toward the base to make the throw.

Giving Signals

Signals tell the pitcher to throw specific pitches. The signals may correspond to specific types of pitches and positions within the strike zone. Signals should be given to the pitcher from the down position. With a runner on base, the signal should be given from the down position and then the catcher should position herself in the up position to receive the pitch. The signals should be given with the knees apart and the fingers of the throwing hand spread as far apart as possible up against the crotch of the pants so the pitcher can see the signs. The glove should be positioned on the outside of the glove side leg just above the ankle to block the signals from being seen by the third base coach.

Blocking Balls

For pitches thrown into the dirt, the catcher should attempt to keep the ball in front of her body to help prevent the base runners from advancing to the next base. When the catcher realizes the ball is going to hit the dirt, she should stay low and position her body in front of the ball to keep it on the midline of her body. She should drop to her knees while putting the glove hand down between her knees to block the space between her legs. She should keep her shoulders perpendicular to the path of the ball and should tuck her chin to her chest while keeping her eyes on the ball.

Fielding the Bunt

Bunts can be fielded by the third baseman, pitcher, first baseman, or catcher depending on the location of the bunt, the defensive positioning, and the location of the runners. Bunts that remain very close to home plate provide fielding opportunities for the catcher. The catcher must spring up from her position and get to the ball very quickly to keep her fielding options open. She should glance at the lead runner and make the play on the lead runner if possible. If it is not possible to get the lead runner out, she should make the play at first base. For bunts where another fielder gets to the ball first, the catcher should direct the fielder as to where to make the throw by yelling 1, 2, 3, or home.

Fielding the Pop Fly

Fielding a pop fly in foul territory is tough play for a catcher. To improve her chances of making the play, she must jump up and move quickly in the direction she believes the ball is headed. At the same time, she should flip off her catcher's helmet to help her find the ball more easily. Once the ball is in the catcher's sights, it should be tracked and caught as any fly ball. The other infielders should help direct her to the ball by pointing to it and providing verbal instruction. For balls hit to the first base side, the infielders should yell "up 1". For balls hit to the 3rd base side, the infielders should yell "up 3". For balls hit directly behind the catcher, the infielders should yell "back".

Receiving Throws for the Tag Play

After the ball is hit, the catcher should take a position in front of home plate with her left foot near the at the third base edge of the plate. She must take care not to position her foot in the sliding lane of the runner. Her body should face the direction of the throw and she should receive the throw with both hands. As she receives the throw, she should stay low to the ground and should move into the path of the runner in preparation to make the tag. After making the tag, she should be attentive to trail runners unless that is the third out of the inning.

Receiving Throws for the Force Play

After the ball is hit, the catcher should move to a position in front of home plate with her body facing the throw. She should place her throwing side foot on the plate and step toward the throw with her glove side foot. She should receive the throw with two hands. After making the catch, she should be attentive to trail runners unless that is the third out of the inning.