

Avon Lake Parks and Recreation Pitching Skills and Drills

Pitching Information

Pitchers need to be committed and want to pitch. Important knowledge, skills, and aptitude for a pitcher include: knowledge of the game, being a thinker, speed/control/movement of the ball, having one “sure” pitch, and having a positive attitude. All of these qualities are attributes that we firmly believe you have and will use to contribute to the team.

Pitchers need to know the concept of rotation/spin of each pitch. Get to know the correct feel of each pitch. As a pitcher, you need to learn to be your own pitching coach: *learn to help correct yourself*. Work on positive self-imagery and positive self-talk. You may not be able to control your initial thought, but you can decide what your next one entails. Visualize yourself as being successful and achieving goals for yourself and your team. Players who function as a team, think as a team, create a team whose mental cohesiveness contribute to excellence and success. Work together and win together as a team.

Aspects of Throwing Hard

1. **Power Line:** The body should be going forward toward the catcher as well as should the arm. Weight stays with the body width aka, “the hallway”.
2. **Length of Levers:** The longer the levers of the arm, the more force can be generated. The arm should be fully extended. Place ball in fingers to give a longer lever as compared to the back of your hand.
3. **Selective Relaxation:** Relax in the circle, not too tight a grip on the ball as this will allow a faster wrist snap as well.
4. **Rotation:** Hip rotation follows through to home plate AFTER the ball passes the hip. (Hand BEFORE hip).
5. **Centrifugal Force:** Perfect circle rotation with arm and shoulder socket.
6. **Sequential Summation of Levers:** The order of joints going together starting with ankle, then knee to waist and shoulder down, followed by the wrist and finally the fingers.

Aspects of the Breaking Ball

1. **Gripping the Ball:** Always use the fingertips to grip the ball, unless throwing a changeup. The closer the ball is to the palm, the greater the constriction of muscles of the wrist and forearm, therefore reducing speed. To prove this point, place the ball in the palm of the hand and grip tightly, now try to move the wrist back and forth as quick as possible. Repeat this with the ball in the fingertips as tight as possible. The difference in wrist speed will be significant. The concept of relaxation is important to understand. The fast pitcher with good movement can hold the ball tightly with the fingers and still maintain a loose wrist.
2. **Throwing Breaking Balls:** There are four important principles when throwing the breaking ball.

- a. The ball will always break in the direction it's rotating
- b. The faster the speed and rotation the "sharper" the ball will break
- c. A quick wrist snap is important because of the short distance
- d. The pitcher should find a grip that is most effective for them

Make sure when working on breaking balls that there is a majority of emphasis on the quick wrist snap to attain speed of rotation.

Mental Aspects of Pitching

Pitchers need to be thinkers!

1. Two of the first three pitches should be strikes. The first should hit the corner and the second should graze the back of the plate. Get ahead early. Work in the strike zone till the umpire gets to know you then begin your way out.
2. Use theory of opposites. Mix batters up by using different pitches.
3. A batter is showing you what pitch she likes to hit during her practice swings. Pay Attention!
4. Examine batter position in the box. Look at hands, feet, and bat. She again is telling you what pitch she hits best.
5. Review the scouting report to be ahead of your batters.
6. Know situations like if there are runners in position (low pitch) or if there is a squeeze play (high inside).
7. Always remember where you pitch is more important than what you pitch.

Pitching Sequence

The pitching sequence is 4-5 pitches to take advantage of the batters weakness. A pitching sequence would require you to throw a proportionate number of balls in order to get the batter to hit the worst possible pitch. The main concept is taking advantage of the batters weakness, but also using the entire strike zone to "set up" the batter for a specific pitch. Some skills needed to become a sequence pitcher include: control, ability to change speeds, and adjusting rhythm to keep the batters off balance.

By using a pitching sequence you will find:

1. It requires you to analyze the batters more carefully and thus forces you to concentrate more.
2. It helps develop your control by increasing your concentration level.
3. It provides more flexibility in keeping hitters off balance because you use a wider range of pitching weapons.
4. By using rhythm and speed changes you pace yourself more effectively through an entire game.

Example:

Within in the strike zone, the effectiveness of a pitch increases in relation to its contrast with the previous pitch. This contrast refers to the location of the pitch in the strike zone, the direction of its movement, and its speed.

This idea suggests the more you contrast these features from one pitch to the next, the more effective each pitch will be in reducing the batters chances of getting a hit. For example, the maximum contrast

for a high inside pitch would be one low and outside. The idea of pitch sequences is not to throw the same pitch twice in a row but rather set up the next pitch to get the batter out.

Situations Chart

SITUATION	RESULT WANTED	PITCH TO THROW
Runner on 1 st : bunt situation Hitter bunts for a hit	Poor bunt/pop up Poor bunt or force to hit	High in or out, very low inside High in or out, change in, Lefty slapper: out and away
Runner on 2 nd RH 0 or 1 out	Ground ball left side	Low in, change in, high in
Runner on 2 nd LH 0 or 1 out	Ground ball corners	Very low in and out
Runner on 3 rd LH 0 or 1 out	Ground ball left side	Low out, change out
Runner on 3 rd RH 0 or 1 out	Pop out	High in or out
Bases loaded or runners on 2/3	Ground ball	Low in
Hit and Run	Pop up or ground ball	Low in or high in
Aggressive hitter	Change pitching rhythm/sequence	Pause before pitching, mix in off speed/fast pitches
Ahead in Count	Pitch to the corners of the plate, make batter swing at ball.	NOTHING CLOSE TO AN EASILY HITTABLE PITCH!
Behind in Count	Pitch to umpires/pitcher strike zone.	NEVER PITCH TO THE BATTER STRENGTH!
Start of a New Batter	Starting with first pitch strike	Always mix up location of first pitch

Corrective Actions

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Speed below normal	Arm motion (incomplete circle)	Reach up to height of circle
	Poor hip rotation	Increase weight on front foot, open front hip toward catcher
	Stride too long	Short, adjust in practice by setting object on ground to find perfect stride length
	Lack of body rhythm	Sync body at push off- everything loads and pushes off/moves forward at the same time.
	Lack of push off	Load weight onto front foot- really drive front of foot into the ground for an EXPLOSIVE push off.
Loss of Control	Inadequate warm up	Pitch between innings
	Over/Under striding	Push off harder or less
	Inconsistent grip and finger pressure	Hold ball in the pads of your fingertips, keep the palm off the ball
	Not picking up target soon enough	Focus on catcher's glove prior to starting pitching motion

	Aiming the ball	Release quicker/keep wrist tension through release point
	Stride too far left/right	Point toe of stride foot at catcher during stride
	Lack of confidence	POSITIVE AFFIRMATIONS!

Pitching Motion



Pitching Drills

Leg Drive Drills

1. **Push-Off.** It is important to push-off the mound forcefully (speed), to maintain good balance of your body at all times (control) and maintain proper weight distribution on each leg (advanced pitches). Start with the normal pitching position with weight back on the stride foot, but without a ball. Transfer your weight forward to the pivot foot and start taking a step with the stride foot to move your body forward. Bend the knee of your pivot leg as your stride foot reaches to take a forward step. Stepping style pitchers should turn the pivot foot toward third base. Push off the mound by straightening the pivot leg and thrusting the hips/stomach forward. This is where throwing speed can be achieved. Be sure to thrust toward the target and not upward. The stride foot should land pointing substantially in the direction of the throw. It is important that you stride in the direction of the throw; if your stride foot lands to one side, your body will be out of balance and control will be more difficult. The knee should be bent on the stride leg when it lands. Follow through by dragging the pivot foot forward off the mound and planting it in a position which will enable you to field a ball hit back to you. Don't lift your pivot foot during the drag – it is illegal for women!

Variations.

- a. Bend forward at the waist as you transfer weight to the pivot foot, and then straighten up tall as you stride forward and push off the pitcher's plate. The push-off should thrust the hips forward and complete the straightening.
- b. Perform the windmill arm motion, but without a ball. This may be necessary when trying to correct improper placement or direction of stride foot plant.
- c. If the pitcher has difficulty bending the pivot leg knee, consciously "squash a bug" with the heel of the pivot foot during the motion.
- d. To encourage a more energetic push-off, place a target on the floor that promotes a longer reach with the stride foot.

2. **Back-Leg Drive Drill.** Try placing a ball at the inside of the drive foot. If the pitcher uses correct action, the heel of the drive foot will not disturb the ball. If the pivot occurs, the ball will roll away.

3. **Back-Leg Drive Drill #2.** Another drill to correct the back-leg drive is for the pitcher to start about a stride away from the catcher. The catcher places the mitt at the height of the pitcher's knee. Without a ball, the pitcher goes through the motion, striding right under the catcher's glove. As soon as the stride foot is set, the drive-leg knee should come forward and into the glove. The toe of the drive leg should still go toward the heel of the stride foot. This drill will create a nice visual aid even when the pitcher is 40 feet away.

4. **Long Toss.** Long tossing a ball is an effective way of uncovering lower-body problems. *Distance will magnify mistakes.* Pitchers can start at regulation distance and gradually backup to 75 to 150 feet, depending on the size and the strength of the pitcher. As the pitcher backs up, she can put a slight arc on the pitch to carry the distance. This activity should appear more like tossing or playing underhand catch than pitching. The focus should not be on throwing a strike height wise but on stepping on the power line or pulling the ball through a straight line. In backing up, if the pitcher does not correctly use the back-

leg drive, she will compromise her posture and the ball will fall short of its destination. This drill can greatly improve the pitcher's understanding of proper mechanics.

5. **Chalk Drill.** Stride aggression can be improved in several ways. The coach can observe the pitcher's stride on several pitches without her realizing that the coach is trying to get an honest idea of her natural stride. The coach then places a chalk mark where her toe is landing and another three or four inches in front of the first. The pitcher should try to reach the new mark. If that is easy, the distance can be increased by another three or four inches. The pitcher should not attempt to do too much at one time.

6. **Rope Drill.** Knowing the natural stride of the pitcher, the coach can place a rope in front of her at about three-quarters the full distance of her stride. The rope can be four to five inches off the ground. This placement will encourage the pitcher to stride farther as well as drive the stride leg (by forcing it to stay higher longer). The distance and height of the rope can be changed reasonably and gradually. But the pitcher must keep in mind the timing that must occur with the stride-foot landing and the arm between ten o'clock and twelve o'clock.

7. **One-to-One Drill.** In this drill the pitcher stands balanced on the drive leg. Bending slightly as if preparing to jump, she powers outward with the stride, beginning with the thigh or quad of the drive leg rather than the foot or leg of the stride leg. Some pitchers will feel awkward when first trying this drill because they are not accustomed to using their legs to incorporate power. They start the motion simply by stepping forward comfortably. By starting the drill with the drive leg, the body will start to count on the contribution of power, thus generating more speed overall. Once the pitcher has pitched the ball, she should balance on her stride leg. The pitch goes from one leg (the drive leg) to the other leg (the stride leg). Isolation for strengthening is a factor, and balance is incorporated.

8. **Weight Back Drill.** The goal of this drill is to teach players to keep their weight back during the pitching motion. In the open hip position and the front foot facing the target/catcher, the pitcher snaps the ball driving the back knee to the front knee. Immediately after the motion, the pitcher takes a step back to the original position with the back leg to perform the motion all over again. The feeling is like falling back into the original position. When the pitcher strides back off to either side of the line of force, the coach makes the corrections to bring the stride back onto the line of force

9. **Run-up / Walk-through.** This drill helps increase your leg speed in your stride leg, which can determine the speed of your pitching. We usually recommend that our pitchers use a 2-step approach by starting 5 or 6 feet behind the rubber. Step first with your left foot. The 2nd step lands on the front edge of the rubber where you start your rotation and delivery. After releasing the ball, continue "walking through the pitch" 1 or 2 steps toward the catcher. Eventually you can increase the speed of your approach by running to the pitching rubber. The faster you drive your stride foot forward, the faster you will pitch. This is especially beneficial when throwing your warm-up pitches at the start of a new half inning.

10. **Walking Drill.** Begin one step behind the mound with the feet together. The pitcher should have the ball separated from the glove in the throwing hand. At the same time, the pitcher will take a step and present the ball and then throw hard to the wall or net. The focus is to take an aggressive step and drive off the mound. The step gets the momentum going for the pitcher. Try the drill for 10 times and then alternate a regular pitch from the mound and then a walking drill.

11. **Step Drill.** Sometimes a pitcher has a problem with her stride, it may not be long enough or forceful enough. To see if that's the problem, have a partner hold a stick in front of you before you begin your motion. As you stride, make sure your foot goes over the stick.

12. **Open Circle w/Step.** This drill focuses on the stride foot angle, the power line as well as the backside drive. During the motion, let your hand lead through and not your hips. With your power foot at a 45-degree angle, continue with a backside drive keeping your balance the whole way.

Hip Rotation Drills

1. **Drum Major Drill.** This drill is designed to drive the hips closed and increase ball speed by improving the closing body rotation. The pitcher performs the normal pitching motion and after the ball is released, the pitching arm is lifted high overhead and the pivot leg knee is brought up so forcefully that the pitcher hops on the planted stride foot. The pitcher looks like a high stepping drum major. This drill also checks balance on the stride foot, since an out-of-balance pitcher will not be able to hop on the stride foot.

2. **No Stride.** This exercise promotes proper ball release and speed when pitching. The pitcher delivers a ball to a partner without using a forward stride. The partner can be another pitcher, so this is a good warm-up drill. The stride foot is even with the pivot foot. The pitcher pitches the ball using good hip rotation, a strong snap of the wrist, and a good follow-through, focusing on proper hip and arm mechanics. Pitchers should be aware of the danger of not rotating the hips and then throwing only with the arm.

3. **Side Drill.** Have the pitcher stand sideways to the catcher with both feet on the power line, shoulder width apart. With the catcher 20-30 feet away, have the pitcher take a side step down the power line, using full arm motion to throw the ball. The body should finish by rotating the position facing the catcher. Concentrate on an aggressive and balanced stride, and completing the hip rotation.

4. **9 O'clock One-Step Drill.** This drill is designed to assist in "closing" and using the lower body or hip rotation. Face 3rd base (for a right-hander) start by holding the ball straight up in the air, and glove hand pointing toward the catcher. Throw hard, and follow through, ending up in the ready position.

5. **Standing 1-2-3 Drill.** Emphasis here should be on the rotation of the hips as well as the push with the back leg, keeping the knee slightly bent. Start with both your hands forward, pointing at the target and your feet in the power line position. Bring your throwing hand with the ball overhead, slightly bending your elbow, with your glove still pointing at the target. Follow through and finish with increased speed when reaching the bottom of the pitching motion.

Arm Rotation Drills

1. **Arm Whip.** This drill is designed to improve the whipping action in the arm that occurs just prior to ball release. This action works in combination with the wrist snap, and it is necessary to achieve high ball speeds. Stand in the “power” position in which you face the target with the stride foot placed forward of the pivot foot. The feet should be spread wider than the shoulders. Extend the glove arm toward the target and swing the pitching arm rearward to a horizontal position while rotating hips and shoulders to the “open position.” The wrist should be “cocked” and the arm slightly bent at the elbow. From this position, bring the pitching arm down forcefully to the side while closing the hips and shoulders. Stop the elbow at the hip and allow the pitching hand to pass while releasing the ball with a snap of the wrist. After the ball is released, the elbow may follow the pitching hand past the hip. Throw the ball as fast as possible without letting the elbow pass the hip before ball release.

Variations.

a. Arm Whip from 9:00 Position. Standing along the power line with the glove hand pointed at the target and the ball hand in line with the glove hand (the body should be a T), snap the ball toward the target and the glove hand down at the same time. Bend your legs so your weight is over the back leg. As the ball and glove are pulled down rotate the hips and shoulders so the belly button faces target at release. The elbow should also point at the target during the follow-through.

b. Arm Whip from 12:00 Position. Standing along the power line with the ball hand directly overhead, snap the ball toward the target and the glove hand down at the same time. Bend your legs so your weight is over the back leg. As the ball and glove are pulled down rotate the hips and shoulders so the belly button faces target at release. The elbow should also point at the target during the follow-through.

2. **Simple Toss.** The pitcher takes a ball and just lets the arm rock back a foot or so behind the hip. She rocks forward smoothly and tosses the ball to the catcher, who is standing. The pitcher should not be trying to throw a strike. She should simply toss the ball to the catcher. The catcher should gradually back up to full distance or perhaps a little farther. If the pitcher performs the toss correctly, she will be able to throw the distance with no problem. If the follow-through stiffens, the tosses will fall short or go sharply upward.

3. **Glass of Water.** A visual aid, such as a glass of water, may help with going through the pitching motion – slowly of course. Correct motion will allow the glass of water to stay upright until the bottom of the circle, approximately 12 to 18 inches behind the body when the arm begins to move forwards for the wrist snap. At that point the water will

spill out of the glass. Early loaders will spill water as soon as they reach the back side of the circle top.

4. **Football Toss.** A drill that allows for faster arm movement while working on the correction of the early load is the football toss. The pitcher grips the football as if to throw a normal overhand pass. Using the pitching motion, she makes the circle and releases the ball in front of her body. The point of the ball located closest to the pinky finger must be heading straight upward. The pitcher must not be afraid to throw the ball high with an arch. This would indicate that the elbow leads the circle. An early loader will release the football on a flat angle with the tip aiming outward left and right and the ball spinning forward. Another good aspect of this drill is the fact that it shows arm whip rather than straight-arm release. A pitcher who can get the point up in the air is leading correctly with the elbow. If the point goes directly outward to the catcher, the arm is straight. The pitcher should start this drill with a simple rock back and no circle but she should eventually add the circle and distance to help strengthen the arm and reinforce proper mechanics.

5. **Triple and Double Circles.** The pitcher kneels on one knee close to a net or a fence (right knee down for a right-handed pitcher). She makes her arm circle three times in a row as fast as she can before releasing the ball and tries to become faster with each circle. She should use muscles throughout the arm to make the circles, not just spin at the shoulder. (A slight curve to the arm rather than a straight arm indicates involvement of the whole arm.) The pitcher performs 10 pitches, and then drops to double circles for 10 pitches. She finishes with single circles but puts all the energy of the multiple circles into the single circle.

6. **Arm-Speed Development.** The purpose of this exercise is to learn the feeling of arm speed and to develop acceleration through the arm circle. The pitcher works alone on her arm circle. She stands in a sideways pitching position with the stride leg forward and the pitching arm above the head at the top of the circle. She moves the arm around in a perfect circle as fast as she can to get the feel of high arm speed. She keeps her arm totally relaxed, as loose as a noodle. The pitcher then focuses on building acceleration through the circle. Still sideways, she begins with the pitching arm at waist level. The pitcher focuses on lifting the arm in a relaxed manner and increasing the speed of the arm by accelerating on the downswing with a whip-like action. The arm is extended (elbow relaxed) to create the biggest arc and lever possible. The longer the lever, the more force it can produce.

7. **Wall Drill.** This drill helps the pitcher develop proper rotation of the arm. The pitcher throws imaginary pitches using a wall to keep the arm straight in a perfect circle. She stands perpendicular to a wall with the pitching arm close to the wall and about four inches away. The pitcher uses the full pitching motion (including the stride and the opening of the hips), keeping the arm straight and in tight so that it does not contact the wall. The pitcher walks and moves down the wall throwing imaginary pitches.

8. **The Wall.** Have the players line up about a foot or so from a wall with their body perpendicular and their throwing arm closest to the wall. Make them deliver the ball to a catcher 40 or so feet away. The intent of the drill is to make sure that the pitcher isn't getting long in the back. If the player is, then he/she will hit the wall with the throwing arm. Some coaches think that the use of this drill makes the kid short arm the ball, but most kids have full extension towards the ground, not straight back.

9. **Pitcher's Wall.** This drill will make sure pitchers do not drop their shoulders and make that swooping motion. Stand next to a wall, approximately 4 to 6 inches away, feet angled at a 45 degree, then go through the motion of either slingshot or windmill.

10. **Upper Body Drill #1.** Stand with your feet together in the open position (45-60 degree angle) and throw as hard as you can to a full distance (your pitching distance) target. This drill works on the upper body and arm speed, so don't get into a habit of slowing the arm down to match the feet.

11. **Upper Body Drill #2.** Stand, while balancing on your back foot (push foot) in the open position (45-60 degree angle) and throw as hard as you can to a full distance (your pitching distance) target. This drill works on the upper body and arm speed and also works on keeping weight back using your middle body.

12. **Upper Body Drill #3.** (Triples): This drill works on arm speed making your pitches noticeably faster. Get into your "power position" (feet spread wide, but comfortably apart in open position with weight back) about three-quarters of your full distance. Swing arm around very quickly 3 times releasing ball on third revolution. Glove arm comes up on first circle and down with pitching arm on third circle at release. Arm should be very loose like a wet noodle on each circle.

Wrist Snap Drills

1. **Wrist Snap.** This drill improves the wrist snap to achieve more ball speed, and it improves control of the ball during release. One of its main advantages is that it can be done almost anywhere. In a seated position, rest your forearm on your thigh. Extend the wrist and throwing hand out over your knee. With a fastball grip, cock and snap your wrist to throw the ball straight upward. You may initially hold your forearm down with the other hand to insure that only the wrist muscles are used, but eventually you must learn to do this drill by relaxing your forearm during the wrist snap. You may use any ball, but a weighted softball is best. Work on increasing the heights of the ball as it is thrown (ball speed) and work on controlling where it lands (ball control).

Variations.

- a. While standing with the pitching arm extended forward, grip a softball and flick it straight up with the wrist. Keep the elbow relaxed and don't throw with the arm.
- b. While standing with the pitching arm extended forward and palm up, place a softball on the fingers of your pitching hand and flick it upward using a wrist snap. Note, don't grip the ball with your thumb.
- c. While standing with your arm at your side, grip a ball and flick it to the catcher using

only a wrist snap. Keep your elbow relaxed.

2. **Wrist Snap Behind Back.** This drill develops the wrist snap by isolating the wrist, preventing the pitcher from using the elbow to snap the ball. The pitcher stands sideways 5 to 10 feet from the catcher or a wall. The glove side faces the target, and the ball is behind the back. The pitcher flips the ball by snapping the wrist.

3. **Wrist Snap Under Knee.** Like the behind the back wrist snap, this drill also isolates the wrist. Partners stand about 10 feet apart. Pitchers can throw to pitchers. If right-handed the pitcher kneels on the left knee with the right leg bent and the right foot flat on the ground. The pitching arm is placed against the leg with the ball and hand under the knee. The pitcher flips the ball in the air to her partner by snapping the wrist.

4. **Broom.** Here is a drill for pitchers players trying to learn the wrist snap. Have a friend or parent hold a broom where the long part is horizontal and touching the arch in your back right where your wrist would hit on your release point. If you take your arm behind you and slowly pitch, your wrist will hit the broom making your wrist flick the ball. You don't want to throw the ball hard, it should not go far and will go slow.

5. **Forearm Strength.** This drill can increase your strength in the hand, wrist, and especially the forearm. Put a pile of single sheet newspapers in an area you would normally walk by the most times during the day. Every time you walk by, grab a sheet and wad it up, using only one hand. This is the kind of exercise that you hardly notice doing after awhile

6. **L Drill.** This purpose of this drill is to help pitchers with the wrist snap. Have the pitcher stand the distance of the rubber or closer in. If she is right-handed, put her standing, facing 3rd base. Put the left foot towards the catcher (toe pointing the catcher). Hold your glove up towards the catcher (arm out like a wing). Take the throwing hand and hold it up so that with your glove and ball arms you are making an "L" shape. Then just let your hand drop and snap your wrist.

8. **Snap Drill.** When you make advances pitches, most of your motion remains the same. The things that change the most are your grip and your snap, so it helps to isolate these when you are learning. Stand sideways, as if you have already taken your stride, about ten feet from a partner. Throw your pitch without the windup and with just a slight backswing, working on getting the most of your power from your wrist snap. Work on all the pitches this way until you feel comfortable with the different releases.