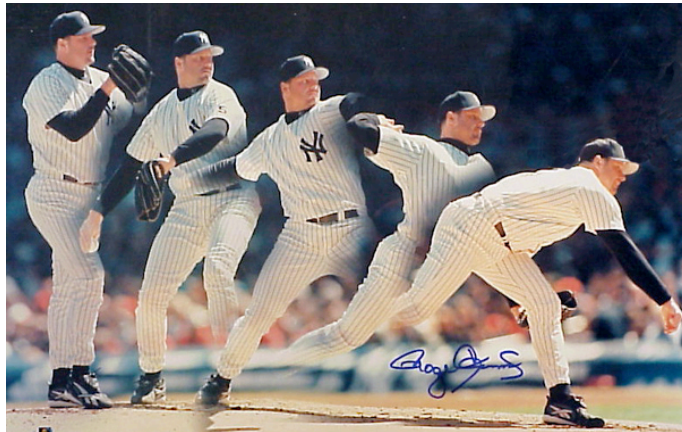


Wayzata High School Baseball



Pitcher Development



In and Out of Season Pitching Drills

In order to perform consistently, pitchers need to develop their arm strength and fine-tune their mechanics year round. This does not require constant throwing. The following are

some ideas for developing your pitching mechanics, which will improve your overall pitching performance.

Pitching can be as easy or as complicated as each player wants to make it. This packet will attempt to keep pitching simple, yet effective. The ideas in this packet should be practiced as often as possible (everyday, every other day, three times a week).

There are four areas that a pitcher must be improving upon in and out of season:

1. Arm strength (along with total body)
2. Pitching mechanics
3. Pitcher's defense (bunts, come-backers, covering bases)
4. Pick-offs

There are three other areas that a pitcher must develop as the season progresses:

1. Backing up bases
2. Mental development (understanding the game "upstairs")
3. Bull pens/ pre-game warm up

Arm Strength (Total Body Strength)

Refer to the player development packet

Pitching Mechanics

Pitching mechanics is defined as your throwing motion. The powers that be have determined the "proper" motion that pitchers should use in order to "correctly" deliver a pitch to the plate. There are some basic things that a pitcher should do during their delivery; however, we want to avoid the cookie-cutter approach. Pitchers should be allowed some personal freedom in their mechanics.

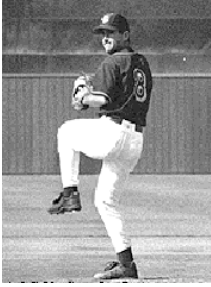
Pitching mechanics can be easily broken down into three basic positions.

1. Balance
2. Direction
3. Extension

Balance – Whether you are in the windup or the stretch, all pitchers must achieve a **balanced position**. Pitching is a lot like dominoes (in order to knock down the last domino, the previous dominoes must be lined up correctly and fall in their correct order). Your balance position is the first domino. If we are inconsistent with our balance point, we stand a greater chance to make more mistakes during the rest of the motion.

**Here is what a proper balance
Point should look like:**

**Here is what balance should
Not look like:**



Keys to the Balance Point

- Straight line through body from pivot foot to chin (do not lean back)
- Keeping shoulders in a straight line to the plate (avoid the coil; a little is ok)
- Leg Lift is around 90 and under control (avoid leg kicks that are too high)
- Slight knee bend with leg on ground (avoid locking straight)
- Lifted foot is relatively under lifted knee (lefties should never cross, picks)

Practicing Balance Point

There are several drills we can do to improve our balance point. Remember that we want to reach the same balance position every time. **MUSCLE MEMORY!**

Regular Leg Lift

lift leg to balance point
hold for as long as possible
repeat many, many times

Cross-over Leg Lift

cross feet then lift to balance point
hold for as long as possible
repeat many, many times

Facing the Wall Leg Lifts

stand close to the wall – facing
lift leg to balance point
lifted foot should be 1-inch away
keeps from raising too high
repeat many, many times

Back to the Wall Leg Lifts

stand close to wall - back
lift leg to balance point
keep back close to wall
stops you from leaning back
repeat many, many times

Partner Balance Point – hold your balance point and have a partner toss you a ball. Try to catch the ball while maintaining your balance. The partner can circle around you and toss from all angles.

*Challenge yourself by standing on some sort of a balance beam. Can you stay on?

Direction

After reaching your balance point, pitchers must stride to the plate in order to deliver the ball. This is called direction. It is important that pitchers step straight towards the plate. If our stride is not straight (meaning closed or open), our dominoes are not lined up and mistakes are made. It makes it very hard to be consistent with our mechanics. Also we increase our risk of injury.

Here is what good

Here is what bad

direction looks like:



direction looks like:



Keys to Direction

- Stride is straight to the plate
- Body and head stays balanced over center of gravity
- Weight does not get transferred too soon (just like hitting)

Notice the two on the right: open stride and bad balance (falling over)

Practicing Direction

Drills for improving direction are fairly limited. Start with the balance position every time. **MUSCLE MEMORY!**

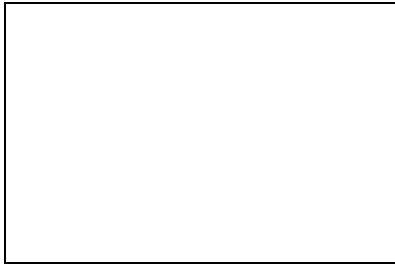
Length of stride should be slightly less than the height of the player. Place a tapeline on your floor to represent the pitching rubber. Lay down so that your head is on the line and your body is straight. Place another tapeline on the floor just short of where your feet are. Connect the two lines with tape down the middle (you just made a capital "I"). This is generally the comfortable distance that pitchers use for stride. Adjust as you see fit, however we should be able to get our head over our stride knee when releasing the ball.

If not, shorten up! See picture below (good example):

Stride Out

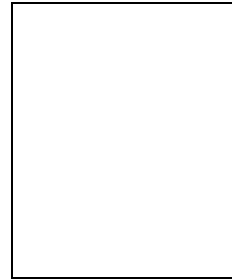
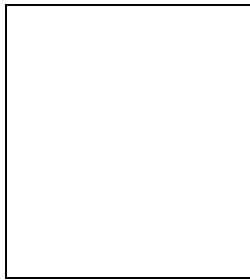
- Start in balance position using your tape setup; stride out to the proper distance
- Weight stays back when stride foot hits ground; Back knee has a slight bend
- Glove-side arm should be pointing towards the plate with tension
- Throwing arm should be 90 with hand to the sky
- Torso should not have begun to twist yet; Head is looking at the plate
- Repeat many, many times





NOTE: it doesn't really matter where your glove points. What does matter is that your shoulders are in a straight line for as long as possible. The three pictures above are good examples.

Below you can see how these pitcher's shoulders are out of line. This adds more stress to your throwing arm and will increase your chance of injury



Extension (which includes follow through)

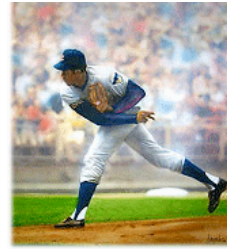
The final step in our pitching delivery is called extension. The goal of extension is to reach out as far as possible towards the plate in order to maximize our power potential.

Too many pitchers short arm their throws. This not only decreases velocity but also increases the risk of injury. People who short arm their throws are generally inconsistent with their mechanics.

Here is what good extension looks like:



Here is what good follow through looks like:



Keys to extension

- Head is over stride knee
- Stride knee is slightly bent during release
- Glove returns to glove side shoulder

Keys to follow through

- Throwing arm finishes on outside of opposite leg
- Stride foot remains stationary while back foot swings up and around
- Head stays up and looking at target
- Body bends over at the waist

Extension naturally flows from good direction. Think of reaching out and placing your hand in the catcher's glove during release. Full extension allows us to maximize our power and hand speed.

Just as important, full extension will assure consistency. If we are consistent with extension early on in the game and we tire as the game progresses, we should be able to feel ourselves short arming the ball. If we can feel a difference, then we should be able to make an adjustment to get back to extension.

Always allow your arm to stop itself naturally. Let your muscles work.

Practicing Extension

These two drills can be done with a partner or alone. Either way you will need some sort of a target to strike.

Cut a strip of an old, thin towel so that it is approximately 3x12 inches. During drills hold the middle of the towel like a baseball so that the ends of the towel are on the sides of your index and middle finger.

Your partner holding a glove or whatever target you are hitting should be far enough away so that only the ends of the towel strip will strike. If you use enough hand speed, you should hear a crack upon impact.

Direction Towel Drill

Start in direction position
Throw a pitch
Ends of towel hit target
Make sure you are reaching
Repeat many, many times

Balance Towel Drill

Start in balance position
Throw a pitch
Ends of towel hit target
Make sure you are reaching
Repeat many, many times

Practice dry mechanics with a slightly larger towel strip to simulate a ball.

Muscle Memory = Consistency

By practicing these drills as often as possible, you will attain muscle memory. Dry mechanics will help you build muscle memory. Muscle memory will build consistency.

Consistency in mechanics is the ultimate goal. Consistency will not only improve our performance and decrease our chances of injury, but will also allow us to make in-game adjustments to get us back on track.

Pitcher's Defense

When fielding the ball, the most important thing to know is what you will do with the ball. You must know what the situation requires and how that changes depending on where the ball is hit (bunt, come-backer, side to side). Are you covering a bunt or a come-backer? Who else is charging with you? If you throw to third is it a force or a tag play? What happens if you bobble it? Then where do you go? These are things you must know before the pitch is thrown. You become a fielder after the ball leaves your hand!

- Work on your reactions by throwing a tennis ball off of a garage wall/door or other flat surface
- Place a ball on the ground ten feet away, simulate a pitch, cover the bunt
- Always fake a throw to a base

Covering First

Anytime a ball is hit to the right side of the field, pitchers should be moving towards first in case they need to cover. Never assume that the first basemen or second basemen will cover. What if they fall down or bobble the ball? Pitchers need to be there.

3-1, 4-1 (not a double play)

- Run to the line at the cut of the grass and then up the line (parallel to the first base line)
- Stay in fair territory to avoid getting run over by the batter
- Step on first with right foot on “your” half of the bag
- If the ball has not been thrown yet, stop on bag (become the 1st basemen)
- After recording the out, always looks to throw out other runners
- ESPECIALLY AT HOME

Some coaches will bunt to first with a runner on second and send the runner home to catch the pitcher sleeping at first.



Stay on your side!!!

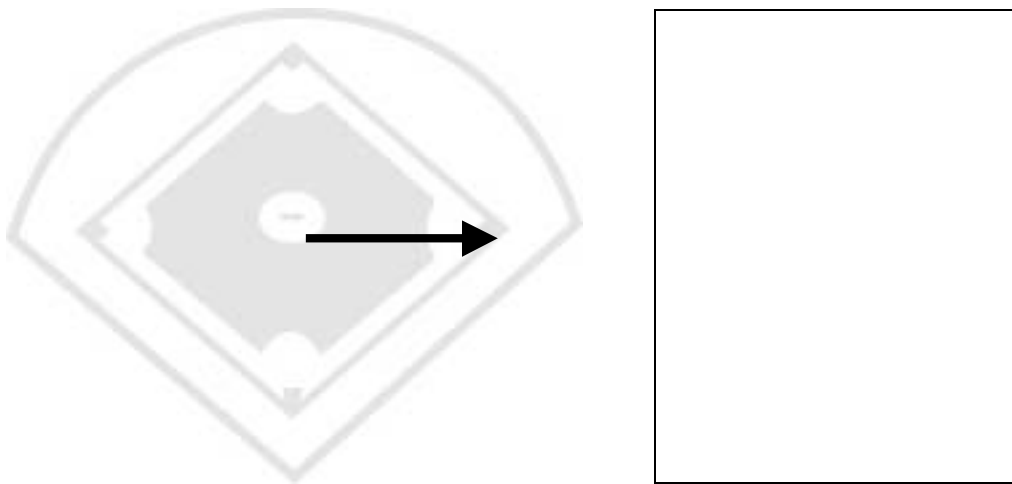
Look home after out is made

3-6-1 (possibly 4-6-1)

- Run straight to bag; forget the banana curl; get to bag ASAP
- Break down body to slow down
- Must stop on bag, become the first basemen
- NOTHING GETS BY YOU! Take it off the face if you have to, save the run
- Look in for other runners especially at home

If there is a ball hit to where both 1st and 2nd go for it and the 2nd basemen gets it, he may try for two. This will leave the 1st basemen out of position and the pitcher needs to cover first.

See example below:



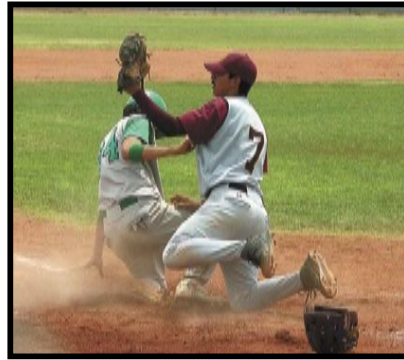
Covering Home Plate

After a passed ball or wild pitch, pitchers need to cover the plate to try to stop the run from scoring. Anytime there is a runner on third, pitchers need to be prepared to cover. However, pitchers also need to keep themselves safe.

Keys to covering home (WP/PB)

- Point to location of ball as you run to home plate
- Yell out direction for catcher to take (it is important to point and yell)
- Straddle home plate with back to first base (stay standing up)
- Do not stand over the plate; give the runner a place to slide
- Avoid getting hit at all costs
- Apply the tag by slapping your glove straight down (do not sweep tag)
- Immediately bring glove back up and show umpire the ball (sell it!)
- Look for other runners advancing

Stay on your feet



*Note – it is important to point and yell to help the catcher find the ball

- Catcher does not see where the ball went; pitcher knows immediately
- Pitchers must yell because the catcher may not see you point
- Pitchers must point because the catcher may not hear you yell
- Yelling means YELLING!!!

If the ball goes to the first base side – ONE, ONE, ONE! And point

If the ball goes to the third base side – THREE, THREE, THREE! And point

If the ball is straight back – STRAIGHT BACK, STRAIGHT BACK! And point

If the ball is under the catcher's feet – DOWN, DOWN, DOWN! And point

*Note – if the catcher does not see the ball at all and is lost.....THE PITCHER MUST GO GET THE BALL!!!

Pick Offs (holding runners)

The pitcher is more responsible for keeping runners from stealing than the catcher. The catcher reacts to the steal while the pitcher is more proactive.

Picks to First Base (left- and right handed)

- Right handed move is built around speed and quickness
- Left handed move is built around deception

As a **right-handed** pitcher we need to get rid of the ball as fast as possible. There are two keys to quick release. Many pitchers confuse quick release with throwing the ball as hard as possible.

In order to have a quick release, pitchers should:

#1 - short arm the ball (this is the one time it is ok to short arm a throw).

#2 – use the jump turn instead of stepping back first before throwing

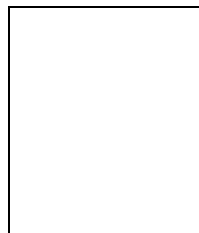
Quick Release

- Separate hands as soon as you start your pick off
- Throwing hand should go from glove directly to your ear
- Do not take your arm through the entire throwing motion
- Make sure your shoulders get squared to your target (first base)
- Think quick shoulders and your feet will follow

**It doesn't
matter
where your
hands come
set**

Going home

**Going to First
Hands
separate
straight up
to ear**



Jump-turn

- Take a small step with your right foot towards your left foot
- Drop step left foot so that it is pointing to first
- OR spin both feet at same time so that they are squared to first
- Make sure your hips get all of the way around

When performing a pick to first, our body momentum should be moving to first. After throwing the ball, our body should drift to first a few steps (walk off the throw). Think **QUICK** not **HARD**.

As a **left-handed** pitcher we will try to fool the runner into thinking that we are throwing home.

In order to have a deceptive move to first, pitchers should:

#1 – develop consistent mechanics to the plate

#2 - make our move to first look like we are going home as long as possible



Important Keys to a Left-handed move to first

- Stare at the runner (lefties give the pick away when they look home right away during their leg kick). Try to look at the runner as long as possible.
- Look away at the last second then look back to first to complete the throw (Look at 1st base dugout as a “look-away”)
- Leg kick needs to look the same as when you are going home (never cross)
- Drift with your hips towards home a little to make it appear that you are going home

- Try to keep shoulders straight to home as long as possible before committing to the pick
- Use the 45 rule to the best of your ability
- Walk off the mound towards first after throwing (do not let the umpire get a good look at where your right foot came down)

Lefties do not forget the snap throw to first too. Wait until the runner is in the middle of taking another step off of first and then snap over.

Some other things to consider for lefties/righties

- Freeze – hold the ball, ruin the timing of the base-stealer
- Make the runner stop moving – don't give up the walking lead
- Show off a few bad moves first – then get them with your best
- Mix up your timing to home – avoid getting into a pattern
- Pick off to first to expose the bunt (third basemen is watching batter)
- Off speed counts are good for stealing
- Fastball counts are good for hit-and-runs
- Don't wait for the catcher to call a pick; do it on your own

Pick Offs to Second Base

There are two main ways to pick to second. There is the inside move (a.k.a. the spaghetti move) and the spin move.

The spin move is the same as a right-handed pick to first except that the body will keep spinning until it is lined up with second. It is built around speed. The inside move is similar to a left-handed move to first except that the body will rotate back to line up with second base. It is built around deception

Keys to the spin move to second base

- Take a small step with your back foot towards your front foot
- Drop step your front foot back so that it is pointing to second base
- OR spin both feet backwards at same time until they are squared to second
- You must step behind the rubber
- Make sure your hips get all of the way around
- Use the short arm throw just like a pick to first for righties
- Keep your elbow up or you will tail your throw into center field

Keys to the inside move (a.k.a. the spaghetti move)

- Lift front leg to balance point while looking at the runner
- Look home and spin on back foot to line up hips to second
- Make sure lead foot lands behind rubber

*Note – try bending pivot-foot leg a little more to help with rotating your body. It is important to make it look like we are going home during our leg kick. Obviously you need to set up a timing play with your middle infielders.

Pick Offs to Third Base

Picks to third are just like picks to first except now the roles are reversed.

- Righties will use deception to fool the runner (left-handed move to first)
- Lefties will use speed/quickness to beat the runner back to the base (right-handed move to first)

See above for information. Again, set up a timing play with your third basemen.

Practicing Pick Offs

Out of Season – just as you practice your mechanics of pitching you should be practicing your mechanics of pick offs. Repeat the footwork and body movements to build muscle memory. Repeat many, many times.

Backing Up Bases

On every play during a game, pitchers have a responsibility to back up a base. Even if there is no one on and a ground ball is hit, pitchers can run towards the dugout behind first to back up the throw.

As a rule, pitchers should always back up the base where the lead runner will end up. Where it becomes tricky is when you have a runner on first and double is hit. Pitchers should run into foul territory between third and home and float to the correct base once the play develops. Once you see where you are needed, you can easily get to either bag.

- Always go somewhere (Pitchers should never be in the middle of the field)
- Never be the cutoff man
- Back up the lead runners base
- Get as close to the fence as possible (Give yourself enough room to react)

The toughest play is when the bags are full and multiple errors occur. It is still your responsibility to back up a bag. If an error happens and the guy from second scores easy while you are behind home, you need to move to third to back up that throw. BE MOBILE!



Mental Know-how

There are several categories under mental know-how. Situations, personal limitations, plan of attack, pitch selection, and reflection are the big ones.

Situations

- Understand situations and how to react to them (you need to know before they happen)
- Know your bunt defense responsibilities and who else is charging with you
- Know outs, runners, score, count, what the batter did last time
- Know where to go once the ball has been hit (backup bases)

Personal Limitations

- Understand your own limitations (it is not your job to strike people out but to make quality pitches)
- Understand that you only have control over yourself (you can't control what the batter does)
- Risks are ok to take as long as you have a chance to be successful.
- Dumb risks are just that... dumb.

Plan of Attack

- Pitch to your strengths (FB versus CH or BB)
- Use pick offs to keep runners off balance (freeze, hold for a long time then throw, etc.)
- Mix up your timing to mess up the hitter (hitting is timing; pitching is messing up timing)
- Talk to your catcher ahead of the game about your goals
- Get ahead of hitter, stay ahead
- Lead-off hitter out is extremely important (chances of scoring significantly decreases when lead-off hitter is out)
- 0-2, 1-2 hitters must be finished off; be aggressive
- Stop the bleeding; end the rally
- Don't try to out-think the hitter – "I thought he would be looking for..."
- Don't blame the catcher; you have the ability to shake-off; better have a good reason
- Try to get hitters out as soon as possible; early in the count
- Never give up; you're always only one pitch away from getting out of a jam

Pitch Selection

- Any pitch can be thrown at any time; **execution**
- Establish the fastball first; make them prove they can hit the FB
- Middle of the plate is fine as long as the ball is down; walks lose games
- 0-2 curveballs are too predictable. Try a low and away FB to get the batter leaning
- Second time through the lineup mix up your first pitch selection
- Watch out for first pitch swingers (will know by 2nd or 3rd AB)
- If a pitch is working, repeat it; go with what is working

- Don't always give up on a pitch that isn't working
- Work inside on batters with long swings; go for the jam
- With the game on the line; go down with your best pitch
- Commit yourself 100% to every pitch thrown. Just because the catcher/coach calls a pitch that you are not excited about, it does not give you the right to not try your best.

You've heard the saying before but it's true: play the game one pitch at a time.

Reflection

During the game ask these questions:

- "What is working and what is not?" – make the adjustments
- Ask catcher: "What are you seeing? What can we do better?"
- Ask coach: "What are you seeing? What do I need to improve?"

After the game:

- "Was I prepared the best I could be?"
- "How can I be better prepared next time?"
- "What was I thinking about before the game? Was I focused yet relaxed?"
- "What did I do well during the game?"
- "What did not go well? How can I fix it for next time?"
- "What do I need to work on in practice before my next appearance?"

Getting Loose

After stretching and strength cords, start with knee drills and progress to full motion (throw from balance and direction). Work your way out to a distance of at least 120 feet. Work your way back in and finish with close range throws (good time to work on pick offs or pitch grips)

Bullpens/Pre-game

During practices pitchers should be throwing bullpens. The number of bullpens per week depends on how many times you throw and when the next appearance will happen. Starters will throw more pens than relievers will. Before the game, starting pitchers need to properly prepare the body. The following are general guidelines that pitchers can use to get prepared. Adjust as necessary.

Before you step on the mound:

- Stretch appropriately; use your stretch cord
- Run – not kidding; loosen your legs; little jogging; a few sprints
- Get loose; throwing drills
- Develop a plan; you should practice with a goal in mind

During the bullpen:

- Start off at about 60% to get comfortable on the mound
- Find the strike zone before working on anything else (got to throw strikes)
- Work your way up to 90-95% velocity
- Establish FB on the corners; don't move on until you have one side down

- Work on CB and CH over the middle of the plate and down; don't try to be too fine
- Have the catcher call signs and work a few counts; create situations
- Finish by working your FB in the middle of the plate and down

After the bullpen (or after the game):

- If possible ice right away; otherwise do it at home later
- Run, run, run
- Reflect upon the whether you accomplished anything

As you do more bullpens increase the number of pitches you throw. Start off at 25 pitches and try to get to 80 or 90 by the start of the season. It does no good to throw 100 pitches in December or even January. We want to hit our max around April 1.

All of the above should be used as a pre-game warm up too. Starting pitchers should be sweating when the game starts. This is not "too much" throwing before a game. Relievers will have less time to get ready and will need to loosen up faster. Between innings relievers should stay loose by running and playing catch with the odd outfielder.

Running Ideas

- Sprints of varying lengths (40, 50, 60, 70 yards)
- Distance (poles, neighborhoods, etc.) purpose is time not speed
- Run pass patterns with a partner
- Play basketball
- Shuttles
- Ply metrics (jumping, hopping, leaping, shuffling etc.)
- Timed poles (suggest 34 seconds)
- Uphill/downhill

Suggested Weekly Schedule (in season)

<u>Day</u> #1	<u>7-Day Starter</u> Game	<u>5-Day Starter</u> Game	<u>Reliever</u> Game
#2	Heavy Running Light Toss Defense	Heavy Running Light Toss Defense	Medium Running Medium Toss Defense
#3	Long-toss Medium Running Defense	Long-toss Medium Running Defense	Long-toss Game?LtBullpen? /Light Running Defense
#4	Medium Bullpen Light Running Defense	Medium/Light Bullpen Light Running Defense	Game?Lt Bullpen? /Med Running Defense
#5	Long-toss Medium Running Defense	Long-toss Light Running Defense	Long-toss Game?LtBullpen? Defense
#6	Light Bullpen Light Running Defense	Game	Game?LtBullpen? Medium Running Defense
#7	Long-toss Light Running Defense	Repeat Cycle	Repeat Cycle

Starters: Long-toss needs to be maintained even when we are in season. Remember there is a difference between sore and pain. Minor adjustments can be made depending on game schedule and need. Your mid-cycle bullpen could be a one- or two-inning appearance in a game.

Relievers: Your schedule is more flexible as you see fit. Maintain running and long-toss. If you get the feeling that you won't pitch today, mix in a bullpen during the game. Ask coach first.

Heavy running = sprints and distance (35-40 minutes)

Medium running = sprints and distance (25-30 minutes) Light = sprints only?

Suggested Pre-game Preparation for Starters

It is very important to determine how long it takes you to prepare for a game. For some pitchers they get ready too soon and end up waiting for the game to start. Whatever routine you develop it should be something that you are consistent with. Minor adjustments are okay, but just because you didn't have success in the game, that doesn't mean your pre-game was all wrong.

<u>Activity</u>	<u>Approx. Time</u>
1. Stretch	8 minutes
2. Loosen up legs – run	5 minutes
3. Strength exercises – cord	5-7 minutes
4. Loosen arm (drills and distance)	15 minutes
5. Mound work (see below)	20 minutes
6. Down Time (relax; talk to catcher)	6-8 minutes max.

Approximate Time needed to prepare: 60 minutes

During your pre-game routine you should be thinking about situations, practicing pick offs, and formulating a plan. This does not mean you can't talk to teammates and have fun; you can! However, you have a job to get done and many people are relying on you to be well prepared.

You may need to keep a watch with you the first few times until you get the timing down. This will take practice, patience, and dedication. Stick with it.

Relievers need to get ready as soon as possible. When a coach sends you to get loose and says, "I need to you right away," that means you should run. Hurry up!

Suggested Pre-game Mound Work

- 8-10 FB middle of the plate, down 60%
- 5 FB middle of the plate, down 90%
- 5 FB on arm-side corner, down 90%
- 5 FB on glove-side corner, down 90%
- 5 CH middle of the plate, down 90%
- 5 BB middle of the plate, down 90%
- Break time – catch your breath 2-3 minutes
- Work two counts (K or BB) to a hitter - could have a teammate stand in
- Work two 0-2 counts (use your out pitch, in a safe location)
- Throw a pitch out to each side of the plate
- Last pitch – dead center of the plate

Relievers – mostly fastballs, mix in a few off speed, get ready quickly

Time Your Own Pre-game Prep

Stretch	_____ minutes
Loosen up legs – run	_____ minutes
Strength exercises – cord	_____ minutes
Loosen arm (drills and distance)	_____ minutes
Mound work	_____ minutes
Down Time (relax; talk to catcher)	_____ minutes
 Total Time	_____ minutes

Make adjustments?

Stretch	_____ minutes
Loosen up legs – run	_____ minutes
Strength exercises – cord	_____ minutes
Loosen arm (drills and distance)	_____ minutes
Mound work	_____ minutes
Down Time (relax; talk to catcher)	_____ minutes
 Total Time	_____ minutes

Stretch	_____ minutes
Loosen up legs – run	_____ minutes
Strength exercises – cord	_____ minutes
Loosen arm (drills and distance)	_____ minutes
Mound work	_____ minutes
Down Time (relax; talk to catcher)	_____ minutes
 Total Time	_____ minutes

Relievers

When entering the middle of a game, you do not have time to prep like a starter. You need to get ready as the coach dictates. You will probably get on the mound right away and get loose as quickly as possible.

*You have to be able to get ready quickly. If it takes you twenty minutes to get ready as a reliever, you may have to get started earlier.

Baseball is a sport you need to be prepared for even before your first day of practice. The more a player can develop prior to the spring season, the bigger advantage he will have over his competition.