

National Federation of State
High School Associations



2014 NFHS Baseball Rules PowerPoint Presentation

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Baseball Rules Editor

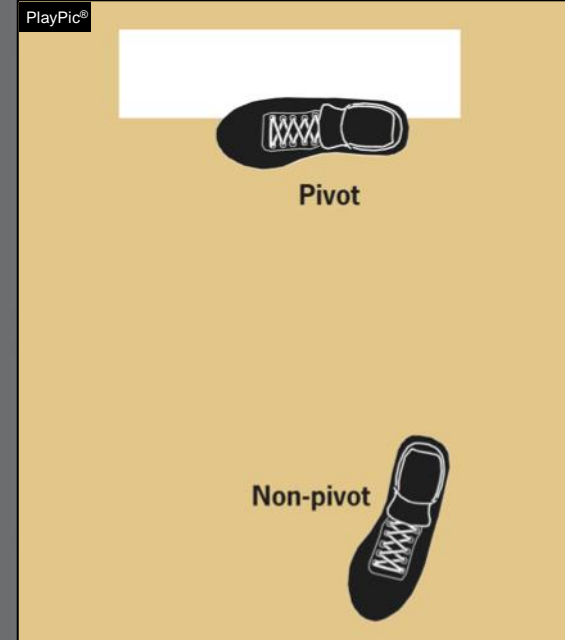
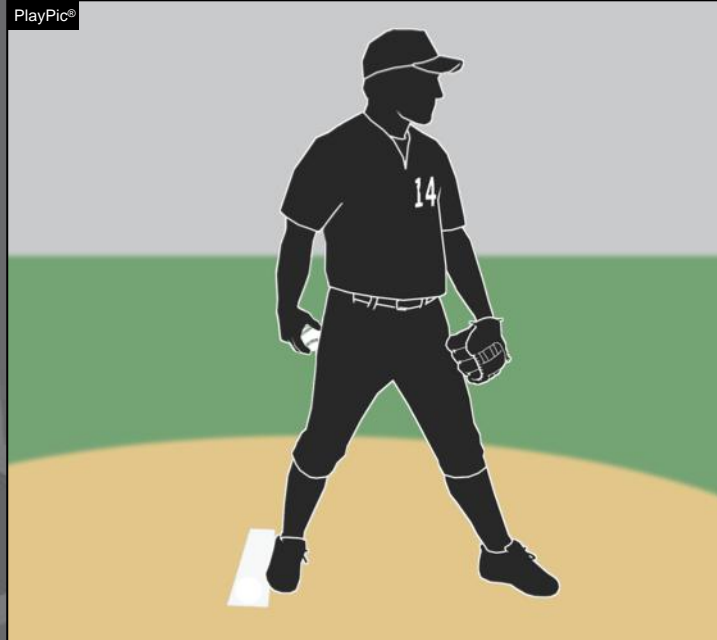


Take Part. Get Set For Life.™



Legal Pitching Positions

Rule 6-1-3



The set is one of two legal pitching positions. For the set position, a pitcher shall stand with his entire non-pivot foot in front of a line extending through the front edge of the pitcher's plate and with his entire pivot foot in contact with or directly in front of and parallel to the pitcher's plate.

RULE CHANGE

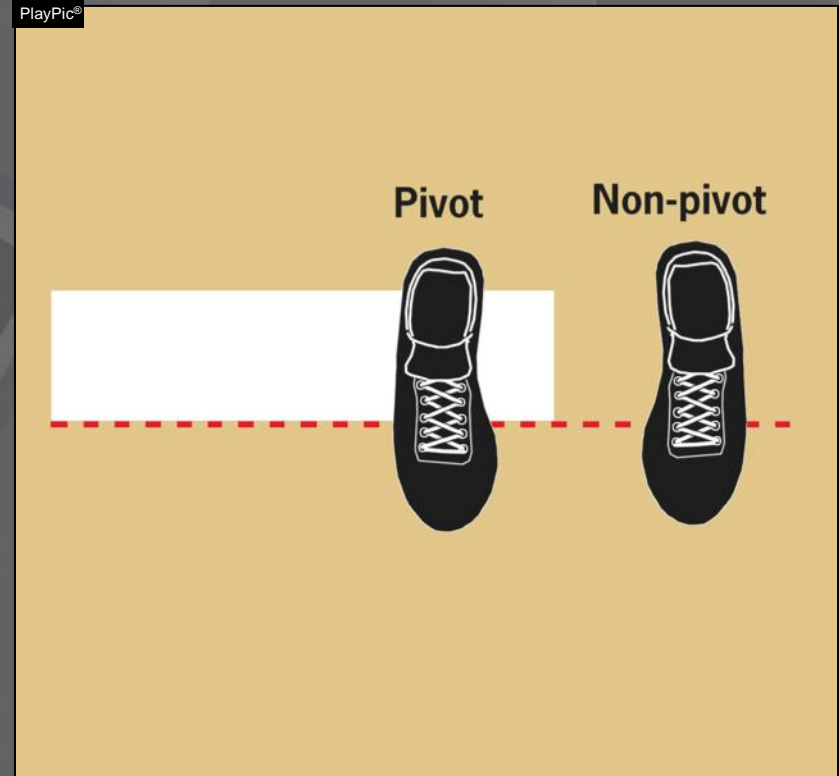
REFEREE



Legal Pitching Positions

Rule 6-1-3

RULE CHANGE



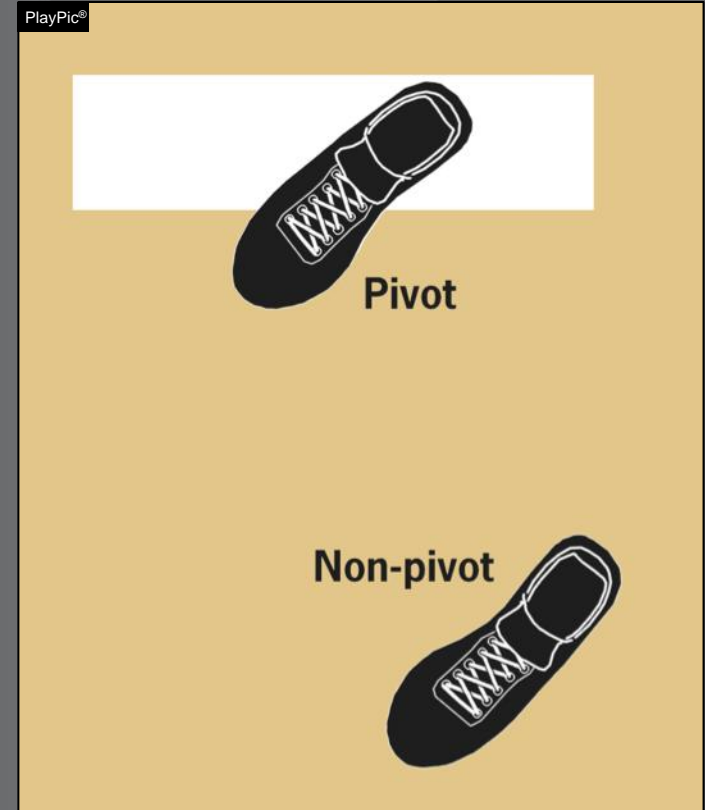
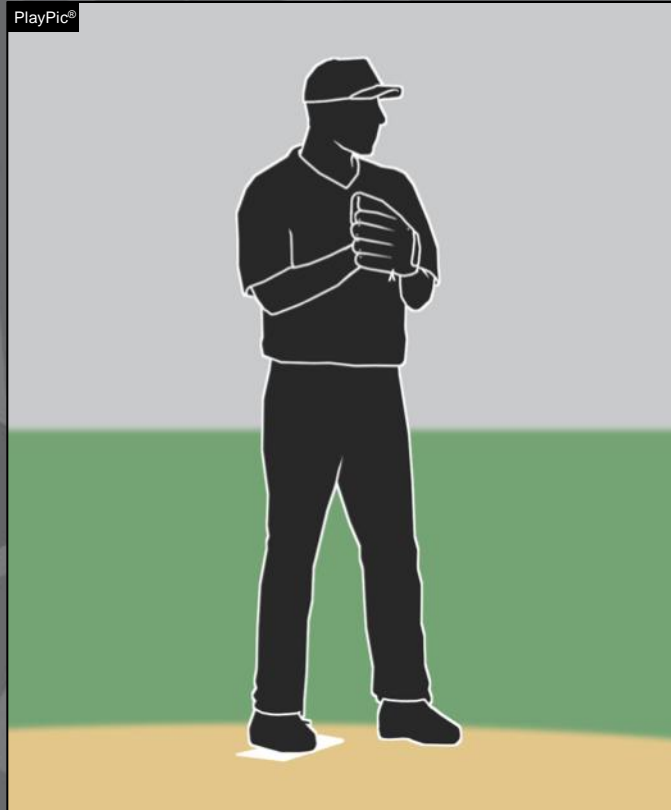
The windup is second of two legal pitching positions. For the windup, the pitcher's non-pivot foot shall be in any position on or behind a line extending through the front edge of the pitcher's plate.

REFEREE



Illegal Pitching Position Rule 6-1-3

RULE CHANGE



A number of pitchers are starting in this position and coming set. This is not a legal position because it does not meet the requirements of either the windup or set position.

REFEREE

Rule 6-1-3

- **ART. 3 . . .** For the set position the pitcher shall have the ball in either his gloved hand or pitching hand. His pitching hand down at his side or behind his back. Before starting the delivery, he shall stand with his entire non-pivot foot in front of a line extending through the front edge of the pitcher's plate and with his entire pivot foot in contact with or directly in front of and parallel to the pitcher's plate.



Rule 6-1-3 (continued)

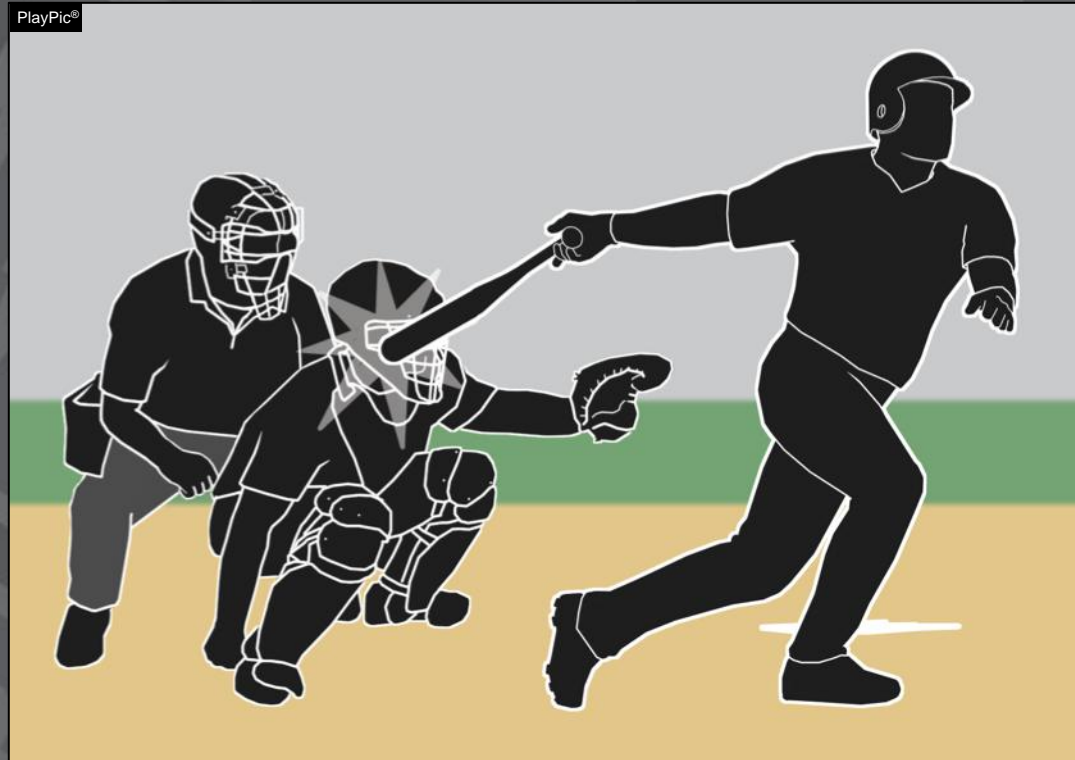
- **Rationale:** To eliminate any confusion or circumvention of the set position pitching rule by a pitcher or coach. Also, to emphasize the pivot foot requirement to be in a legal set position.





Backswing Interference Rule 7-3-5c

RULE CHANGE



The batter is responsible for his bat throughout his swing. If the batter's swing prevents the catcher from making a play, he has committed backswing interference.

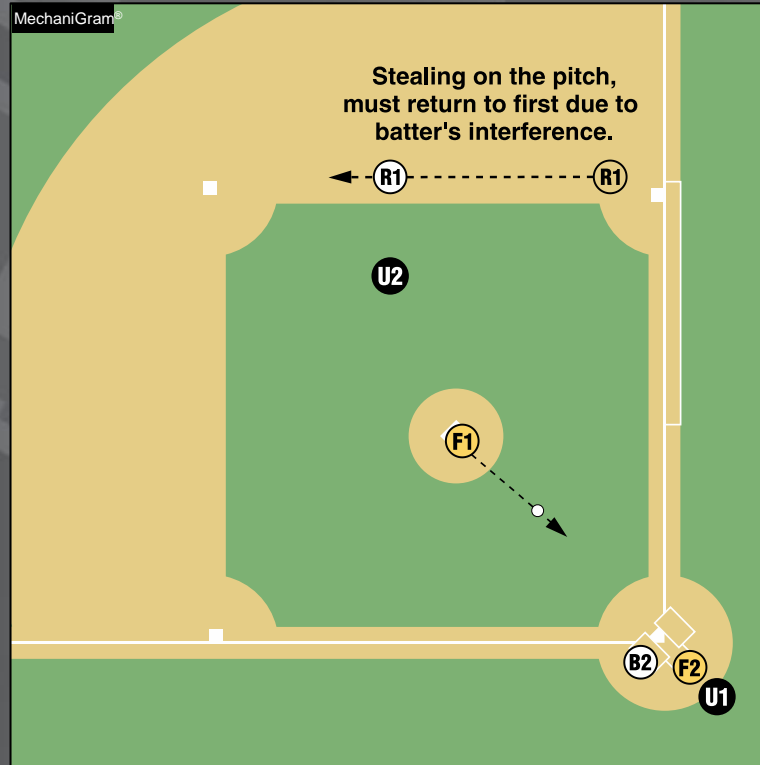
REFEREE



Backswing Interference

Rule 7-3-5c

RULE CHANGE



When the batter commits backswing interference and the attempt to retire R1 at second is unsuccessful, the batter is ruled out and R1 must return to first base.

REFEREE

Rule 7-3-5

- **ART. 5 . . .**Interfere with the catcher's fielding or throwing by:
 - leaning over home plate,
 - stepping out of the batter's box,
 - making any other movement, including backswing interference, which hinders action at home plate or the catcher's attempt to play on a runner, or
 - Failing to make a reasonable effort to vacate a congested area when there is a throw to home plate and there is time for the batter to move away.
- **Rationale:** Prior rule did not address this specific type of interference.



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Points of Emphasis



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Points of Emphasis

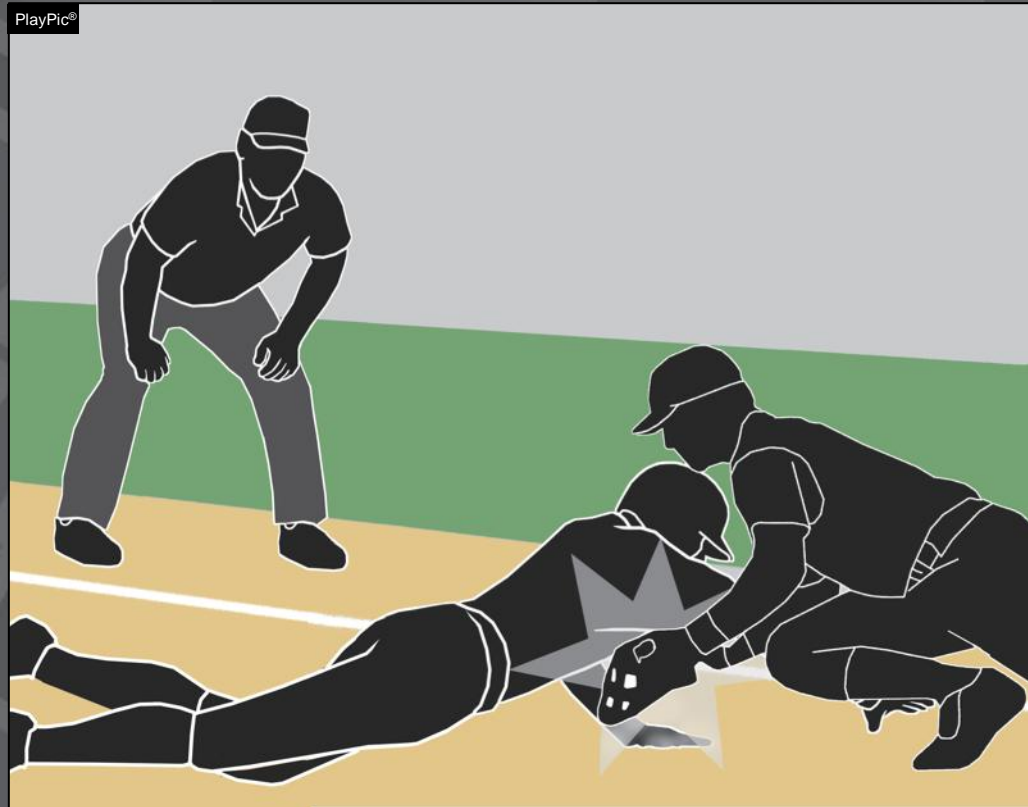
- Malicious Contact
- Coaching Attire
- Umpire Authority and Enforcement





Malicious Contact

POINT OF EMPHASIS



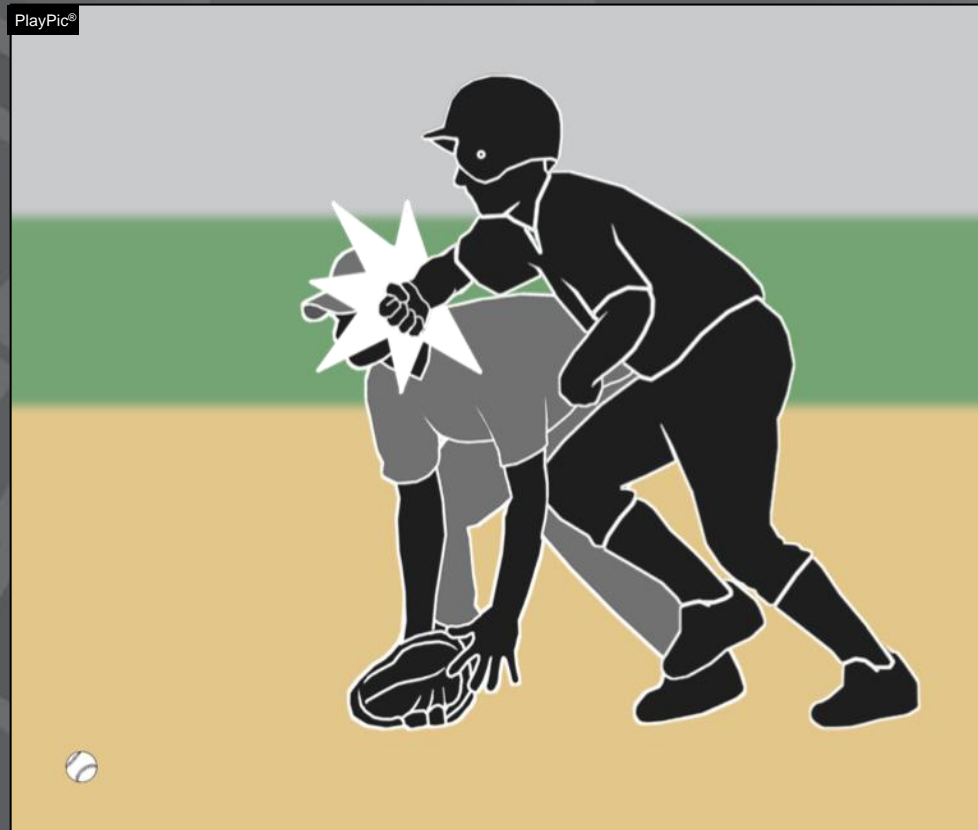
An unnecessarily hard tag is an example of defensive malicious contact. If that occurs, the ball is dead and the defensive player is ejected.

REFEREE



Malicious Contact

POINT OF EMPHASIS



Offensive players can be guilty of malicious contact. When malicious contact by an offensive player occurs, the ball is dead and the player is out and ejected.

REFEREE

Malicious Contact

- Not a new topic of discussion
- Difference between incidental and malicious contact
- NFHS Rules support in Rules 2,3,5,8, Dead Ball Table and Base Running Awards Table.
- Umpires have the flexibility to judge witnessed contact as malicious or not.
- Umpire judgment should not be removed by rule but enhanced by education, game experience and field locations/mechanics.



Malicious Contact

- The majority of collisions occur at home plate or on the bases.
- Runners should be instructed to slide or attempt to avoid contact with any defensive player.
- Malicious contact can be committed either by an offensive or defensive player (3-3-1n PEN).



Malicious Contact

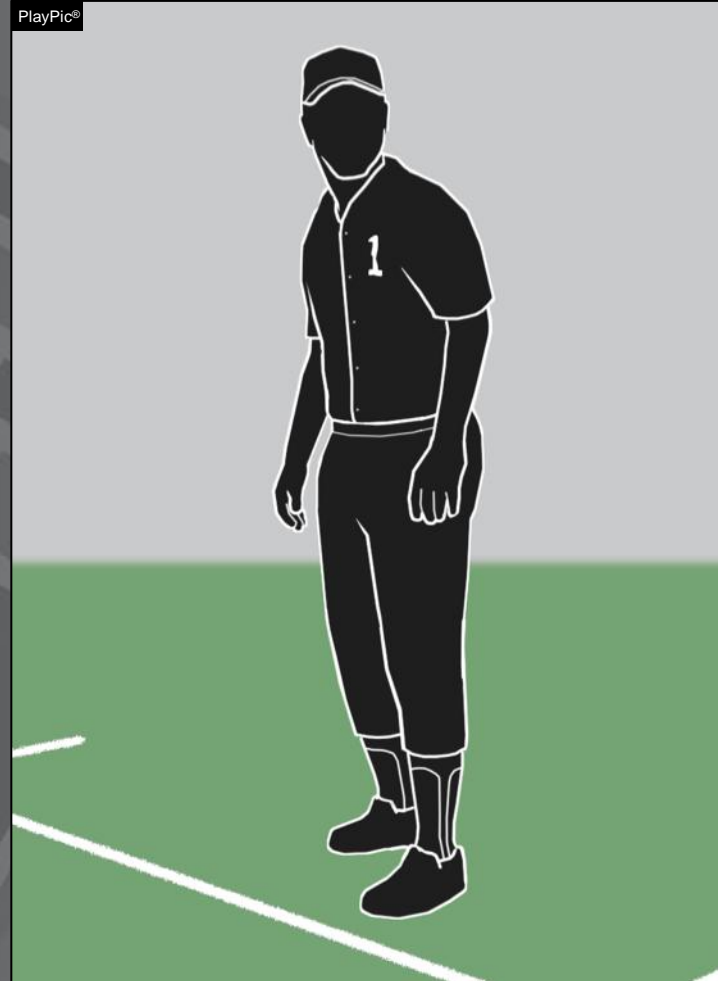
- Suggested Parameters:
 - Was the contact the result of intentional excessive force?
 - Was there intent to injure?
- The absence of these two conditions does not guarantee that malicious contact did not exist, they only provide a starting point for consideration!





POINT OF EMPHASIS

Coach's Attire



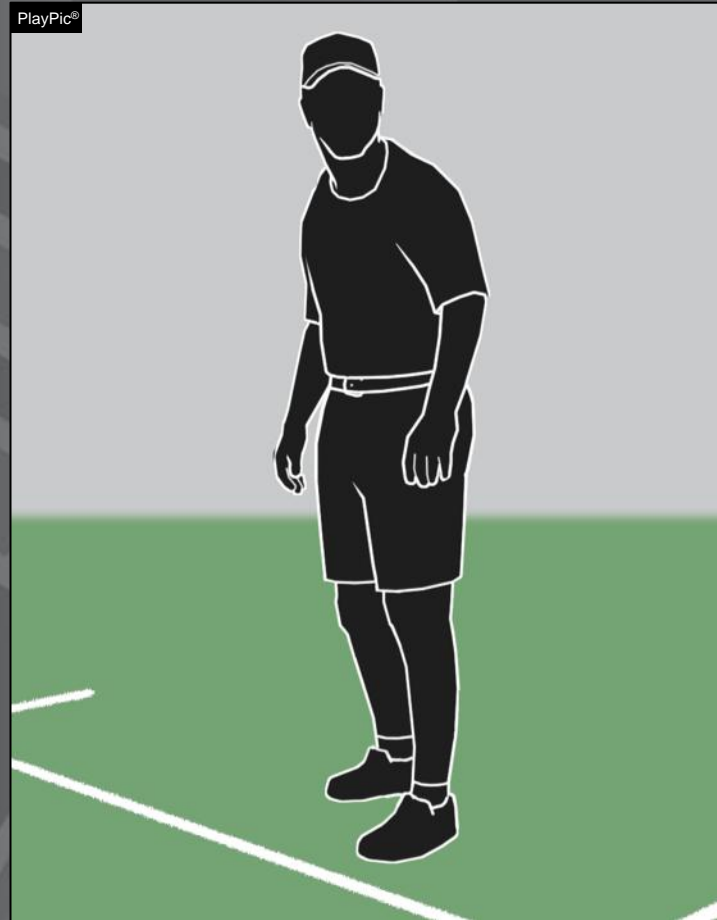
This is a traditional coach's uniform in most states.

REFEREE



POINT OF EMPHASIS

Coach's Attire



This uniform might be allowed in your state. Check with your local state association for their requirements.

REFEREE

Coaching Attire

- Coaches wearing the same uniform of the team is a longstanding tradition in the sport of baseball.
- Coach's attire supports uniformity and speaks to the notion of camaraderie of the team.
- Baseball coaches are some of the few coaches that are on the field of play and have an active role during a live ball in any sport.



Coaching Attire

- Identification of the adult coaches is the primary focus.
- It provides visual security.
- One can easily identify who does not belong because they are not dressed the same as the rest of the team.
- Umpires have to be discerning and flexible in their approach with these coach/teacher individuals.



Coaching Attire

- Today's current school model is different from the past.
- Every school and program is under tremendous pressure for program resources.
- Umpires should know their state association's requirements and procedures for coaches' uniform violations.
- Many schools have chosen not to require the coach to wear a uniform like his players and use the surplus resources to buy a uniform for an additional player.



Coaching Attire

- Some state associations permit coaches to dress similar to their players by wearing (not a complete list):
 - Team ball cap
 - Wind shirt with team colors
 - Team jersey
 - Warm up jacket with team colors
 - Grey baseball pants
 - Athletic coaching slacks





Umpire's Authority

POINT OF EMPHASIS



Coaches are permitted to question rules and their enforcements, but are not allowed to question the judgment of the umpire. The umpire is the sole authority for ruling on a game.

REFEREE



POINT OF EMPHASIS

Umpire's Authority



When an umpire comes to the mound, the defensive conference is over. The coach should respect the umpire's authority to resume the game and not linger or prolong the conference unnecessarily.

REFEREE

Umpire Authority and Enforcement

- The game official has one of the toughest roles in all sports:
 - He has to know all the rules.
 - He has to correctly apply those rules.
 - He has to know all the various case plays and variations.
 - He has to make hard decisions immediately.
 - He has to be perfect.



Umpire Authority and Enforcement

- Umpires have the unenviable responsibility and authority to make decisions based on the rules.
- The game official has to make calls, correct behavior and issue direction to students and coaches.
- At times, players, fans and coaches will not agree with the decision of an umpire and they have that right...however, they do not have the right not to accept the decision of the umpire.



Umpire Authority and Enforcement

- A coach or player cannot (not limited to):
 - Dispute an umpire's call.
 - Fail to comply with an umpire's directive.
 - Exaggerate the time allowed for conferences.
 - Challenge the umpire's authority.
 - Incite fan/spectator negative behavior.
 - Model inappropriate behavior to their team members.



Umpire Authority and Enforcement

- The positive effect of activity/athletic participation is well documented and is a determining factor for projecting success in life.
- If we allow bad behavior to become the norm, we are doing a huge disservice to the young people we serve and are systematically destroying the foundation of education-based athletics.



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Pitcher's Arm Care Suggestions



Take Part. Get Set For Life.™



POINT OF EMPHASIS

Arm Care



Coaches have an obligation to take care of their pitchers. Arm injuries continue to rise and proper care must be taken. No single win is worth unnecessary risk or injury to a player.

REFEREE



POINT OF EMPHASIS

Arm Care



When a pitcher indicates he is injured, the coach should remove him from the game immediately. His replacement gets as many throws as reasonable to warm up.

REFEREE



POINT OF EMPHASIS

Arm Care



Taking care of a pitcher's arm following a game is one thing that can be done to help prevent injuries. However, no training or treatment program will prevent all injuries.

REFEREE

Arm Care Suggestions

- Arm injuries are on the rise in high school age players.
- Most of the arm injuries are at the pitcher position.
- 45% of pitchers under the age of 12 experience chronic elbow pain.
- Ulnar collateral ligament reconstruction (Tommy John) surgeries have increased over 700% in the last decade for adolescent pitchers.



Arm Care Suggestions

4 Main Areas of Concern

- Posterior Shoulder
- Medial Elbow
- Anterior Shoulder
- Lateral Elbow



Arm Care Suggestions

Reasons

- Overuse, undertrained, inadequate rest, insufficient recovery and repair time
- Poor throwing/pitching delivery
- Incomplete warm-up and cool down activity
- Anatomical limitations or restrictions
- Too many games and not enough practices
- Poor physical conditioning
- Parental and coaching ignorance or worse...
indifference



Arm Care Suggestions

Red Flags

- Decrease in velocity
- Lack of command, breaking ball loses snap
- Reluctant to throw off-speed pitches
- Pitching delivery changes
- Facial grimaces, frustration, rubbing or shaking arm
- Normal routine altered, less or more time spent to get ready to pitch
- Pain, sensitivity, burning sensation or swelling
- Loss of range of motion and/or grip strength



Arm Care Suggestions

Corrective Actions

- Proper technical, mental, nutritional and physical training before, during and after pitching with appropriate rest, recovery and repair time
- Proper practices, workload management for pitches, pitchers and entire staff
- Develop other pitchers to share the pitching load
- Observe and understand pitchers' tendencies, make pain assessments, review past performances, preparation and routine



Arm Care Suggestions

Corrective Actions

- No overhead throwing of any kind for at least 2-3 months per year (4 months preferable).
- No competitive baseball pitching for at least 4 months per year.
- Do not pitch more than 100 innings in games in any calendar year.
- Avoid pitching on multiple teams with overlapping seasons.
- A pitcher should not also be team's catcher due to overuse concerns.



Arm Care Suggestions PDF References

The American Journal of Sports
Medicine
<http://ajs.sagepub.com/>

Risk Factors for Shoulder and Elbow Injuries in Adolescent Baseball Pitchers

Samuel J. Olsen II, MD, Glenn S. Fleisig,* PhD, Shouchen Dun, MS, Jeremy Loftice, and James R. Andrews, MD
From the American Sports Medicine Institute, Birmingham, Alabama

Background: There is little evidence supporting current safety recommendations for adolescent pitchers.

Hypothesis: Pitching practices of adolescent pitchers without history of arm injury will be significantly different from those of adolescent pitchers who required shoulder or elbow surgery.

Study Design: Case control study; Level of evidence, 3.

Methods: Ninety-five adolescent pitchers who had shoulder or elbow surgery and 45 adolescent pitchers who never had a significant pitching-related injury completed a survey. Responses were compared between the 2 groups using t tests and χ^2 analyses. Multivariable logistic regression models were developed to identify the risk factors.

Results: The injured group pitched significantly more months per year, games per year, innings per game, pitches per game, pitches per year, and warm-up pitches before a game. These pitchers were more frequently starting pitchers, pitched in more showcases, pitched with higher velocity, and pitched more often with arm pain and fatigue. They also used anti-inflammatory drugs and ice more frequently to prevent an injury. Although the groups were age matched, the injured group was taller and heavier. There were no significant differences regarding private pitching instruction, coach's chief concern, pitcher's self-rating, exercise programs, stretching practices, relieving frequency, pitch type frequency, or age at which pitch types were first thrown.

Conclusion: Pitching practices were significantly different between the groups. The factors with the strongest associations with injury were overuse and fatigue. High pitch velocity and participation in showcases were also associated with increased risk for injury.

Clinical Relevance: New recommendations were made based on these results. Adherence to the recommendations may reduce the incidence of significant injury to adolescent pitchers.

Keywords: pitch count; curvball; velocity; showcase; surgery; prevention

Baseball pitchers are at increased risk for shoulder and elbow injuries. Over the past several years at our institution, we have noted a sharp increase in the number of high school and collegiate pitchers requiring surgery for a pitching-related injury. When comparing the time period of 1994-1999 to 2000-2004, there was a 4-fold increase in the number of elbow surgeries performed on collegiate baseball pitchers by our senior surgeon (J.R.A.) and a 6-fold increase for high school pitchers.¹ Because of this observation, attempts have been made to identify risk factors for these injuries.

Lynn et al² followed 298 youth baseball pitchers (9-12 years old) during 2 consecutive spring seasons. They found that the incidence of elbow pain increased with increased

age, increased weight, decreased height, lifting weights, playing outside the league, decreased satisfaction with one's pitching, pitching with arm fatigue, and number of pitches thrown per season.³ They also identified risk factors for shoulder pain, which included decreased satisfaction with one's pitching, pitching with arm fatigue, number of pitches thrown per game, and number of pitches thrown per season.⁴ The subsequent study by the same authors made several similar conclusions. In addition, they recommended that pitchers between ages 9 and 14 years should not throw breaking pitches because of an increased incidence of shoulder and elbow pain.⁵ However, long-term follow-up of these subjects has not yet been reported. Therefore, it is unknown whether their pain was an early indicator for significant injury.

On the basis of these studies, the USA Baseball Medical and Safety Advisory Committee made several recommendations to help young pitchers avoid injury.⁶ Included was a statement that adults should pay attention and react appropriately to arm pain in these athletes. Pitch mental should be monitored closely. Pitchers should avoid throwing

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[Athletic Training]



Baseball Pitching Biomechanics in Relation to Injury Risk and Performance

Dave Fortenbaugh, MS, Glenn S. Fleisig, PhD,* and James R. Andrews, MD

Context: Baseball pitching kinematics, kinetics, ball velocity, and injuries at the shoulder and elbow are related.

Evidence Acquisition: PubMed and Sport Discus were searched for original studies published between 1994 and 2008. Relevant references in these studies were retrieved. Inferential studies that tested relationships between kinematics and kinetics were included, as were studies that tested relationships between kinematics and ball velocity. Descriptive studies that simply quantified kinematics and/or kinetics were excluded.

Results: Several kinematic parameters at the instant of foot contact were associated with increased upper extremity kinetics: knee flexion position, trunk flexion, shoulder abduction, and shoulder horizontal adduction. The timing of shoulder external rotation, pelvic rotation, and upper trunk rotation was associated with increased kinetics and decreased ball velocity. Low breaking forces of the lead leg and a short stride were associated with decreased ball velocity. Decreased maximum shoulder external rotation, shoulder abduction, knee extension, and trunk tilt were also associated with decreased ball velocity. As pitchers develop, kinematic values remain similar, their variability reduces, and kinetic values gradually increase. Slight kinematic variations were seen among pitch types, although the kinetics of fastball and curvball were relatively the same; changeup kinetics were the lowest. As pitchers fatigued, kinetic values remained constant, but increases in arm pain were reported.

Conclusions: Several kinematic parameters were related to joint kinetics and ball velocity. To enhance performance and reduce injury risk, pitchers need to learn proper baseball mechanics at an early age. A changeup is recommended as a safe secondary pitch to complement the fastball; the curvball can be added after fastball and changeup mechanics are mastered. Avoiding overuse and pitching while fatigued is necessary to minimize the risk of arm injury.

Keywords: shoulder; elbow; ball velocity; kinetics; mechanics

A s with most other athletic movements, the biomechanics of baseball pitching is studied to improve performance and prevent or/and rehabilitate injury. As technology in the sports science field has developed over the past 20 years, the interest has developed in using these advancements to the benefit of athletes. The initial studies provided accurate descriptions of the pitching kinematics and kinetics¹⁻¹⁰ which helped athletes, coaches, medical professionals, and scientists understand the demands of pitching. Subsequent research has assessed factors that comprise to performance enhancement and/or injury. The purpose of this review is to analyze all the available scientific research on baseball pitching biomechanics related to performance and injury. This information is grouped into 5 major kinematics and its relationship to velocity, the association among kinematics, kinetics, and injury, the effects of

fatigue, the development of a pitcher from youth to adult, and the effect of pitch types on mechanics. Over the years, research has been collected from different institutions with assorted methodologies, thereby making it difficult to compare numbers directly. Despite variance in numbers, the commonalities among pathomechanical patterns are most interesting.

KINEMATICS AND VELOCITY

If you ask baseball coaches what elements make a pitcher effective, their responses will be "velocity" and "accuracy." Pitching coaches and biomechanists have studied the motion of elite pitchers to discern how they consistently throw fast pitches in the strike zone. Limited scientific research exists on the biomechanical factors that affect accuracy, but it is known about

From the American Sports Medicine Institute, Birmingham, Alabama.

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Risk of Serious Injury for Young Baseball Pitchers - A 10-Year Prospective Study
Glenn S. Fleisig, James R. Andrews, Gary R. Cutter, Adam Weber, Jeremy Loftice, Chris McMichael, Nina Hassell and Stephen Lyman
Am J Sports Med 2011 39: 253 originally published online November 23, 2010
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Arm Care Suggestions

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- The references for these suggestions are from:
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- Paul Niggebrugge – [www.Be Your Best Academy.com](http://www.BeYourBestAcademy.com)
- American Sports Medicine Institute – www.asmi.org
 - (<http://www.asmi.org/research.php?page=research§ion=positionStatement>)



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commitment to high school baseball.
Have a great season!**



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