National Federation of State
High School Associations

2015 NFHS Baseball Rule Changes

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Director of Sports, Sanctioning and Student Services

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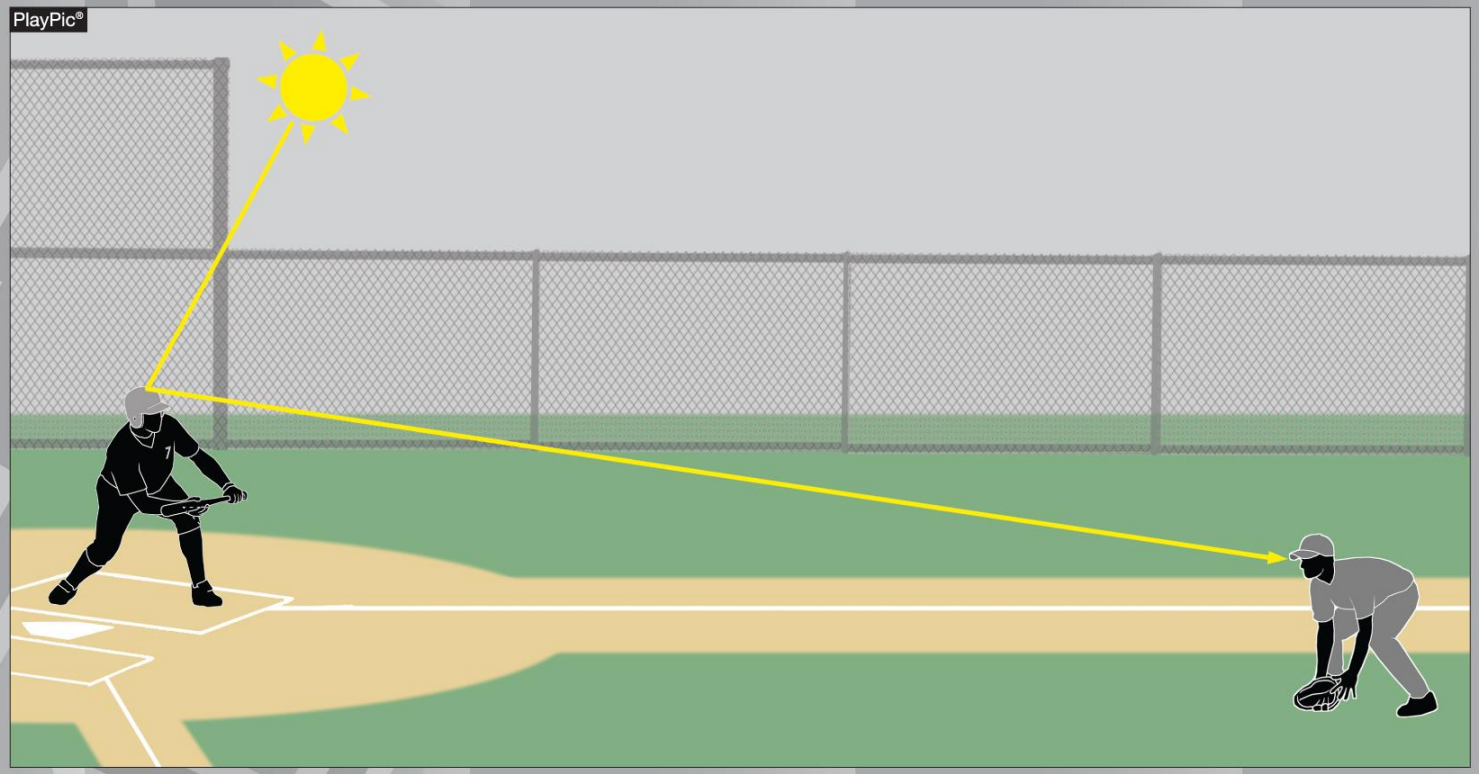
Legal Batting Helmets
Rule 1-5-1

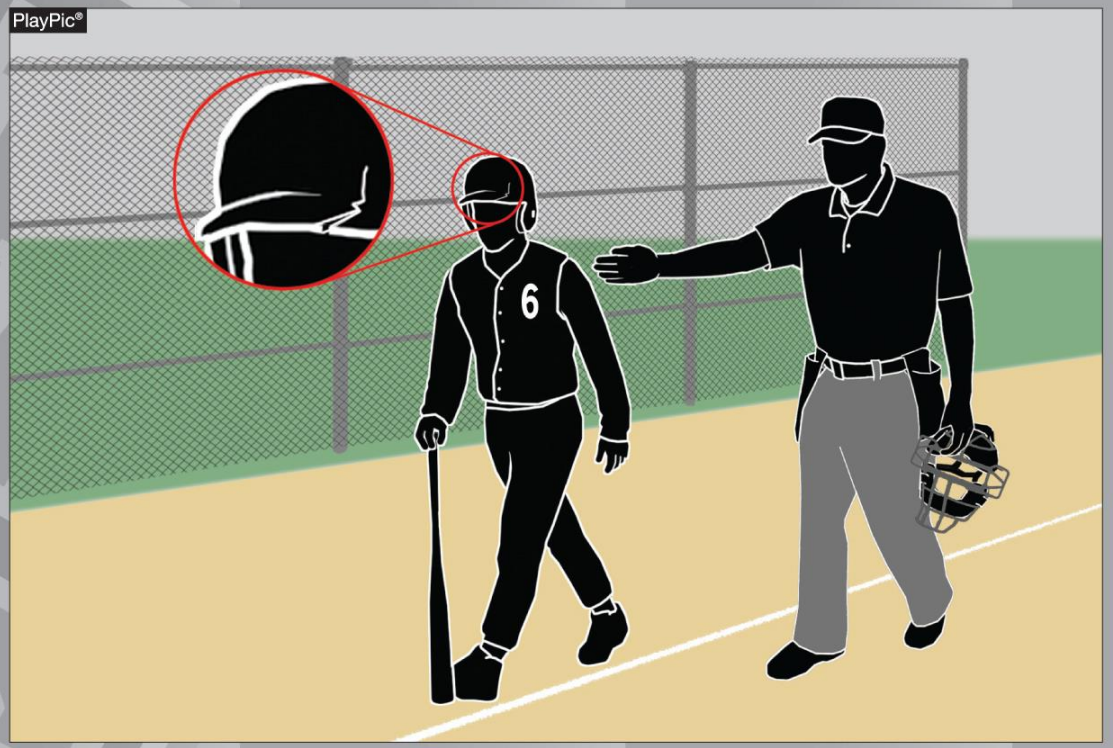
RULE CHANGE



Batting helmets shall have a non-glare, not mirror - like surface and shall meet the NOCSAE standard at the time of manufacture.

REFEREE

Defective Batting Helmet
Rule 1-5-1, 4-1-3b



Even though this helmet met the NOCSAE standard at the time of manufacture, the crack makes the helmet illegal. The batter must replace the helmet immediately.

RULE CHANGE

REFEREE

Rule 1-5-1

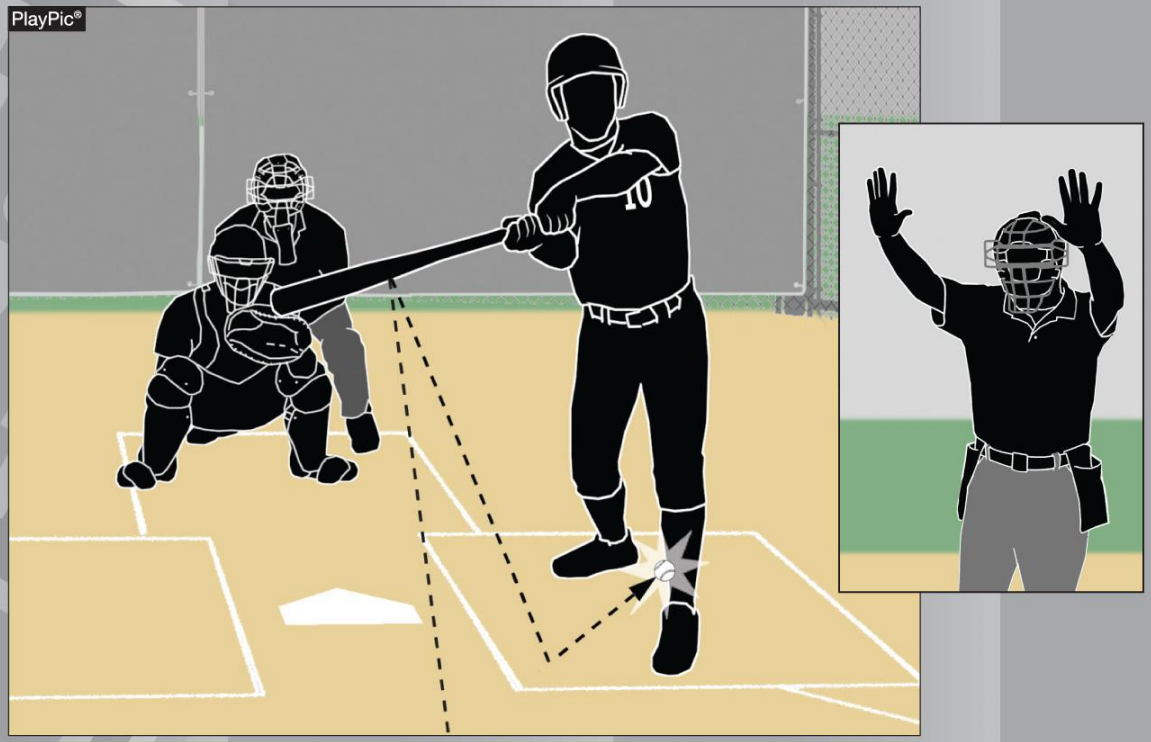
- **ART.1 . . .** It is mandatory for on-deck batters, batters, runners, retired runners, players/students in the coaches boxes as well as non-adult bat/ball shaggers to wear a batting helmet that has a non-glare (not mirror-like) surface and meets the NOCSAE standard at the time of manufacture.

Rule 1-5-1 (continued)

- **Rationale:** Batting helmets are a key component for minimizing risk in high school baseball. It is critical that the surface of the helmet does not pose any risk for those who are wearing the helmet and for their opponents.

  It is equally important that the batting helmet not only meet the prescribed NOCSAE standard at the time of manufacture, but that they are monitored regularly for excessive use and kept in good functioning order.

Foul Ball
Rule 2-16-1f

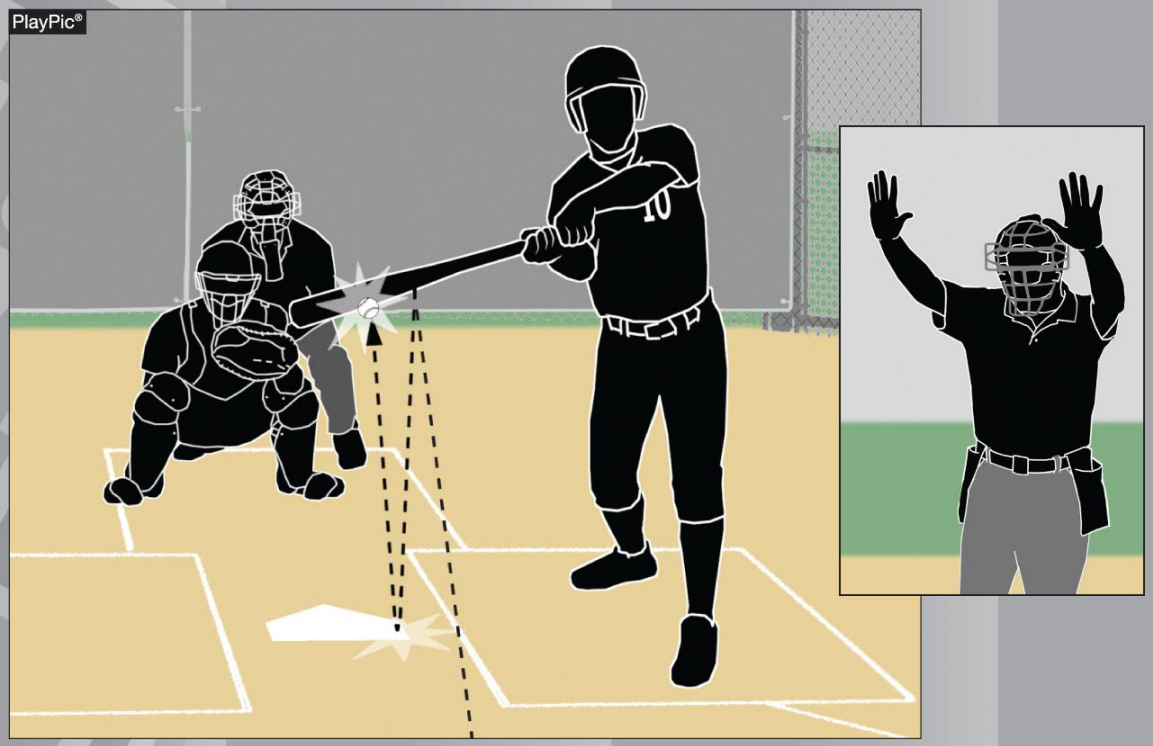


A batted ball that rebounds and hits the batter while he is still legally in the batter's box shall be called a foul ball.

RULE CHANGE

REFEREE

Foul Ball
Rule 2-16-1f

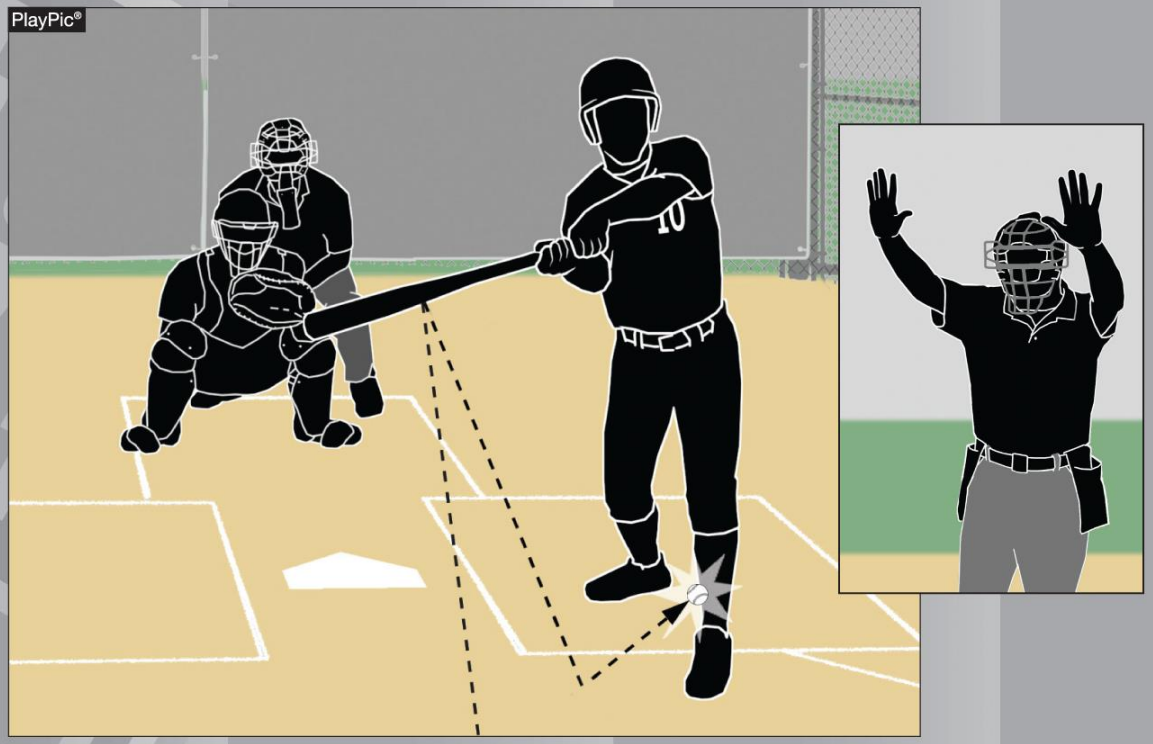


A batted ball that rebounds and hits the bat while the batter is still holding it while in the batter's box shall be called a foul ball.

RULE CHANGE

REFEREE

Foul Ball
Rule 2-16-1f



Even though this batter has one foot completely outside the batter's box, he has one foot still in. Therefore, when the batted ball rebounds and hits him, it shall be called a foul ball.

RULE CHANGE

REFEREE

Rule 2-16-1f and 1g

- **ART. 1 . . .** A foul is a batted ball:

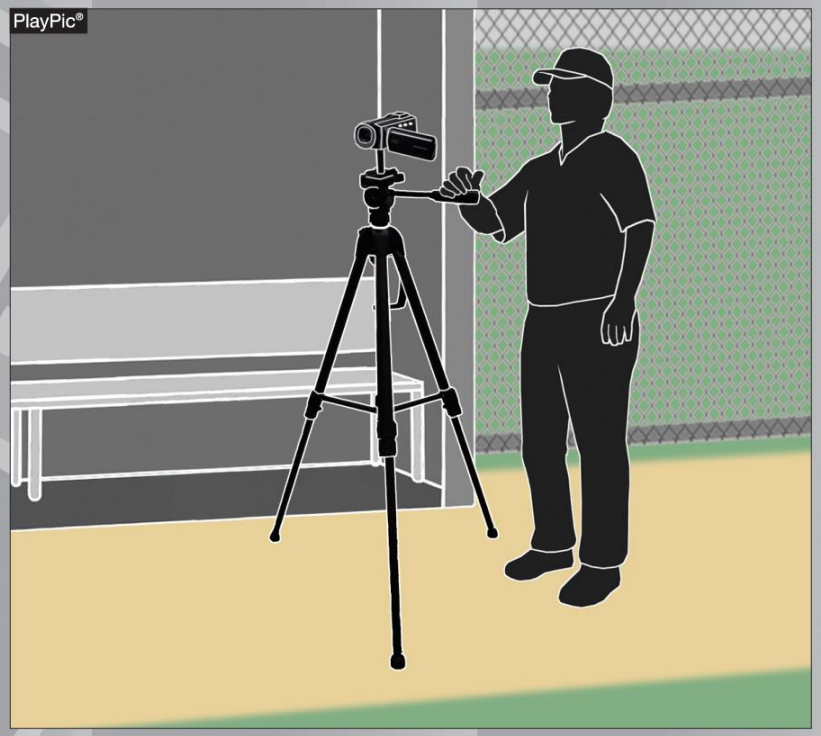
  Sub-articles a-e unchanged.

f. that hits the batter in the batter's box; or

g. that hits the ground or home plate and then his the batter or the bat which is held by the batter, while he is in the batter's box.

- **Rationale:** Foul balls are often topics that yield a tremendous amount of discussions. Given the opportunity to identify additional foul ball scenarios, it provides more education that is helpful to coaches and umpires.

Video Permitted
Rule 3-3-1



The rule that prohibited using video for coaching purposes during a game has been removed. Therefore, it is legal for a coach or player to use a camera, tablet or phone to record video during a game from the dugout.

RULE CHANGE

REFEREE

Video Equipment in Coaching Box
Rule 3-3-1h

Although it is now legal to use video for coaching purposes during a game, a coach is not permitted to record while in the coaching box. A coach may only have a stopwatch, rule book (hard copy) and scorebook while coaching in the box.

RULE CHANGE

REFEREE

Video Equipment
Rule 3-3-1

Not only may teams record video during the game, but they may also watch it for coaching purposes.

RULE CHANGE

REFEREE

Video Equipment
Rule 3-3-1, 10-1-5

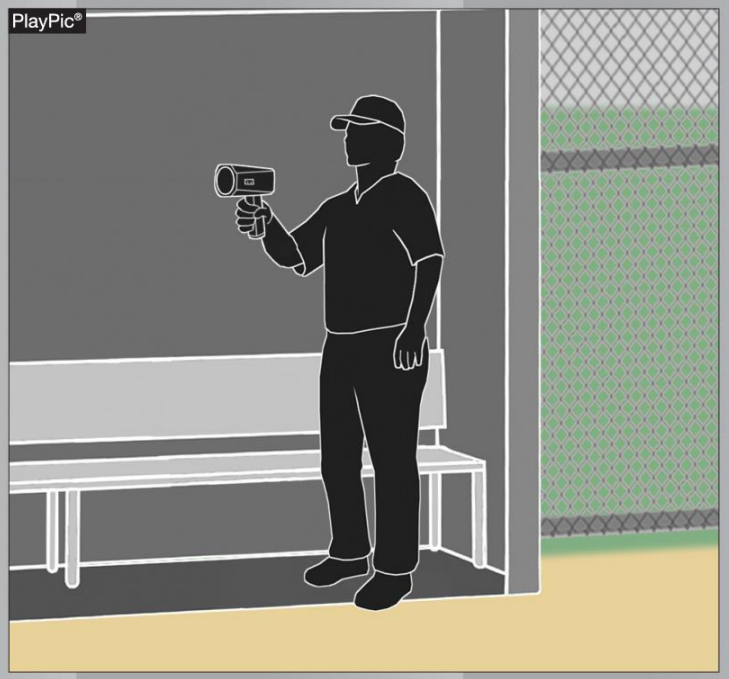
RULE CHANGE

A coach is not permitted to show a play to umpires, as umpires are not allowed to use video equipment during a game. If a coach persists, he can be warned, restricted to the dugout or ejected.

REFEREE

Radar Guns
Rule 3-3-1

RULE CHANGE



The use of radar guns is permitted.

REFEREE

Rule 3-3-1f

- **ART. 1. . .** Sub-articles a-e are unchanged.

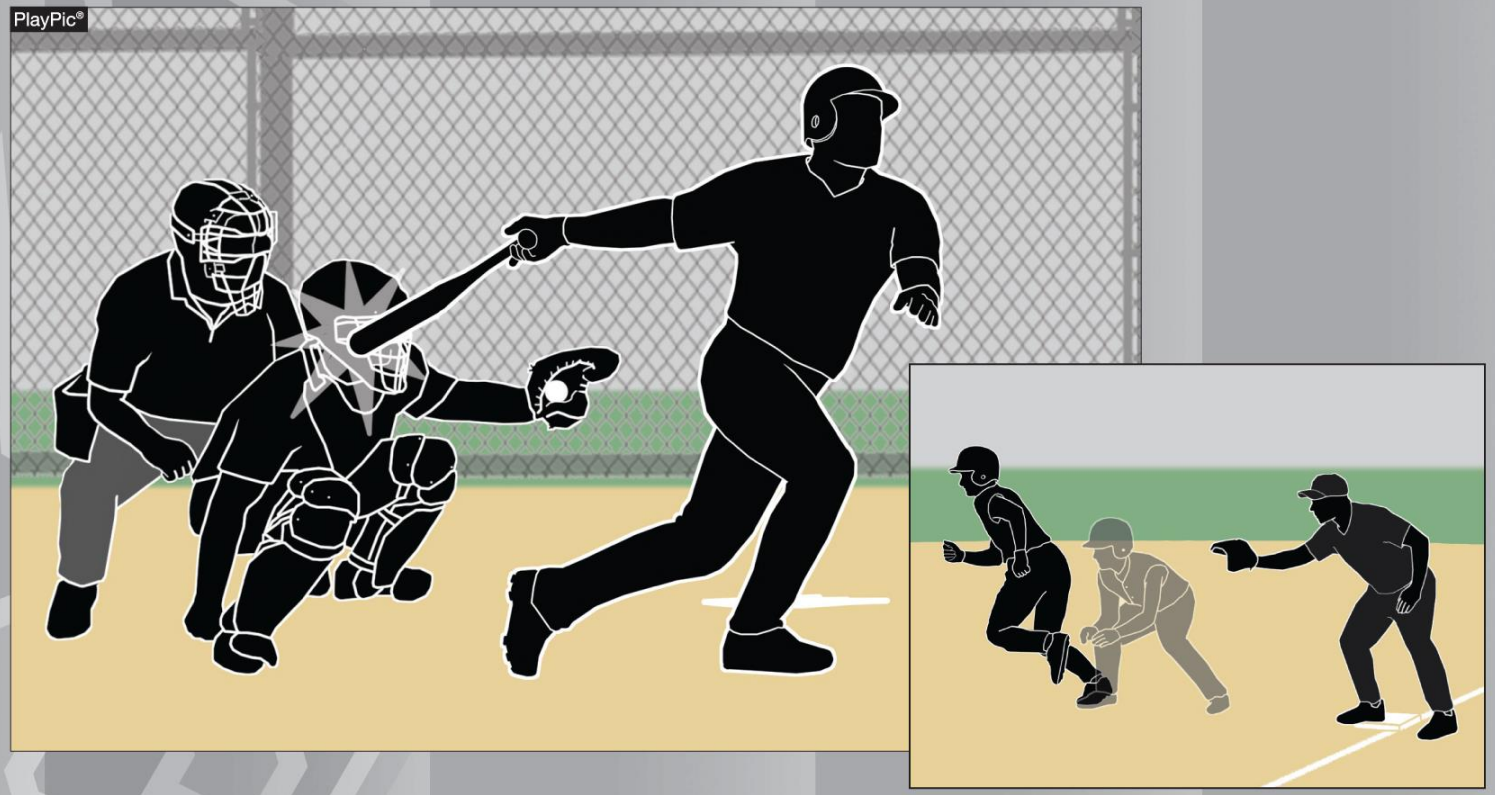
f. ~~Use of television monitoring or replay equipment for coaching purposes during the course of the game;~~

The rest of the sub-articles will be renumbered.

- **Rationale:** The game of baseball has developed and technology is more affordable and available. Videotaping a game or players' performances adds to the evolution of the game and enhances the educational ability for a coach to provide real-time instruction.

Follow-through Interference
Rule 2-21-4

RULE CHANGE

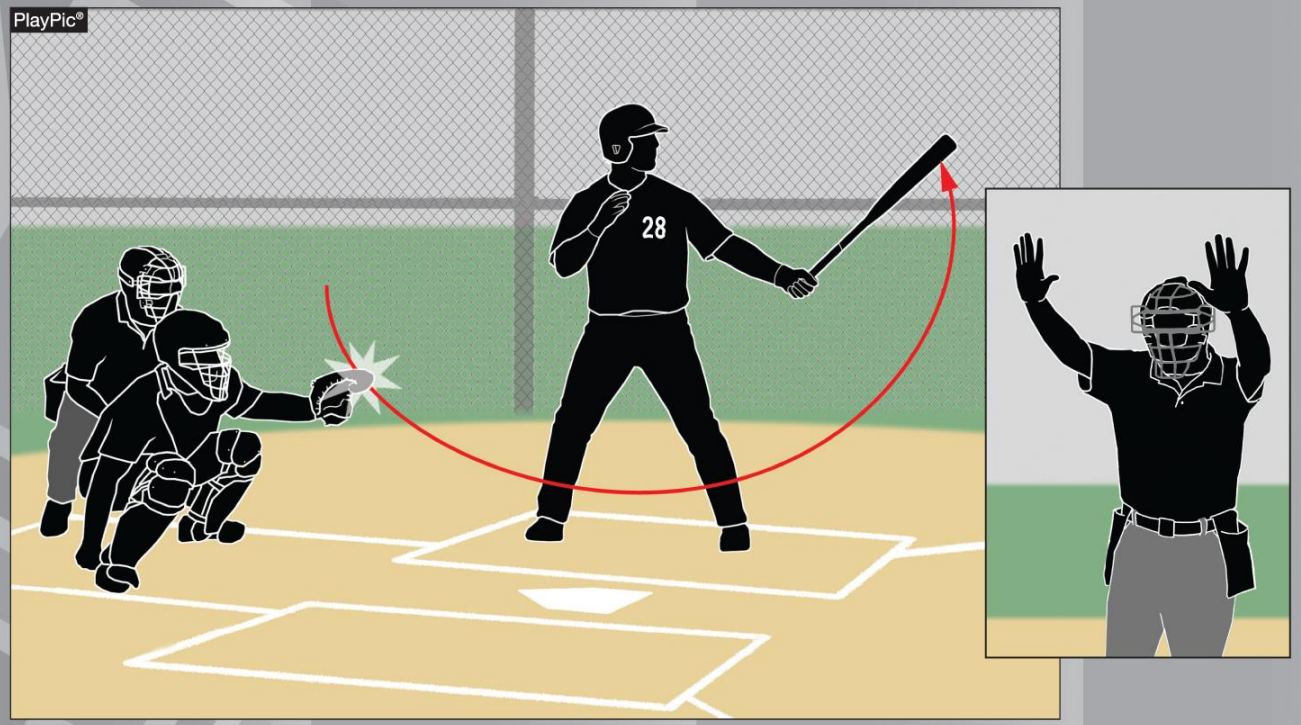


On his natural follow-through, the batter has made contact with the catcher. The ball is delayed-dead on follow-through interference and if F2 isn't able to throw out the runner attempting to steal, the runner must be returned to first base and the batter is out.

REFEREE

Backswing Interference
Rule 2-21-5

RULE CHANGE



Before the time of the pitch, if the batter's practice swing makes contact with the catcher or his equipment, the umpire shall call an immediate dead ball. There is no penalty.

REFEREE

Rule 2-21-4 and 5

- **ART. 4 . . .** Follow-through interference is when the bat hits the catcher after the batter has swung at a pitch and hinders action at home plate or the catcher's attempt to play on a runner.
- **ART. 5 . . .** Backswing interference is when a batter contacts the catcher or his equipment prior to the time of the pitch.

Rule 2-21-4 and 5 (continued)

- **Rationale:** Identifying the various types of offensive interference is pivotal when discussing the role of the batter in that manner. Follow-through and backswing interference are two separate and distinct acts and the penalties reflect their differences.

Rule 7-3-5c

- c. making any other movement, including follow-through interference, which hinders actions at home plate or the catcher's attempt to play on a runner or…

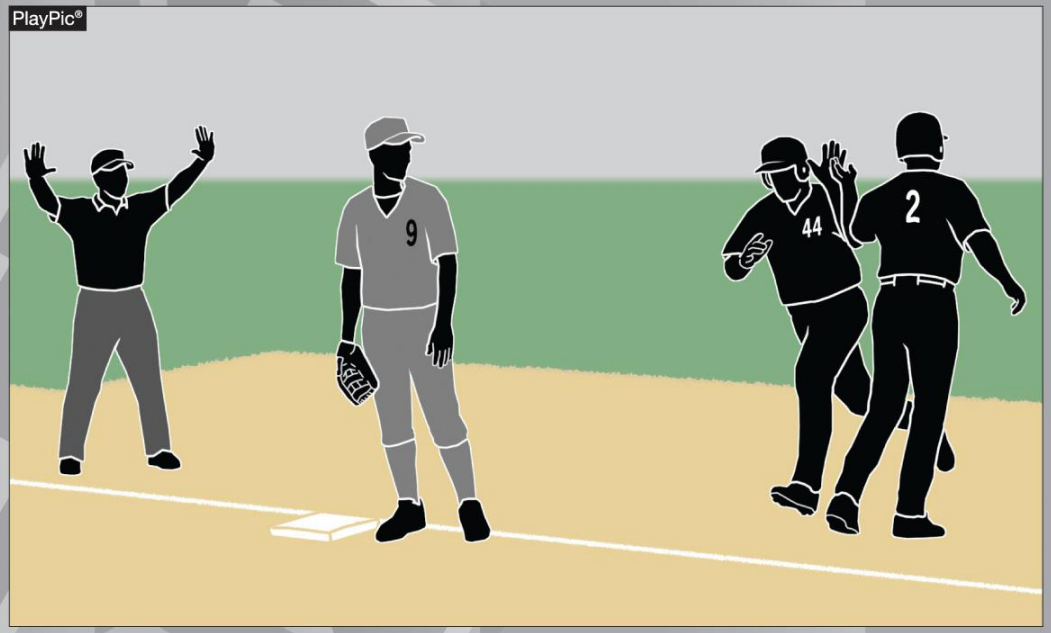
- **Rationale:** After reviewing this rule change from last year, it became evident that the term "backswing" did not accurately capture the infraction, the term "follow-through" was more descriptive.

Rule 7-3-7 and Corresponding Penalty

- **ART. 7 . . .** Commit backswing interference.
- **PENALTY: The ball is immediately dead.**
- **Rationale:** Clarification.

Optional Speed-Up Rules
Courtesy Runner

RULE CHANGE



First at bat in the first inning

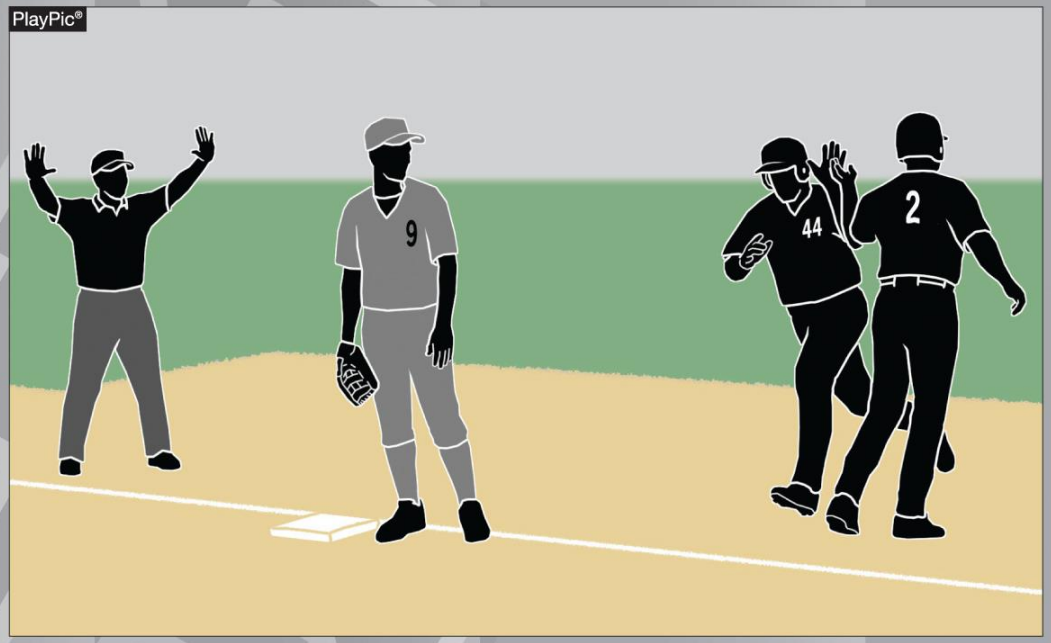
Second at bat in the first inning

No. 44 is the courtesy runner for the catcher, No. 2. If his team bats around in an inning, No. 2 has not been substituted for and may bat when it is his turn.

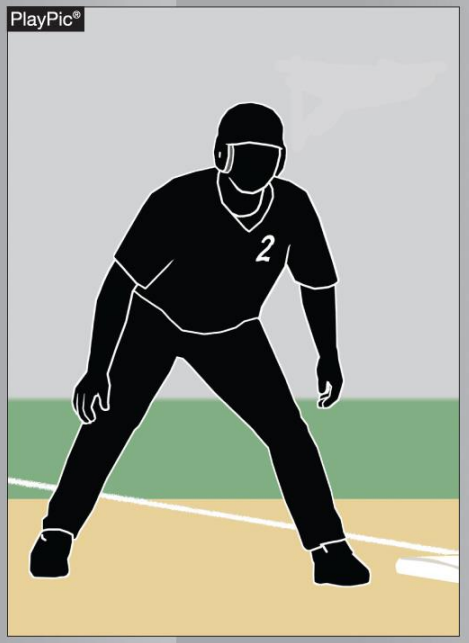
REFEREE

Optional Speed-Up Rules
Courtesy Runner

RULE CHANGE



First at bat in the first inning



Second at bat in the first inning

If the offense bats around and No. 2 reaches base a second time in the inning, he may run for himself and is not required to be replaced by a courtesy runner.

REFEREE

Courtesy Runner

- 1. At any time, the team at bat may use courtesy runners for the pitcher and/or the catcher. In the event that the offensive team bats around, the pitcher and/or catcher who had a courtesy runner inserted on their behalf may bat in their normal position in the batting order.

- **Rationale:** Clarification when a particular scenario occurs and how that affects the role of courtesy runner for the pitcher and catcher.

National Federation of State
High School Associations

Points of Emphasis

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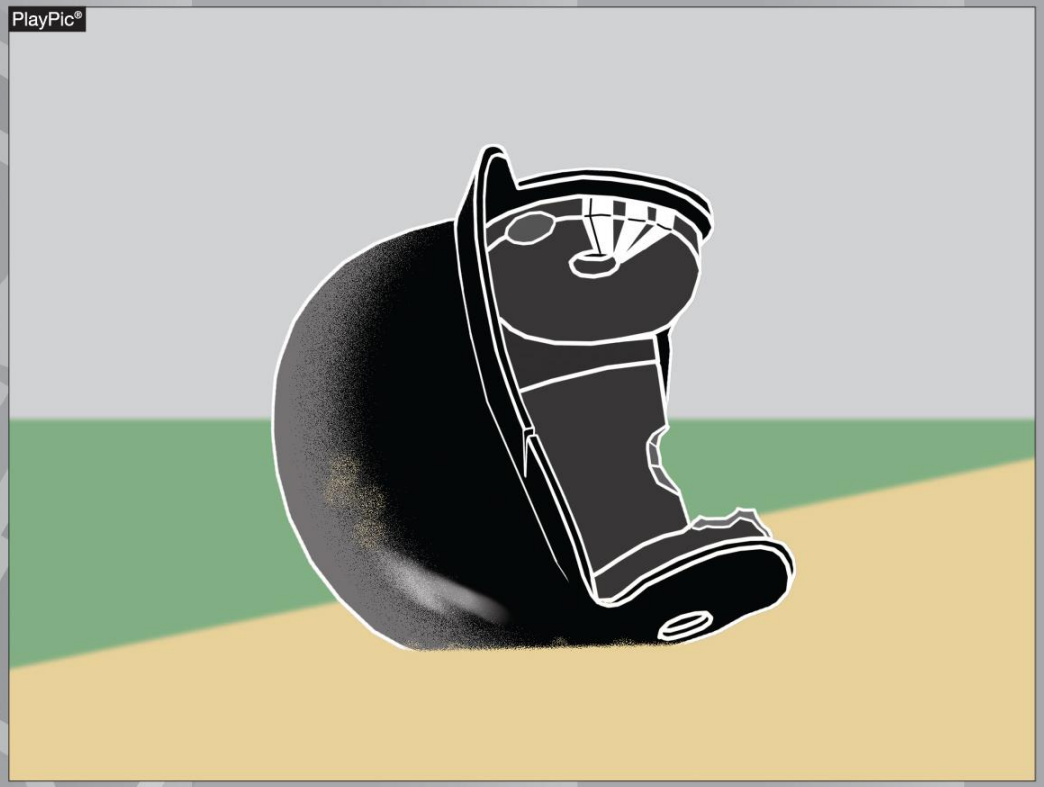
Helmet Care

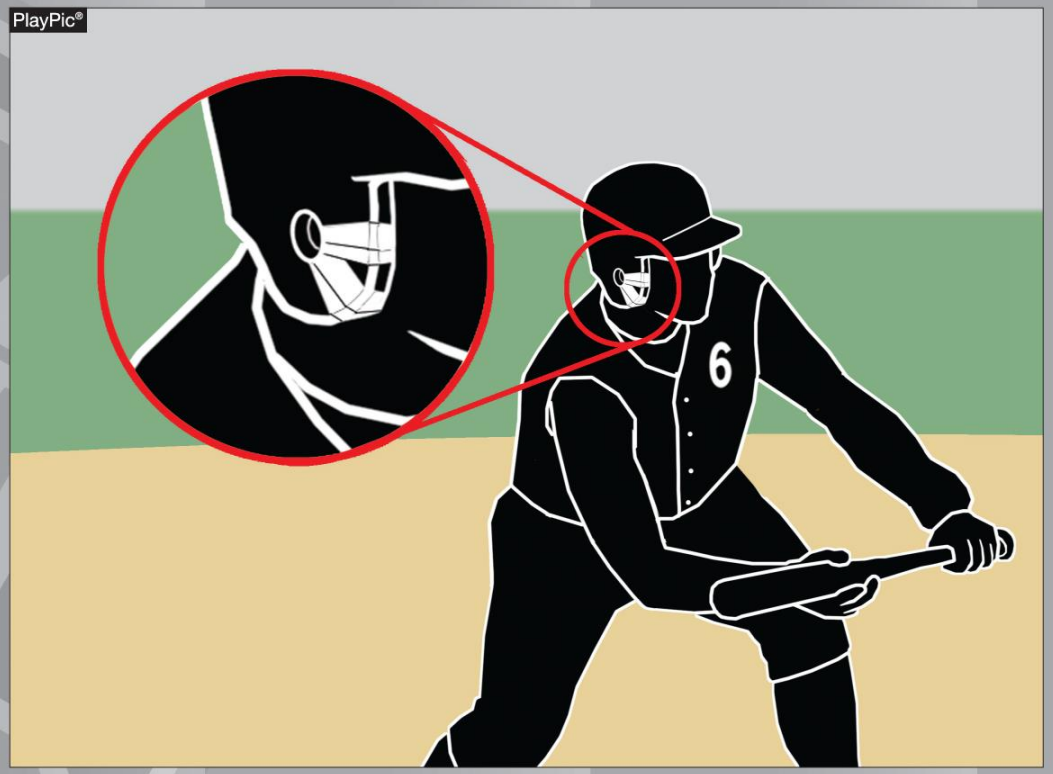


Coaches need to ensure helmets (and all equipment) are in suitable condition for use, particularly when reviewing equipment prior to the start of a season. While this helmet met NOCSAE standards at the time of manufacture, it is no longer suitable for use.

POINT OF EMPHASIS

REFEREE

Helmet Care



Tape is not permitted on a batting helmet, since it could be covering up a crack or defect. Also, it could compromise the ability of the helmet to protect a player.

POINT OF EMPHASIS

REFEREE

Helmet Maintenance and Usage

- Reviewing the number of players (and some coaches) who are wearing batting helmets, it becomes clear that a lot of individuals are invested in protecting their head and brain by wearing a batting helmet that meets the NOCSAE performance standard.

- There should be a routine scheduled review and assessment of the condition of the batting helmets established by coaches and school administrators.

Helmet Maintenance and Usage (continued)

- They should also be maintained in a manner that your team can enjoy several seasons of functional use.
- Batting helmet manufacturers normally provide a routine maintenance schedule either with the product or on their company's website.

Pitching Substitution: Coach Delaying the Game

A replacement pitcher gets eight warm-up throws. The defensive team shall be ready to resume play upon completion of the eighth throw. A coach is permitted to observe the throws, but must be off the field when they are completed.

POINT OF EMPHASIS

REFEREE

Pitching Substitutions: Coach Delaying the Game

- Pitching is critical in our game and substituting the pitcher is a key personnel strategy.
- By rule, there are some specific time guidelines provided for the execution of substituting the game pitcher.
- It is becoming more noticeable that the defensive coach is extending his time around the mound while the substitute pitcher completes his warm-up pitches.

Pitching Substitutions: Coach Delaying the Game (continued)

- This delay of the game by lingering around the mound has become problematic.
- While it provides the coach an opportunity to speak to the rest of the defensive team, it is also lengthening and delaying the game.

Pitching Substitutions: Coach Delaying the Game (continued)

- The coach should make his substitution known to the umpire-in-chief, scorekeeper, relieve the game pitcher, instruct his defensive players quickly and leave the diamond area heading back to the dugout/bench area.
- For the sake of continuity, It is a better game when it is fluid and with minimal interruptions.

POINT OF EMPHASIS

Celebrations

During a home-run celebration, team members must remain clear of the plate, allowing the umpire to ensure all runners legally touch.

REFEREE

Sportsmanship – Celebrations around or near Home Plate

- Any walk-off game winning base hit or home run generates immediate excitement for the player who hit the ball, his teammates and fans.
- Everyone on the winning team wants to congratulate the successful runner as he turns the corner at third base and heads to home plate.
- The problem is that the umpire-in-chief has to be able to verify that the runner scores.

Celebrations

A team is permitted to be outside the dugout and celebrate during a dead-ball, such as after a home run. However, Rule 3-3-1f (4) does not permit unsporting behavior and can result in the ejection of players who taunt.

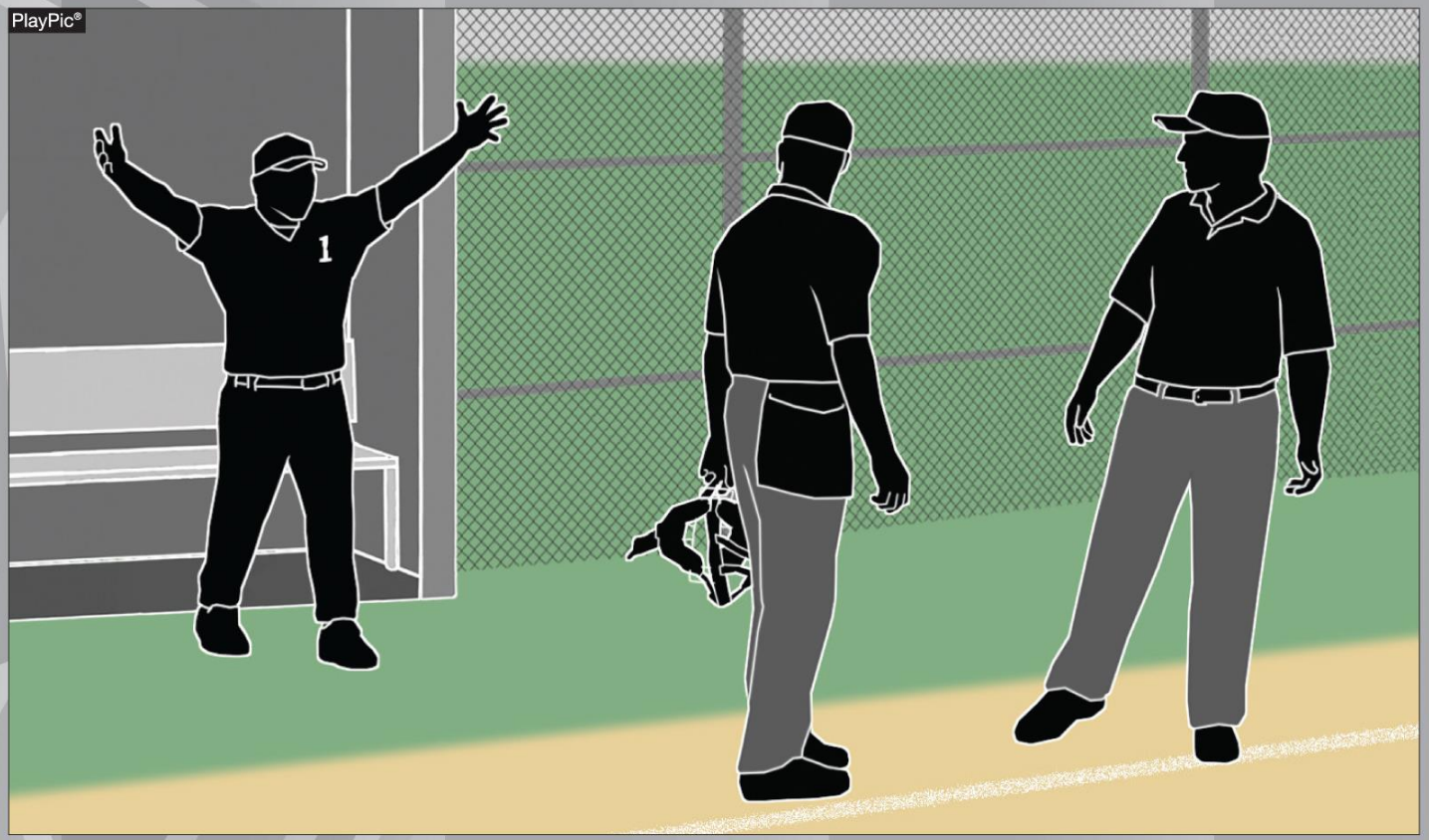
POINT OF EMPHASIS

REFEREE

Sportsmanship – Celebrations around or near Home Plate (continued)

- It is important to keep that area around home plate clear of bodies (and equipment) so the umpire can do his job correctly.
- In addition, hovering around the third base line and home plate is a perfect opportunity for bad sportsmanship actions with taunting and other boorish behavior.
- Celebrations should be more diligently observed because of the number of poor sportsmanship incidents being reported throughout the country.

Postgame Conduct



Umpires retain jurisdiction and can eject players or coaches until all umpires have left the field. Even though the game is over, this coach is subject to being ejected.

POINT OF EMPHASIS

REFEREE

Postgame Conduct

Since the umpires have left the field, umpires cannot issue a post-game ejection. However, if confronted by a coach, player or fan, umpires are expected to report the conduct to their state association office.

POINT OF EMPHASIS

REFEREE

Postgame Conduct

- An occurrence that is becoming all too common is that the game has concluded and the losing team members, coaches or fans wait for the umpiring crew to leave the confines of the field and then verbally attack the umpires.

Postgame Conduct (continued)

- By rule, the umpires have the latitude through their local state association's intervention to make a post-game report and forward it to the state association describing the type of bad behavior and based on the severity of the infraction, the umpires' jurisdiction can be extended after the game has ended.
- Please discuss this with your local state association for their guidance and procedure.

National Federation of State
High School Associations

Editorial Changes

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3-3-1PEN

- Deleted the accompanying penalty for use of television monitoring or replay equipment.

- **Rationale:** Clarification.

Rule 5-5-1n

- Added n. Backswing interference occurs.

- **Rationale:** Consistent with the aforementioned definitions of follow-through and backswing interference.

National Federation of State
High School Associations

Pitcher's Arm Care Suggestions

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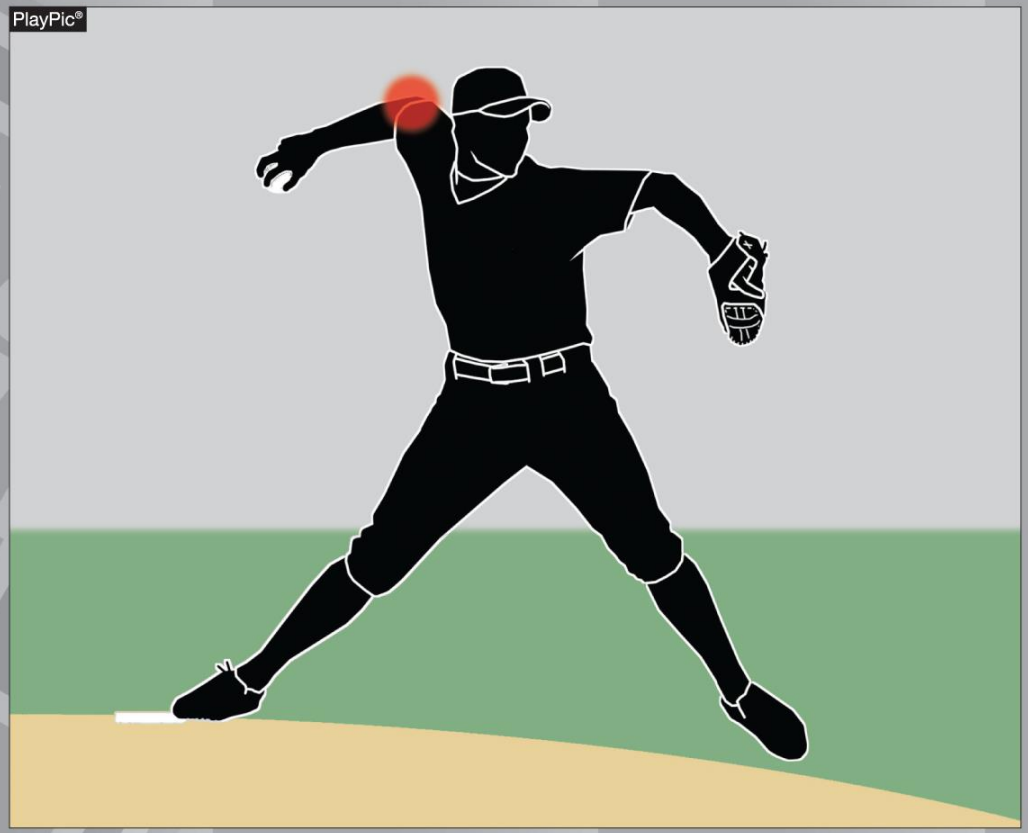
Arm Care



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

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.

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

- Anterior Shoulder
- Posterior Shoulder
- Medial Elbow
- 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… <u>indifference</u>

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

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; curveball; 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.[5] Because of this observation, attempts have been made to identify risk factors for these injuries.

Lyman et al[10] 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.[10] 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.[12] 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.[10] 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.[3] Included was a statement that adults should pay attention and react appropriately to arm pain in these athletes. Pitch counts should be monitored closely. Pitchers should avoid throwing

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No potential conflict of interest declared.

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[Athletic Training] CEU

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: front foot position, front foot orientation, shoulder abduction, and shoulder horizontal adduction. The timing of shoulder external rotation, pelvis rotation, and upper trunk rotation was associated with increased kinetics and decreased ball velocity. Low braking force 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 fastballs and curveballs 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 fastball mechanics at an early age. A changeup is recommended as a safe secondary pitch to complement the fastball; the curveball 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

As with most other athletic movements, the biomechanics of baseball pitching is studied to improve performance and prevent and/or rehabilitate injury. As technology in the sports science field has developed over the past 20 years, the interest has skyrocketed in using these advancements to the benefit of athletes. The initial studies provided accurate descriptions of the pitching kinematics and kinetics,[9-11,15] which helped athletes, coaches, medical professionals, and scientists understand the demands of pitching. Subsequent research has analyzed factors that correlate to performance enhancement and/or injury. The purpose of this review is to assimilate all the available scientific research on baseball pitching biomechanics related to performance and injury. This information is grouped into 5 areas: 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 a lot is known about

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No potential conflict of interest declared.
DOI: 10.1177/1941738109338546

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http://ajs.sagepub.com/

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 References

- The references for these suggestions are from:
- Andrews Sports Medicine & Orthopaedic Center – www.andrewscenters.com
- Paul Niggebrugge – www.Be Your Best Academy.com
- American Sports Medicine Institute – www.asmi.org
  - (http://www.asmi.org/research.php?page=research&section=positionStatement)

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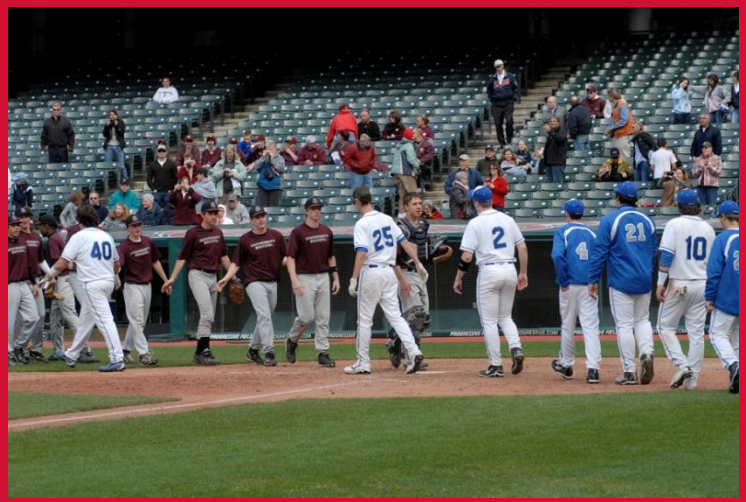
High School Associations

Thank you for your time and commitment to high school baseball.



Take Part. Get Set For Life.™