



2026-27

POLICY AND PROCEDURES

FOR

FIELD HOCKEY



NHIAA FIELD HOCKEY COMMITTEE

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POINTS OF EMPHASIS

- **NHIAA Required Facemasks:** All field players defending a penalty corner shall wear a face mask. It must be a smooth, preferably transparent or white but otherwise single-colored face mask or a metal grill face mask, which closely follows the contours of the face.
 - A defender who does not have a facemask may not defend a penalty corner and shall go back to the centerline with her other teammates.
 - If a defender removes her facemask before the end of a corner, the corner shall be repeated.
 - A player who has chosen to wear a metal grill facemask shall remove it prior to crossing the twenty-five-yard line. The penalty for not removing it shall be a misconduct assessed to the player at the first stoppage of play following the discovery of the violation.
- Be sure to bring an additional set of goalie pads with you to any "away" games. If a goalkeeper is yellow carded and a substitution is necessary, another set of pads should be available. Presently, there is no procedure to award an official time out to allow goalkeepers to change pads.
- **Field of Play:** Field Hockey playing facilities must meet the National Federation regulations. A regulation size field is 100 yards long by 60 yards wide. When space limitations mandate a smaller field, 90 yards long by 50 yards wide may be used. Schools are urged to be certain that the playing surfaces meet safety requirements to ensure proper playing conditions.

NFHS Guidelines for Management of Concussions:

The NHIAA mandates the following of the NFHS guidelines for management of Concussions.

Concussions: Any athlete who exhibits signs, symptoms, or behaviors consistent with a concussion shall be immediately removed from the contest and shall not return to play until cleared by an appropriate health care professional. For additional information and potential symptoms, please be sure to visit By-Law Article III; Sports Medicine: Sect. 13: Concussions and the New Hampshire SB402 and its language as written.

1. REQUIREMENTS:

I. In order to be considered for tournament play, each school must meet the following schedule requirements:

- A. Minimum number of games – 10
- B. Maximum number of games – 16

II. COMPLETED SCHEDULE AND FORFEIT:

All teams must complete their entire schedule submitted to the NHIAA. Any scheduled game(s) not played must be reported (in writing by both schools) to the NHIAA prior to the date of NHIAA pairings with an explanation. The committee will determine if games not played will be considered a forfeit(s) or a no game(s). A team CANNOT forfeit a game to the other team under any circumstances.

MAKE-UP GAMES:

Make-up games may not be scheduled into the last week of the season. The only games that can be played during the last week of the season are games on the original schedules submitted to the NHIAA.

Exception to Reschedule into the Last Week of the Season: If for some reason, a game must be moved into the last week of the season a letter, prior to the game being played, must be submitted to and received by the Chair of the Committee through the NHIAA Executive Director by both outlining the reason(s) for the request.

Please note that any game approved to be moved into the last week of the season must be played by the last date to play. No extension of the season will be granted. In the event the game(s) are not played both teams will be issued forfeit losses.

2. **PLAYING RULES:**

- A. National Federation Field Hockey Rules will be considered the official field hockey rules.
- B. Tie breaking procedures developed by the Field Hockey Committee upon recommendation of the National Federation will be used in tournament play only. Overtime Procedures for Regular Season Play are outlined in Sect. 6 of this manual.
- C. All varsity games are to be officiated by two (2) NHIAA registered officials. Exception to this may be sought by contacting the NHIAA Office before the game.
- D. Goggles are no longer required equipment. If Goggles are to be used, they must meet ASTM standard for Field Hockey (F2713) at the time of manufacture.

3. To avoid increased injury risk, it is recommended that athletes play no more than six (6) quarters in one (1) day. Administrators and coaches should monitor quarters played per day. Athletes who participate in more than six (6) quarters per day should be closely monitored by coaches, administrators, and/or medical personnel (i.e. Athletic Trainers, etc.).

Sub varsity matches are not to be longer than four (4) twelve and one-half (12 and ½) minute quarters. If the Athletic Directors of both schools participating agree to play a 30-minute game, it must be broken up into two (2) 15-minute halves. If a 30-minute game is played, a 15-minute half is equivalent to (2) quarters. The official's rate for this game would remain at the sub varsity rate for field hockey officials as defined in NHIAA By-Law Article XI: Sports Officials fees for 2026-27 School Year.

- An overtime period of ten (10) minutes in the varsity game should be considered as part of the 4th quarter.

4. **SPORTSMANSHIP:**

The NHIAA Field Hockey Committee has established the following procedures for dealing with unruly spectators:

- A. First Offense: Official suspends game on the first dead ball situation and requests appropriate coach or site management to resolve the situation. Once the coach or site management has been made aware of the situation, play shall resume.
- B. Second Offense: Official suspends game on the first dead ball situation and requests the appropriate coach or site management to remove the offending spectator (s) from the venue. Play shall resume upon removal of offending spectator.
- C. Third Offense: The officials shall declare the game a suspended game and report the sportsmanship incident to the state office.

5. **MERCY RULE FOR REGULAR SEASON PLAY:**

When score differential is five or more goals, the clock will continue to run throughout the second half after a goal is scored. The clock will stop for timeout, injuries, issuing of cards, penalty strokes, and official's timeout. If the goal differential is below five in the second half, normal timing will resume NFHS Rule 4-2-2.

6. **OVERTIME PROCEDURES FOR REGULAR SEASON PLAY:**

When the score is tied at the end of regulation time, the tie will be broken in the following manner:

A single, ten (10) minute "sudden victory" overtime period shall be played with teams consisting of six (6) field players and a goalkeeper (7 vs. 7). There shall be a five (5) minute intermission during which

the coach will designate the seven players who will start the overtime period. A toss of the coin will determine ball possession or direction of attack. The visiting team will call all coin tosses.

- A. All game rules shall apply with the following modifications:
1. Each team will begin the overtime with six (6) field players and a goalkeeper. If a team finished the regulation game playing short because of a disqualified player, **it shall play the overtime period short. If a team finished the regulation period playing short because of a suspended player, it shall play short until the suspension time has been served**
 2. Any player who has been disqualified during regulation play is not eligible for the overtime period.
 3. A player suspended during regulation play would be eligible at the end of the suspension.
 4. On penalty corners, the defending team is permitted to have only four (4) players behind the goal line (goalkeeper and three (3) field players).
 5. **Note:** For yellow card suspensions or red card disqualifications during the sudden victory overtime period the offending team shall play short.
- B. The game is complete as soon as a goal has been scored.
- C. The game will be considered a tie if the score is still tied after the single ten (10) minute sudden victory period has been played.

7. **ALIGNMENT:**

Field Hockey will be separated into three divisions, Division I, II, and III. The following is the alignment to be used for this season:

Classification of Field Hockey Schools 2026-27/2027-28

DIV. I (850+)		DIV. II (550-849)		DIV. III (1-549)	
17 Schools		16 Schools		17 Schools	
Pinkerton	2979	Oyster River	796	Laconia	543
Nashua South	1697	Kingswood	727	Kearsarge	485
Nashua North	1545	Pembroke	718	Monadnock	475
Dover	1423	Merrimack Valley	715	Pelham	466
Bedford	1367	Hollis Brookline	713	Gilford	442
Concord	1329	Souhegan	709	Sanborn	433
Exeter	1329	Hanover	693	Stevens	432
Keene	1263	John Stark	657	Winnisquam	372
Londonderry	1219	Plymouth	643	Newfound	368
Salem	1069	Lebanon	642	Berlin	324
Goffstown	1032	Bow	639	Mascoma	317
Merrimack	1013	Milford	613	Hopkinton	309
Winnacunnet	988	Kennett	612	Conant	307
Portsmouth	983	ConVal	603	Derryfield	270
Timberlane	934	*Man. Memorial-Central	2451	Mascenic	263
Windham	884	*St. Thomas	341	Newport	263
*Bishop Guertin	767	*Petition		Bishop Brady	227

8. **TOURNAMENT SELECTION:**

The maximum number of teams allowed per By-Law Article IV: Classification; Sect. 10: Tournament Selection Requirements will qualify for the tournament in each division.

9. **TOURNAMENT ROSTER:**

All tournament teams will be limited to a maximum of twenty-five (25) players, two (2) managers, and

two (2) coaches. Rosters shall be completed via the NHIAA website. If a team is going to make the tournament, a team photo in uniform (no warm-ups and no mascots allowed) must be submitted with a photo lineup. If no photo is received a logo will be supplemented.

Rosters are submitted on-line utilizing the Member Login on the NHIAA website.

Field Hockey Rosters and Photos Due: October 9, 2026

10. TOURNAMENT OFFICIALS:

Selection of tournament officials will be made in accordance with NHIAA By-Law Article I Policy, Section 15: Tournament Officials Selection.

11. TOURNAMENT FORMAT:

The higher seeded teams will host the preliminary round of the tournament. The home field will be of legal size with legal goals in tournament play.

- Preliminary Round - played at the site of the higher seeded team
- Quarterfinal Round - played at the site of the higher seeded team
- Semifinal Round - to be played at a neutral site
- Final Round - to be played at a neutral site
- The FIH International Walkout Procedure shall be used for the introduction of teams, captains, coaches, and umpires are all semifinals and final games.
- The National Anthem should be played before all semifinal games.

Warm-Ups

25 minutes for pre-game warm-ups will be allotted for games at neutral sites

Interrupted or Suspended Games

Any tournament game interrupted due to circumstances beyond the control of the responsible administrative authority shall be completed as follows:

- A. If interrupted during the first half, the entire game shall be replayed;
- B. If interrupted after the start of the second half, the game could be resumed at the point of interruption or by mutual agreement be considered a completed game.

12. FIELD PREPARATION EXPENSES:

Field preparation expenses will only be approved by the Field Hockey Committee when a tournament game is played at a neutral site.

13. TOURNAMENT TIE-BREAKING PROCEDURES

- a) A tied game will be broken to determine the winner by playing up to two 10-minute "Sudden Victory" periods of teams consisting of seven team players (of which one may be a goalkeeper). All game rules apply with the following modifications.
- b) There will be a five-minute break between the end of regulation and the first overtime period, and a two-minute timeout between the overtime periods.
- c) Coin Toss. A toss of the coin for the first overtime period will determine ball possession or direction of attack. If a second overtime period is necessary, the teams shall switch attacking ends and the team who did not have possession at the beginning of the overtime will begin the second overtime with the center pass. The visiting team will call all coin tosses.
- d) Each team will begin the first overtime with seven players, one of which may be a goalkeeper, unless players were disqualified or have not completed a suspension during any previous playing period.
- e) Any player who has been disqualified (red carded) during regulation play is not eligible for the overtime period and the team plays short for the entire overtime. A player suspended (yellow/green carded)

during regulation play would be eligible at the completion of the suspension timeframe. The team plays short until the suspension is completed.

- f) On Penalty Corners. The defending team is permitted to have only four team members (of which one may be a goalkeeper) behind its goal line.
- g) The game is completed as soon as a goal is scored.
- h) If the score remains tied at the end of the second overtime period. A shoot-out will take place.
 1. A coin toss will give a team the choice to attack or defend.
 2. Five players from each team shall go one-on-one alternately against the same goalkeeper from the opposing team. *Note*: Numbers and order of shootouts do not have to be given immediately. Players can be sent to take a shootout at the discretion of the team.
 3. There is no substitution of any player during the shootout except for injury to a player or suspension of defending GK.
 4. The shootout will begin within two minutes after the end of the match. No lineup is required to be submitted to the umpires.
 5. The team awarded the highest number of goals shall be the winner.
 6. Once the shoot-out procedure is decisive, the game shall be complete and no more one-on-one attempts need to be taken.
 7. Taking the shootout:
 - a) The goalkeeper/defender starts on or behind the goal line between the posts.
 - b) The ball is placed on the nearest 23m line opposite the center of the goal.
 - c) The attacker stands outside the 23m line near the ball.
 - d) The umpire blows the whistle to signal the start of the shootout. The attacker and the goalkeeper may then move in any direction.
 8. The shoot-out is completed under the following conditions:
 - a) Eight seconds has elapsed.
 - b) The attacker scores a goal.
 - c) The attacker commits an offense.
 - d) The goalkeeper commits an unintentional offense. (The shoot-out is retaken.)
 - e) The goalkeeper commits an intentional offence. (A penalty stroke is awarded.)
 - f) The ball goes out of play over the back-line or side-line. [This includes the goalkeeper intentionally playing the ball over the back-line (not a foul). The ball simply going outside the circle a second time does not constitute the end of a shoot-out.]
 - g) If a penalty stroke is awarded, any eligible player on the official roster may take the penalty stroke. This penalty stroke will take place before the next available shoot-out takes place.
 9. A player may be suspended by a yellow or red card, but not a green card, during the shoot-out competition.
 - a) If a goalkeeper is suspended during the shoot-out, they may not take further part in that competition but can be replaced by any eligible player from the team. The replacement goalkeeper is allowed reasonable time to put on protective equipment.
 - b) If an attacker is suspended during the shoot-out competition, there is no replacement allowed. Any further shoot-out the player was entitled to take counts as no goal.
 10. During a shoot-out competition, team members and the coaching staff for that match are permitted to enter the field of play, but only in the area outside the 23m area used for the shoot-out. Only a player who is authorized to take or defend a shoot-out may enter the 23m area. The goalkeeper or defending player of the team taking the shootout may be on the backline outside the circle.
- i) If no decision is reached after the first series of shoot-outs.
 1. A “Sudden Victory” procedure will be used to break the tie.
 2. There will be a second series of one-on-ones taken by the same group of players.
 3. The order may be changed but not the players.
 4. The team who defended first in the first set will attack first in this set.

5. The first team awarded more goals than its opponent after an equal number of shoot-out attempts shall be the winner.
 6. Every player of the five selected must attempt a shoot-out before a player is eligible to go again.
 7. The same players take part in any subsequent series of shoot-outs except that an incapacitated player can be replaced from eligible players.
 8. Teams will alternate attacking first in each subsequent series of shoot-outs.
- j) If an overtime game goes into a shootout, a total of one goal (team goal) is awarded for the winner of the set rather than the number of goals scored in the set.

THE FINAL SCORE OF A TIED GAME SHALL BE REPORTED AS ONE MORE THAN THE SCORE AT THE END OF REGULATION PLAY

AWARDS:

Official NHIAA championship and runner-up plaques, in addition to twenty-nine (29) individual medals, will be awarded to the respective champion and runner-up teams in each division.

GAME BALLS:

For all tournament games, the home team shall provide a white game ball to be used during tournament play, except at the semifinal and final games where the NHIAA provides a white tournament game ball.

All game balls at all levels of play shall have the NFHS Authenticating Mark imprinted.

The following procedure is to be followed:

- a. Prior to the start of the game the head official is to inspect the game ball(s) to ensure the NFHS Authenticating Mark is imprinted. If the home team's ball does not have the mark the visiting team's ball with the Authenticating Mark is to be used.
- b. In the event neither ball has the mark, the game is to be played and the head game official is to report the matter to the Supervisor of Officials, who in turn will notify the NHIAA office.

14. TEAM BENCHES:

During all rounds of tournament play held at neutral sites the higher seeded team will have the bench to the right of the scorer's table as it faces the field.

15. PROTEST PROCEDURE AT STATE TOURNAMENTS:

During State Tournament play, there shall be no appeals of protests to the Executive Director. All protests shall be resolved at the game site at the time of the protest.

16. BLOOD SPILLAGE AND BODY FLUIDS:

The NHIAA Sports Medicine Committee suggests that each school develop a local policy in cooperation with their local medical personnel, on how to handle blood spillage.

Housekeeping Procedures for Blood and Body Fluids:

Disposable latex gloves should be worn to avoid contamination of the hands of the person cleaning spillages involving blood or other body fluids and secretions. Persons involved in cleaning contaminated surfaces should avoid exposure of open skin lesions or mucous membranes to blood or body fluids. A freshly prepared solution of dilute household bleach (one quarter cup of bleach diluted in one gallon of water) or other disinfectant labeled as *virucidal*, *Tuberculocidal*, *staphylocidal* is useful. Allow the disinfectant to stand wet for a minimum of one minute to start killing pathogens and disinfecting the area (10 minutes of disinfection time guarantees surface sterility). Whenever possible, disposable towels, tissues, and gloves should be used and properly discarded and mops should be rinsed in disinfectant.

INTERPRETATION OF EXCESSIVE BLEEDING:

National Federation Rules call for a player who is bleeding, has an open wound or excessive blood on the uniform, to leave the court/field.

The NHIAA interprets "excessive blood on the uniform" to mean that part of the uniform is saturated with blood. Saturated does not mean a wet spot. Saturated means a major portion of the garment is covered and soaked with blood. For this to occur, significant bleeding would have had to take place. For any blood on uniform less than "saturated", the uniform does not have to be changed. School personnel have the responsibility of treating the blood area with the appropriate disinfecting solution before the athlete may participate. If the uniform is "saturated" with blood, the uniform must be changed before the athlete may participate. This interpretation is to be followed in the conduct of all NHIAA athletic events.

17. **TOURNAMENT EVENT POSTPONEMENTS (WEATHER):**

If weather causes a tournament event postponement, the following guidelines must be followed:

- **Home of Higher Seed:** The decision to postpone a tournament game held at the home of the higher seed will be left to the discretion of the home site Game Director to make the decision to postpone and reschedule games to the next day. The officials and the NHIAA must be notified of the postponement and the reschedule date and time.
- **Neutral Site – During the Week:** The decision to postpone a tournament event during the week will be made by the NHIAA. Schools, Supervisor of Officials, Game Directors, Police and Trainers will be notified by the NHIAA.
- **Neutral Site – Weekends & Holidays:** The decision to postpone a tournament event on weekends and holidays will be made by the NHIAA. SCHOOLS WILL NOT BE NOTIFIED. It will be the responsibility of the schools playing to check the NHIAA website (visit www.nhiala.org and click on the "tournament info" link. The NHIAA will notify Game Directors, Supervisor of Officials, Police and Trainers. TEAMS SHOULD NOT LEAVE FOR THE TOURNAMENT SITE UNTIL THE NHIAA WEBSITE HAS BEEN CHECKED.

18. **NHIAA SITE SELECTION CRITERIA POLICY:**

NHIAA Sports Committees will make every effort to provide sites with the following criteria in mind. The criteria are not listed in order of priority.

- a. If the home team cannot fulfill all criteria necessary to host a tournament game, including charging an admission fee for the preliminary or quarterfinal games, the school shall locate another site or forfeit the home advantage.
- b. Health and safety of participants.
- c. Comfort and safety of spectators (including adequate seating and parking, and restrooms).
- d. Handicapped accessible for spectators.
- e. Relative travel requirements of participating schools.
- f. The ability to sell, collect and account for ticket sales.
- g. Playing surfaces must meet the requirements as established for that sport.
- h. Facility rental charge (if applicable).
- i. Sufficient parking.
- j. Other costs associated with running the event.
- k. Public Safety – Approximate costs
- l. Ice Charges – If applicable
- m. Custodial
- n. Receptivity and cooperativeness of personnel working at site.
- o. Provide concessions (Facility keeps all sales).
- p. Provide area for NHIAA memorabilia sales.

19. **OUTDOOR ENVIRONMENTAL SAFETY LIGHTNING:**

Lightning is the most consistent and significant weather hazard that may affect outdoor athletics. Within the United States, the National Severe Storm Laboratory (NSSL) estimates that 100 fatalities and 400-500 injuries requiring medical treatment occur from lightning strikes every year. The existence of blue sky and the absence of rain are not protection from lightning. Lightning can, and does, strike as far as

10 miles away from the rain shaft. It does not have to be raining for lightning to strike. Additionally, thunder always accompanies lightning, even though its audible range can be diminished due to background noise in the immediate environment, and its distance from the observer.

The following guidelines are recommended:

- a. All athletic staff and game personnel are to monitor threatening weather. Establish a chain of command as to who makes the decision to remove a team or individual from athletic sites or events (athletic/site/event director, game officials/umpires, sports medicine staff?). An emergency plan should include planned instructions for participants as well as spectators.
- b. Be aware of potential thunderstorms that may form during scheduled athletic events or practices. Included here should include National Weather Service – issued (NWS) thunderstorm “watches” and “warnings” as well as signs of thunderstorms developing nearby. A “watch” means conditions are favorable for severe weather to develop in an area; a “warning” means that severe weather has been reported in an area and for everyone to take proper precautions.
- c. Know where the closest “safe structure or location” is to the field or playing area, and know how long it takes to get to that safe structure or location.

Safe structure or location is defined as:

- Any building normally occupied or frequently used by people, i.e., a building with plumbing and/or electrical wiring that acts to electrically ground the structure. Avoid using shower facilities for safe shelter and **do not use** the showers or plumbing facilities during a thunderstorm.
 - In the absence of a sturdy, frequently inhabited building, any vehicle with a hard metal roof (not a convertible or golf cart) and rolled up windows can provide a measure of safety. A vehicle is certainly better than remaining outdoors. It is not the rubber tires that make a vehicle safe shelter, but the hard metal roof, which dissipates the lightning strike around the vehicle. **DO NOT TOUCH THE SIDES OF THE VEHICLE!**
- d. WHEN YOU FIRST HEAR THUNDER OR SEE LIGHTING, SUSPEND ACTIVITIES AND GO TO A SAFE SHELTER OR LOCATION. **“IF YOU CAN SEE IT (LIGHTNING), FLEE IT (TAKE SHELTER). IF YOU CAN HEAR IT (THUNDER) CLEAR IT (SUSPEND ACTIVITIES).”** WAIT UNTIL 30 MINUTES AFTER THE LAST OBSERVED LIGHTNING OR THUNDER BEFORE RESUMING ACTIVITIES.
 - e. If no safe structure or location is within a reasonable distance, find a thick grove of small trees surrounded by taller trees or a dry ditch. Assume a crouched position on the ground with only the balls of the feet touching the ground, wrap your arms around your knees and lower your head. Minimize contact with the ground, because lightning current often enters a victim through the ground rather than by a direct overhead strike. **MINIMIZE YOUR BODY’S SURFACE AREA, AND MINIMIZE CONTACT WITH THE GROUND! DO NOT LIE FLAT!** Stay away from the tallest trees or objects (such as light poles or flag poles), metal objects (such as bleachers or fences), individual trees, standing pools of water, and open fields. Avoid being the highest object in a field. Do not take shelter under a single, tall tree.

20. **HEAT STRESS AND ATHLETIC PARTICIPATION:**

Early fall football, cross country, soccer, and field hockey practices are conducted in very hot and humid weather in many parts of the United States. Due to the equipment and uniform needed in football, most of the heat problems have been associated with football. During the 1998 season, there were four heat stroke deaths in football. There are no excises for deaths if the proper precautions are taken. During hot weather, the athlete is subject to the following:

HEAT CRAMPS—Painful cramps involving abdominal muscles and extremities caused by intense, prolonged exercise in the heat and depletion of salt and water due to profuse sweating.

HEAT SYNOCOPE—Weakness, fatigue, and fainting due to loss of salt and water in sweat and exercise in the heat. Predisposes to heat stroke.

HEAT EXHAUSTION (WATER DEPLETION)—Excessive weight loss, reduced sweating, elevated skin and core body temperature, excessive thirst, weakness, headaches and sometimes unconsciousness.

HEAT STROKE—An acute medical emergency related to thermoregulatory failure. Associated with nausea, seizures, disorientation, and possible unconsciousness or coma. It may occur suddenly without being preceded by any other clinical signs. The individual is usually unconscious with a high body temperature and a hot dry skin (heat stroke victims, contrary to popular belief, may sweat profusely).

It is believed that the above-mentioned heat stress problems can be controlled provided certain precautions are taken. According to the American Academy of Pediatrics Committee on Sports Medicine, heat related illnesses are all preventable. (Sports Medicine: Health Care for Young Athletes, American Academy of Pediatrics, 1991). The following practices and precautions are recommended:

- a. Each athlete should have a physical exam with a medical history when first entering a program and an annual health history update. History of previous heat illness and type of training activities before organized practice begins should be included. State high school association's recommendations should be followed.
- b. It is clear that top physical performance can only be achieved by an athlete who is in top physical condition. Lack of physical fitness impairs the performance of an athlete who participates in high temperatures. Coaches should know the PHYSICAL CONDITION of their athletes and set practice schedules accordingly
- c. Along with physical conditioning, the factor of acclimatizing to heat is important. Acclimatization is the process of becoming adjusted to the heat and it is essential to provide for GRADUAL ACCLIMATIZATION TO HOT WEATHER. It is necessary for an athlete to exercise in the heat if he/she is to become acclimatized to it. It is suggested that a graduated physical conditioning program be used and that 80 percent acclimatization can be expected to occur after the first seven to 10 days. Final states of acclimatization can be expected to occur after the first seven to 10 days. Final stages of acclimatization to heat are marked by increased sweating and reduced salt concentration in the sweat.

HEAT ACCLIMATIZATION:

- A minimum of three (3) days before interscholastic scrimmaging
 - A minimum length of time between practices (3 hours)
- a. The old idea that water should be withheld from athletes during workouts has NO SCIENTIFIC FOUNDATION. The most important safeguard to the health of an athlete is the replacement of water. Water must be on the field and readily available to athletes at all times. It is recommended that a minimum of 10 minutes be scheduled for a water break every half hour of heavy exercise in the heat. WATER SHOULD BE AVAILABLE IN UNLIMITED QUANTITIES. Check and be sure athletes are drinking the water. Cold water is preferable. Drinking ample water before practices and games has also been found to aid performance in the heat.
 - b. Salt should be replaced daily. Modest salting of foods after practice or games will accomplish this purpose. Salt tablets are not recommended. ATTENTION MUST BE DIRECTED TO REPLACING WATER—FLUID REPLACEMENT IS ESSENTIAL.
 - c. Know both the TEMPERATURE and the HUMIDITY. The greater the humidity, the more difficult it is for the body to cool itself. Test the air prior to practice or game using a wet bulb, globe, relative humidity index (WBGT Index) which is based on the combined effects of air temperature, relative humidity, radiant heat and air movement. The following precautions are recommended when using the WBGT Index (ACSM's Guidelines for the Team Physician, 1991):
 - Below 64.....unlimited activity
 - 65-72....moderate risk
 - 74-82....high risk
 - 82+.....very high risk

There is also a weather guide for activities that last for 30 minutes or more (Fox Matthews, 1981) which involves knowing the relative humidity and air temperature.

AIR TEMP	DANGER ZONE	CRITICAL ZONE
70 F	80% RH	100% RH
75 F	70% RH	100% RH
80 F	50% RH	80% RH
85 F	40% RH	68% RH
90 F	30% RH	55% RH
95 F	20% RH	40% RH
100 F	10% RH	30% RH

RH = Relative Humidity

One other method of measuring the relative humidity is the use of a sling psychrometer which measures the bulb temperature. The wet bulb temperature should be measured prior to practice and the intensity and duration of practice adjusted accordingly. Recommendations are as follows:

Under 60 F.....safe but always observe athletes

61-65 F.....observe players carefully

66-70 F.....caution

71-71 F.....shorter practice sessions and more frequent water and rest breaks

75 + F.....danger level and extreme caution

- d. Cooling by evaporation is proportional to the area of the skin exposed. In extremely hot and humid weather, reduce the amount of clothing covering the body as much as possible. NEVER USE RUBBERIZED CLOTHING.
- e. Athletes should weigh in each day before and after practice and WEIGHT CHARTS CHECKED. Generally, a 3% weight loss through sweating is safe and over a 3% weight loss is in the danger zone. Over a 3% weight loss that athlete should not be allowed to practice in hot and humid conditions. Observe the athletes closely under all conditions. Do not allow athletes to practice until they have adequately replaced their weight.
- f. Observe athletes carefully for signs of trouble, particularly athletes who lose significant weight and the eager athlete who constantly competes are his/her capacity. Some trouble signs are nausea, incoherence, fatigue, vomiting, cramps, weak rapid pulse, visual disturbance and unsteadiness.
- g. Teams that encounter hot weather during the season through travel or following and unseasonably cool period should be physically fit but will not be environmentally fit. Coaches in this situation should follow the above recommendations and substitute more frequently during games.
- h. Know what to do in case of an emergency and have your emergency plans written with copies to all of your staff. Be familiar with immediate first aid practice and prearranged procedures for obtaining medical care, including ambulance service.

HEAT STROKE – *This is a medical emergency- DELAY COULD BE FATAL.*

Immediately cool the body while waiting for transfer to the hospital. Remove clothing and place ice bags on the neck in the axilla (armpit) and on the groin area. An increasing number of medical personnel are now using a treatment for heat illness that involves applying either alcohol or cool water to the victim's skin and vigorously fanning the body. The fanning causes evaporation and cooling. (Source, The First Aider – September 1987).

HEAT EXHAUSTION—OBTAIN MEDICAL CARE AT ONCE. Cool the body as you would for heat stroke while waiting for transfer to the hospital. Give fluids if athlete is able to swallow and is conscious.

SUMMARY—The main problem associated with exercising in the hot weather is water loss through sweating. Water loss is best replaced by allowing the athlete unrestricted access to water. Water breaks two or three times per hour is better than one break an hour. Probably the best method is to have water

available at all times and allow athletes to drink water whenever he/she needs it. Never restrict the amount of water an athlete drinks, and be sure the athletes are drinking the water. The small amount of salt lost in sweat is adequately replaced by salting foods at meals. Talk to your medical personnel concerning emergency treatment plans.

21. **NHIAA GUIDELINES ON OZONE POLLUTION AND PHYSICAL ACTIVITY:**

School Administrators and coaches as well as other appropriate staff are to use this document in making decisions regarding indoor and outdoor activities during periods of high ozone pollution.

CHARTING AIR QUALITY:

Local officials use a simple scale to forecast and report on smog levels and other air pollution.

Depending on where you live, it might be called Air Quality Index (AQI) or Pollutant Standards Index (PSI).

Current air quality is reported as a percentage of the federal health standard for a pollutant. If the current index is above 100, air pollution exceeds the level considered safe.

At Ozone smog levels above 100, children, asthmatics and other sensitive groups should limit strenuous exercise. Even otherwise healthy people should consider limiting vigorous exercise when ozone levels are at or above the health standard.

If the index is above 200, corresponding to an ozone pollution level of .20 parts per million (ppm), the pollution level is judged unhealthy for everyone. At this level, air pollution is a serious health concern. Everyone should avoid strenuous outdoor activity, as respiratory tract irritation can occur.

U.S. EPA Air Quality Index

Index Value	Descriptor	Color	1 hr. Ozone ppb
0 – 50	Good	Green	---
51 – 100	Moderate	Yellow	---
101 – 150	Unhealthy for Sensitive Groups	Orange	125 – 164
151 – 200	Unhealthy	Red	165 – 204
201 – 300	Very Unhealthy	Purple	205 – 404
301 – 500	Hazardous	Maroon	405 – 604

OBSERVING AIR QUALITY:

1. Watch the Calendar

Ozone smog tends to be worst during the May – to – September “smog season.” Be especially conscious of smog levels during warm weather. In warm areas, smog can be a problem at any time of the year. Carbon monoxide pollution levels also are related to the weather, as well as to altitude. In the western U.S., the highest carbon monoxide levels are found in the winter months.

2. Watch the Clock

Since sunlight and time are necessary for ozone smog formation, the highest levels of ozone typically occur during the afternoon. Since carbon monoxide is produced primarily by motor vehicles, the highest carbon monoxide levels usually occur during rush hour or during other traffic congestion situations.

3. Watch the News

GUIDELINES FOR PARTICIPATION:

1. Observe appropriate physical activity restrictions represented above.
2. If an ozone exceedance is expected, but has not yet occurred at the time an interscholastic practice or contest is scheduled to begin, that event may begin as scheduled.
3. If an interscholastic practice or contest is scheduled to begin and an E.P.A. warning is in effect (PSI 201 or higher), the event shall be cancelled, delayed or rescheduled.

When ozone levels reach a national PSI level of 201 (.201 parts per million), exercising indoors or outdoors may cause significant respiratory tract irritation and a decline in lung function. Therefore, strenuous exercise indoors and outdoors is to cease.

RECOMMENDED RESTRICTION OF PHYSICAL ACTIVITY:

The following limits on activity for each type of episode are as follows:

- A. Level Orange, PSI 101-150 (Unhealthy for Sensitive Groups)
 - 1. Active children and adults and people with heart or respiratory disease, such as asthma or allergies, should limit prolonged outdoor exertion.
 - 2. Healthy individuals with noticeable health effects associated with existing conditions should minimize outdoor activity.
- B. Level Red, PSI 151-200 (Unhealthy)
 - 1. All athletes should discontinue prolonged, vigorous exercise indoors and outdoors.
 - 2. Sensitive individuals, primarily children who are active outdoors and people with heart or respiratory disease such as asthma or allergies, should avoid indoor and outdoor activity.
 - 3. Indoor and outdoor activities that should be avoided include, but are not limited to, calisthenics, basketball, baseball, running, field hockey, soccer, football, tennis, swimming and diving.
- C. Level Purple, PSI 201-300 (Very Unhealthy)
 - 1. All athletes shall discontinue vigorous indoor and outdoor activities, regardless of duration.
 - 2. All indoor and outdoor physical education classes, sports practices and athletic competitions shall be rescheduled.

Note: Indoor practices may be held if an air-conditioned facility is available.