

KEY REVIEW POINTS - TOURNAMENT SUMMARY

- In each of 4 Divisions, schools will be assigned to one of 9 Regionals.
- Regional meets may be conducted on Friday, October 24 (after 3:00 pm) or Saturday, October 25.
- The top three teams (1st, 2nd, and 3rd) will automatically qualify from the Regional to the Final Run. THE MAXIMUM NUMBER OF TEAMS QUALIFYING FROM A REGIONAL CANNOT EXCEED FOUR.
- If a school finishes fourth (4th) in the Regional meet with four or more runners in the top 20 places and eight (8) or more complete teams finish the race, that school will also qualify a team for the Final Meet.
- Cross Country Finals qualification will include a minimum of seven individual qualifiers
 from each Regional race. All individuals receiving a medal (top 15) will advance. If the
 number of individual medalists is less than seven, then the additional qualifiers (up to
 seven) will be taken from the individual runners following 15th place.
- The MHSAA Finals meet in each of four Divisions will be conducted at Michigan International Speedway on November 1.
- All entries for the LP XC Regional are to be submitted electronically on athletic.net by 11:59 p.m. on Saturday, October 18, 2025.
- Participating teams & individuals assume all costs of competing at all levels of the MHSAA Tournament.
- Managers must file a financial report immediately after their tournament event.
- Managers are requested to send a copy of all meet information, including course maps regarding their Regional race to the MHSAA for posting online at MHSAA.com

MHSAA LP BOYS & GIRLS CROSS COUNTRY 2025 TOURNAMENT MANAGERS MANUAL (Alphabetical by topic)

ADMISSION—Ticket prices for MHSAA Cross Country tournament events are \$7/person or \$10 a carload for Regional meets and \$11/person at the MHSAA Finals. Tickets can be purchased online for the State Finals using GoFan digital ticketing, which can be found at MHSAA.com.

The policies of the local host site shall prevail with respect to pets/animals. In the absence of local host policy, animals or pets **shall not** be permitted to enter MHSAA tournament venues, including spectator and team areas. However, properly marked or documented service animals that are leashed or harnessed at all times may accompany spectators paying admission or attending with other approved team or school personnel. Individuals who bring service animals are asked to bring their own waste disposal bags and request special seating in advance of the event if this is needed.

COMMUNICATION WITH PARTICIPATING SCHOOLS - Managers shall supply each participating school with information as follows: (Final Managers should direct qualifying teams to MHSAA.com for the LP Team and Individual Cross Country Finals Qualifier Information):

- Location of the course (also make a course map available online)
- Arrival procedures
- Time schedule including course open for inspection and warm up, coaches meeting, and awards ceremony
- Host facility building and grounds rules
- Admission procedure
- List of teams competing
- Parking arrangements for competing schools' vehicles

COMPETITOR NUMBERS—Regional Managers will be provided with numbers for each competitor. The MHSAA Cross Country Committee requires the tournament manager to determine whether the number is to be placed on the front or back of the competitors. Ensure that your timer/scorer is consulted in this area.

CONCUSSION PROTOCOLS –"Any athlete who exhibits signs, symptoms, or behaviors consistent with a concussion (such as loss of consciousness, headache, dizziness, confusion, or balance problems) shall be immediately removed from the contest and shall not return to play until cleared by an appropriate health care professional." The language above, which appears in all National Federation sports rule books, reflects a strengthening of rules regarding the safety of athletes suspected of having a concussion. This language reflects an increasing focus on safety and acknowledges that the vast majority of concussions do not involve a loss of consciousness. This protocol is intended to provide the mechanics to follow during the course of contests when an athlete sustains an apparent concussion.

- 1. The officials will have no role in determining concussion other than the obvious one where a player is either unconscious or apparently unconscious. Officials will merely point out to a coach that a player is apparently injured and advise that the player should be examined by a health care professional for an exact determination of the extent of injury.
- 2. If it is confirmed by the school's designated health care professional that the student did not sustain a concussion, the head coach may so advise the officials during an appropriate stoppage of play and the athlete may reenter competition pursuant to the contest rules.
- 3. Otherwise, if competition continues while the athlete is withheld for an apparent concussion, that athlete may not be returned to competition that day but is subject to the return to play protocol.
 - a. The clearance may not be on the same date on which the athlete was removed from play.
- b. Only an M.D., D.O., Physician's Assistant or Nurse Practitioner may clear the individual to return to activity.
- c. The clearance must be in writing and must be unconditional. It is not sufficient that the M.D., D.O., Physician's Assistant, or Nurse Practitioner has approved the student to begin a return-to-play progression. The medical examiner must approve the student's return to unrestricted activity. d. Individual schools, districts, and leagues may have more stringent requirements and protocols, including but not limited to mandatory periods of inactivity, screening, and post-concussion testing prior to the written clearance for return to activity.
- 4. Following the contest, an Officials Report shall be filed with a removed player's school and the MHSAA if the situation was brought to the officials' attention.
- 5. Member schools are required to complete and submit the forms designated by the MHSAA to record and track head injury events in all levels of all sports.
- 6. In cases where an assigned MHSAA tournament physician (MD/DO/PA/NP) is present, his or her decision to not allow an athlete to return to activity may not be overruled.

Return to Activity & Post-Concussion Form

DATES FOR TOURNAMENT – Regional meets may be conducted on either Friday, October 24 (after 3:00 pm) or Saturday, October 25, 2025. A Friday LP Regional shall be conducted after 3 p.m. unless prior MHSAA authorization is granted. A waiver to start earlier may be requested if a school is hosting multiple Regionals.

ENTRY/LATE FEES - Regional Meet Electronic Entry Materials and instructions for online entry are on the MHSAA Website. Entry information must be placed online no later than 11:59 p.m. on Saturday, Oct.18, 2025, for LP and Friday, Oct. 3, 2025, for UP at www.athletic.net. Late entries – A \$50 late fee must be paid to the Meet Manager before the contestant or team will be allowed to participate. The host school shall retain the \$50 late fee. There can be no late entries after the team box assignments have been determined.

All schools will receive an online Tournament Notification Form in the fall listing the Opt-Out dates for sports they sponsor, as well as an Opt-Out FAX form. Schools must contact their tournament managers by the Opt-Out Due Date if they **DO NOT** intend to participate in a previously assigned MHSAA tournament.

FINANCES – All MHSAA Regional Managers must submit a financial report to the MHSAA after the meet reflecting revenue and approved expenses, including officials' fees.

INJUNCTION OR RESTRAINING ORDER PROCEDURE - Managers are reminded of the following statement adopted by the Representative Council and which is in effect for all MHSAA tournaments: "In the interest of fairness to all participants if an injunction or restraining order is served or presented at an MHSAA tournament site and such purports to require the eligibility of or participation by a student or team which a school and/or the MHSAA has ruled to be ineligible under MHSAA regulations, the on-site tournament manager is to suspend the entire competition (team competition) or

events in which that student is intending to participate (individual competition)." If the meet has begun, it shall be completed.

LOCKER ROOM PRIVACY POLICY - Using devices of any kind to capture or transmit images is strictly prohibited in locker rooms, dressing areas, training rooms, weigh-in rooms, showers, restrooms, or other areas where there is an expectation of privacy during MHSAA tournament events. Tournament managers or athletic directors that discover such use should move immediately to have the device removed and inform the head coach or athletic director of the identity and nature of the activity of the person involved.

MERCHANDISING - Concession stands, whether operated by school or non-school groups, must confine sales to non-alcoholic beverages, edible items and general school spirit items that were available at regular-season home contests. The selling of tournament-related merchandise is limited to programs offered by the MHSAA and its authorized vendors, which may be in contact with you regarding their availability. Such programs may include, but are not limited to, the following categories: T-shirts, DVDs and photography. Regardless of the availability of such authorized programs, schools may not produce their own tournament-specific merchandise items to sell at MHSAA tournament sites. MHSAA tournament hosts can conduct 50-50 raffles provided the host site manager requests and receives the appropriate license from the State of Michigan. https://www.michigan.gov/cg/raffles

MEDIA NOTES – For information on credentials, drones, locker room privacy policy, microphones, photographers, flash photography, postgame interviews, press box, results, streaming (audio and video), and videotaping, go to this page. **Media/Streaming Information**

Here are a few important sections, some specific to cross country:

- PHOTOGRAPHY allowed, provided it does not interfere with the races.
- RESULTS/SCORE REPORTING Tournament results should be reported to the MHSAA immediately after games, not the next morning. Scores of bracketed tournaments should be entered in the Score Center on the MHSAA website or emailed to <u>results@mhsaa.com</u>. Host schools are responsible for informing local media and the major daily newspapers.
- STREAMING AUDIO & RADIO Outlets are required to submit a broadcast application for postseason events with the MHSAA. Approval or denial emails will be sent to both the outlet and the host school. Outlets are encouraged to check with the host school before applying to check on space/equipment needs. There is no limit to the number of outlets that may stream audio if the host can accommodate them. In the regular season, outlets do not need to submit broadcast applications but need permission from the host school to provide an audio stream.
- STREAMING VIDEO (POSTSEASON) The broadcast and streaming rights of MHSAA post-season tournament events belong exclusively to the NFHS Network, Bally Sports Detroit, the MHSAA, and those media outlets which have pre-arranged to secure those rights. Teams participating in MHSAA Tournaments are prohibited from streaming live video of any portion of an event over the Internet including using social media platforms or any other method. Likewise, individual spectators are also prohibited from live-streaming video through any other means. Participating schools are responsible for informing their students, parents, and other fans of this policy and to assist the MHSAA upon request in enforcing it.

MAILINGS - Please send an electronic copy of all pre-meet information (team information sheets, course maps, etc.) regarding your Regional Races to the MHSAA office. They will be posted on MHSAA.com.

MEDICAL EMERGENCY POLICY – Host school Tournament Managers should follow all local school district policies regarding medical emergencies for participating athletes, coaches, students, and adult spectators for competitions conducted in school facilities. In addition:

- Trainers are an allowed expense and encouraged, but not required
- All MHSAA concussion protocols will be followed.
- MHSAA policy on tornado watches and warnings shall be followed.
- MHSAA policy on managing heat and humidity shall be followed.

When MHSAA tournament contests are conducted at non-school facilities, plans should be developed for the following needs and/or circumstances:

- Student, coach and spectator shelter for outdoor events
- Host facility emergency equipment such as AED's, fire escape, etc.
- Emergency communications, i.e. phone numbers, school administration contact
- Coordination with facility management regarding evacuation, first aid, on-site responsibilities
- Medical transport or first responder contact procedures
- Proximity/directions of nearest medical facility

IMPORTANT NOTE: For all MHSAA tournaments conducted at school or non-school facilities, an Automated External Defibrillator (AED) must be within visible distance of the event.

Tournament Medical Incident Report -

Tournament Medical Incident Report

NON-MHSAA REGIONAL COMPETITION - If any open, community, subvarsity, or non-Regional runs will be taking place at the same location and date as the MHSAA Regional, these races need to take place either **before** any MHSAA Regional races begin or **after** all MHSAA Regional races have concluded. Once the Regional meet begins, this is the only competition that can take place until the entire MHSAA Regional event at a site has concluded. There are great liability concerns if a site allows other races or competitions to take place during an MHSAA Regional event.

This is no different from any school or non-school facility scheduling events as they wish before or after any MHSAA tournament event. However, once the MHSAA event begins, it is the only event that has insurance and liability coverage during that time and shall be the only competition allowed until the MHSAA event has concluded.

OFFICIALS - Managers are to hire, pay and assign the starter and/or referee for their Regional. The starter/referee should be a registered MHSAA official, have completed the 2024 MHSAA XC rules meeting, and should not have a connection with any team assigned to the Regional. Official fees are \$100 for Regional Starters that Regional Managers assign with MHSAA approval.

ORDER OF RACES – In 2025, girls run first.

PROHIBITED ACTIVITIES – Handouts for other competitions, and distribution of awards or honors for an organization other than the MHSAA are not allowed.

QUALIFIERS TO LP FINAL MEET - Team Qualifiers, Regional to Finals - Five runners must finish a Regional race for a school to receive a team score. The top three teams automatically qualify from the Regional to the Final Race. THE MAXIMUM NUMBER OF TEAMS QUALIFYING FROM A REGIONAL CANNOT EXCEED FOUR. If a school finishes fourth in the Regional meet with four or more runners in the top 20 places and eight (8) or more complete teams finish the race, that school will also qualify a team for the Final Meet. The maximum number of runners to represent a qualifying team at the Final Meet is seven.

Individual Qualifiers, Regional to Final Meet - Cross Country Finals qualification will include a minimum of seven individual qualifiers from each Regional race. All individuals receiving a medal (top 15) will advance. If the number of individual medalists is less than seven, then the additional qualifiers (up to seven) will be taken from the individual runners following 15th place, regardless if there are 3 or 4 qualifying teams.

SPORTSMANSHIP – MHSAA Regulation V, Section 3 applies in all tournament contests, including the following provisions:

Unsportsmanlike Conduct in Previous Contest - A player or coach who is ejected during a contest for sportsmanlike conduct shall be withheld by his/her school for at least the next day of competition for that team. If a school fails to enforce the subsequent disqualification with respect to one of its students or coaches, the tournament managers or any registered official or representative of a member school who becomes aware of the violation shall report it to the MHSAA, which shall prohibit the school from the remainder of the current tournament.

Player Suspension - A suspended player is treated as an ineligible player, which means that the student shall not participate. It is permissible but not recommended that the player may sit with the team, even in uniform. The minimum requirement is that the suspended student shall not enter the contest as a participant. **Coach Suspension** - Suspension from coaching requires at least that the coach not be at or near the team bench before, during, or after the contest, not be in or near the locker room before, during or after the contest, and not give instructions directly or indirectly to coaches or players from any position in or near the gymnasium or field of play.

Multiple Disqualifications/Abuse of Officials- Any coach who is disqualified for unsportsmanlike conduct two or more times during a season, any player who is disqualified for unsportsmanlike conduct three or more times during a season, and any coach or player who is ejected for spitting at, hitting, slapping, kicking, pushing or intentionally and aggressively physically contacting an official at any time during that season, is not eligible to participate in the MHSAA tournament for that sport that season. If the tournament disqualifying ejection for that individual occurs during the MHSAA tournament, that player or coach is ineligible for the remainder of that tournament.

The school of the disqualified coach or player must prohibit that person from being present on the property of the tournament venue for the remainder of the tournament series. If that school fails to enforce this, the tournament manager, any registered official or representative of a member school who becomes aware of the violation shall report it to the MHSAA, which shall prohibit the school from the remainder of the current tournament.

Taunting - In all sports, officials are to consider taunting a flagrant unsportsmanlike foul that disqualifies the offending bench personnel or contestant from the contest/day of competition (and the next contest/day of competition). A warning may be given but is not required before ejection.

Taunting includes any actions or comments by coaches, players or spectators which are intended to bait, anger, embarrass, ridicule or demean others, whether or not the deeds or words are vulgar or racist. Included is conduct that berates, needles, intimidates or threatens based on race, gender, ethnic origin or background, and conduct that attacks religious beliefs, size, economic status, speech, family, special needs or personal matters.

At all MHSAA tournament venues, tournament management may give spectators one warning for taunting. Thereafter, spectators who taunt others are to be ejected by security.

Tournament Equipment – (Suggested)

- Signs and flags for marking course (mark courses as completely as possible)
- Line marking material and equipment
- Rope for finish line funnel
- Stakes for signs, flags and finish line funnel
- National Anthem, may be played prior to the start of each meet, once per site.
- A set of watches for timing contestants (or other timing devices)
- An image-based system or video recorder at the finish to record finishers.
- A covered or enclosed facility to house meet management, official scorer and clerical personnel
- Restroom facilities including porta johns if needed.
- A public-address system
- Back-up scoring system when computer is the primary scoring source

Tournament Personnel

- Referee Starter (two different persons)
- Finish Judges
- Chute Inspectors/helpers
- Caller call the number of the runner at the finish
- Checker check the caller's announcement
- Course Inspectors position at most distance location & confusing areas
- Timers read, register finish times, upload results to Athletic.net, review image-based system
- Scorers
- Computer Operator
- Announcer
- Assistant Starter

RESULTS/REPORTS – Managers should send the following information via email or other electronic means to the MHSAA at the conclusion of their meet.

- Transmit team and individual Finalist to the MHSAA via Athletic.net
- Local information (send when assigned schools are notified)
- Financial Report
- Report any unusual circumstances that were a factor in determining qualifiers

RESCHEDULING POLICY – If an MHSAA tournament or meet is postponed or suspended because the facility becomes unavailable or a result of acts of persons or nature, and the playing rules require that the meet or contest must be played or resumed, the meet or contest must be played or completed on the first available subsequent date at the same facility.

SCHOOL SUPERVISION – No individual or team shall represent their school in a sport under MHSAA jurisdiction unless accompanied to the event by the coach, administrator, or appointee of the school.

TOBACCO AND ALCOHOL POLICY -The use of alcohol or tobacco, including e-cigarettes or other smoking devices, is prohibited at MHSAA tournament events by players, coaches, and spectators. Managers should stress in coaches' meetings that they are not to use tobacco at the tournament venue.

TROPHIES/AWARDS - ESCO of Milwaukee, Wisconsin, will provide the MHSAA Tournament trophies and medals.

Tournament managers will receive both trophies and medals together in one shipment from ESCO. The box containing the trophies and medals should be opened immediately upon delivery and inspected for accurate amounts, engraving, etc. Tournament managers should contact ESCO directly (not the MHSAA) at 800-852-4266 with any questions or problems regarding trophy and medal shipments.

Distribution – Regional champions in each Division receive a trophy and 7 team medals, the top 15 individuals receive medals in each Division. Finals – In each Division, Champion and runner-up teams receive a trophy and 7 team medals, the top 30 individuals at the Finals receive medals.

Extra/Replacement Medal Order Form - Extra/Replacement Medal Order Form

UNMANNED AERIAL VEHICLE (DRONE) POLICY - For the purposes of the policy, the word "drone" applies to all Unmanned Aerial Vehicles. The policy is written for all MHSAA tournament contests, while local laws and policies control all regular-season contests.

Drones are prohibited for all indoor tournament contests in all sports. For outdoor sports local, state, and federal laws govern the use of drones. Drones may never be flown over spectators, athletes, or the playing surface. All drones must stay outside of the "restraining line" or the normal footprint of the playing surface. This includes never flying over bleachers, press box, or anywhere that spectators sit or gather for a contest. The operator of the drone must be registered with the FAA and follow local, state, and federal law when flying the drone. https://www.faa.gov/uas/getting_started

Drones can never be used to scout opponents' games or practices. Non-school facilities reserve the right to restrict drone use on their property. An exception to this policy may be made in specific cases for MHSAA broadcast partners, provided the management of the tournament facility permits the presence of UAVs for broadcast purposes under the control of the MHSAA.

WITHDRAWAL POLICY - If a school withdraws or fails to show for scheduled competition after the draw is completed for team sports, (or after the pairings, heat assignments or flights are determined for individual sports) of the first level of the MHSAA tournament in a sport; the MHSAA staff person responsible for the sport will request from the school principal a written explanation for the no-show/withdrawal. If the reason is determined to be unacceptable by MHSAA staff, the MHSAA Executive Director will place the school on probation for the next two school years. A second offense within the two-year probationary period will cause the school to be prohibited from tournament play in that sport for the two years following the second offense. MHSAA Regional Managers should notify the MHSAA of schools who do not show to their Regional but were assigned.

WEATHER SUSPENSION POLICY - Tournament managers and host facility personnel are the sole authority for making decisions regarding delay of start times, suspension or cancellation of play.

Every effort should be made to complete play on the scheduled date. MHSAA policies regarding suspension of competition for a minimum of 30 minutes when thunder or lightning is present and tornado polies apply as stated in the MHSAA Hand

On threatening days, tournament management should consult host facility management about what to do if conditions worsen. When suspending an outdoor contest, tournament management shall follow these guidelines.

- Lightning necessitates those contests be suspended. The occurrence of lightning is not subject to interpretation or discussion--lightning is lightning.
- Severe weather in the form of rain or snow may make the course unplayable.

When a contest is suspended, the host school administration shall attempt to arrange for the security of all participants.

- Contestants and support personnel shall be moved to appropriate cover, indoor facilities, buses, and vans.
- When lightning is observed or thunder is heard and the contest is suspended, play may resume when lightning has been absent from the sky and thunder has not been heard for 30 minutes.
- Spectators shall be advised of the action being taken to seek shelter. (Some hosts may be able to offer shelter to spectators but are not required to do so.)

In considering the resumption of competition, if the tournament can be resumed and completed before darkness, it shall be resumed. A postponed contest should be rescheduled on the next possible date the course is available.

YOUTH PROTECTION POLICY - During the MHSAA Tournament events, the MHSAA expects all designated managers, volunteer or paid staff assisting in the event, officials or any other personnel to follow local school district policy and state statute regarding the mandatory reporting of child abuse, bullying, hazing and sexual harassment. A report of such activity shall be made to legal authorities and to the MHSAA Executive Director or his designee.

START/FINISH PROCEDURES

Start Area

- 1. A visible curved start line will be used at all Regionals and Finals.
- 2. Provide boxes 6'-8' wide on starting line, 5' 8' deep:
 - a. Three to five runners at the start line.
 - b. Remaining runners in second row/third row.
 - c. Boxes should be spaced 6 feet from another team if space allows.
- 3. Start line should be 2" wide (9-1-3c).
- 4. Level ground.
- 5. Secured from public access.

Start Straightaway

- 1. Four hundred meters to first change in direction.
- 2. First 100 meters same or nearly same width as start.
- 3. Optional mark at point of first 100 meters.
- 4. Area is to be free of holes, roots, glass or other potential problems

Starter Position

- 1. Ahead to one side of the start.
- 2. Elevated, behind the starting line.
- 3. Assistant starters may be positioned:

- a. Ahead to the opposite side of the starters.
- b. Ahead to one side (or both sides) in front.
- c. When assistant starters are used, the starter may take a position behind the runners.
- 4. The starter should remain in position until runners pass the first 100 meters of the race.

Starting Consideration

- 1. Meets can be enhanced by use of a sound system.
- 2. Instructions at start can avoid problems on the course.
- 3. Point out potential problems:
 - a. Explanation.
 - b. Cones, signs.
 - c. Ensure pre-meet check of teams

Course Markings – the course shall be clearly marked using one of the following methods:

- 1. A single wide line or boundary lines, both inside and outside, marked with a material which is not injurious to the eyes or skin.
- 2. The use of artificial or natural boundary markers.
- 3. Signposts with large directional arrows wherever the course turns, or flags about 1 foot square and mounted on stakes which hold them 6 feet or more above the ground.

Signage

- 1. Information signs:
 - a. Start banner.
 - b. Finish banner.
 - c. One, one and one-half, two-mile markers.
 - d. 100 meters.
- 2. Directional Signs:
 - a. Slight change of direction use an arrow.
 - b. Notable locations.
 - c. Trouble spots, unusual terrain or course changes.
- 3. Painted or Chalk Line:
 - a. Least dependable weather, multiple runs.
 - b. Good secondary marking system.
 - c. Looped courses may elect a second color.
 - d. Cheap latex paint works well.
 - e. Football, baseball field marking device works well if terrain allows.
 - f. Expensive.
- 4. Painted Boundary Line Both inside and outside and/or the use of natural or artificial boundary markers may be used to mark the course.

Finish Procedures

- A. The Approach
 - 1. 400 meters of straightaway.
 - 2. Good spectator viewing.
 - 3. Steady uphill grade or flat.
 - 4. Avoid downhill approach.
- B. The Finish Area:
 - 1. Clear open area
 - 2. Flat
 - 3. Grass
 - 4. Accessible to power
- C. The Finish Line:

- 1. Banner overhead to mark "Finish".
- 2. Clear 2" or 4" painted finish line.
- 3. Room for workers.
- 4. Apart from spectators.
- 5. Visible time or verbal announcement.
- 6. Elevated video camera position. (image based camera system)
- D. Sorting Yard:
 - 1. Space for pickers to stand (4-6).
 - 2. Space for judges at finish.
 - 3. Space for helpers (6-12).
- E. The Runway:
 - 1. Space at runway head for chute control official (2).
 - 2. Use rope at 4' to $4\frac{1}{2}$ ' from earth.
 - 3 Plenty of poles (every 5' 6' apart) to keep rope taut.
 - 4. Double runway.
 - 5. Station helpers on either side.
- F. Recording Pen:
 - 1. Area at end of both runways in which athletes wait for processing.
 - 2. Keep spectators from athletes.
 - 3. Space for scorer to mark finish appropriately.
 - 4. Process athletes in official area:
 - a. Building
 - b. Tent
 - c. Open air tables

Setting the Starting Line

- 1. Once the area for the start has been decided, roughly locate the approximate end positions of the starting line. The distance between these two points will be determined by the number of teams to compete, the amount of space available, and the width of each box. It has been recommended that space should be provided for five runners on the front line, but this very seldom happens. Measure the distance between the two points A and B and then determine the mid-point C.
- 2. Stretch a long cord from this mid-point C, to the first turn. If your line is not long enough to reach the first turn, you can set it in line by sight. Locate point D on your line, 60 feet from point C. Attach two 100-foot measuring tapes to points C and D. Using the two tape measures, locate point E, 80 feet from C and 100 feet from D. Segment CE will be perpendicular to CD. Swing your tapes to the other side and locate point F in the same manner. Segment FCE should be a straight line.
- 3. Use a string or cord that is longer than the distance between points A and B and stretch it so that it will pass through the points F, C, and E. Move the stakes at A and B so that they will coincide with this line.
- 4. By using a calculator, square the distance from C to B and add this to the square of the distance from C to the first turn. Extract the square root of this sum. From this value, subtract the distance from C to the first turn.

Example: You have 29 teams, and you are allowing 8 feet for each team. The distance from A to B would be 232 feet. Half of that (the distance from C to B) would be 116 feet. You have 553 yards (1659 feet) to the first turn.

- 116 ft. squared = 13456 sq. ft.
- 1659 ft. squared = 2752281 sq. ft.
- 13456 sq. ft. + 2752281 sq. ft. = 2765837 sq. ft.
- The square root of 2765737 sq. ft. = 1663.05 ft.
- 1663.05 ft. 1659 ft. = 4.05 ft.
- 4.05 ft. = 4 ft. 5/8 in.
- 5. Move the stakes at A and B forward 4 ft. 5/8 inches. Move your line and stretch it very tightly past the new point A, around point C and the new position of B. See <u>Diagram 2</u>.
- 6. Pull your cord back at the point X, midway between A and C, and stake it with a slight bend in the line. Do the same at point Y, midway between C and B. See <u>Diagram 3</u>.
- 7. Continue to stake at the mid-points of the segments and adjust the positions until you have a smooth curved line. When you are satisfied with the curve, paint the line and then prepare to set up your boxes.