



## **Runner Safety Position Statement**

**National Federation of State High School Associations (NFHS)  
Sports Medicine Advisory Committee (SMAC)**

### **Background**

Participation in high school track and field has increased substantially over the past few decades with the 2022-23 National Federation of High Schools (NFHS) participation survey reporting 437,831 cross country runners and 1,091,338 outdoor track and field participants. As the popularity of outdoor running has expanded so has the rate of pedestrian-involved motor vehicle crashes (MVCs). Although much of the data on MVCs does not distinguish between pedestrian vs. runner related crashes, a recent study in Sports Health documented nine fatalities amongst high school runners from 2011 to 2020. The Governors Highway Safety Association (GHSA) reported 7,508 pedestrians were killed in 2022 or an average of 20 deaths per day. A disproportionate number of these fatalities occurred on rural roads, despite only 19% of the population living in a rural area. Distracted or impaired driving from alcohol, drugs, texting, eating, or loud music puts the burden of extreme attentiveness on the runner. This position statement suggests important pedestrian safety strategies to reduce runner fatalities.

### **Pre-participation**

All athletes participating in cross country or track and field should have an annual sports pre-participation physical examination. Athletes requiring emergency rescue medications such as EpiPens, Glucagon, and/or Albuterol inhalers should carry them while participating. All schools should have a well-rehearsed, venue specific Emergency Action Plan. Coaches should provide a list of common routes and running options that are approved by the athletic director. Coaches should plan for safe shelter sites in the instance of lightning or other inclement weather and consider staying on the school campus if lightning or severe weather is in the forecast. There should also be a cell phone with verified service along the route accompanying the runners. Counseling regarding performance enhancing substances with potential cardiac or thermal effects should be reviewed with athletes. Avoid stretching and warm-ups near the roadway and discuss the dangers of texting and using social media while running, as it makes the runner less aware of their surroundings.

### **Roadway Safety**

Studies have demonstrated that rural road running is significantly more dangerous than city running. When available, sidewalks should be utilized. Avoid running in higher traffic speed areas (highways) and choose times when traffic density is low. Road running should be done facing traffic so the runner can see the approaching cars and adjust lane position as necessary. Parking lot entrances are dangerous crossways. When on city roads, obey all traffic controls and signals, and roadways should be crossed at intersections in well-lit areas. In 2017 the National Highway Traffic Safety Administration reported:

- 91% of pedestrian fatalities occurred in areas other than sidewalks.
- 77% lower risk of MVC among pedestrians who walked facing traffic.
- 73% of pedestrian fatalities occurred at an area other than the intersection.

## **Visibility**

Pedestrian deaths are often the result of poor driver visibility because of sun glare, fog, rain, snow, or darkness. National Highway Traffic Safety Administration identified 75% of pedestrian fatalities occurred in dark lighting conditions. If night-time running is the only feasible time of day for a runner, reflectors should cover at least half of their vest or extremity reflectors should be worn. Research has shown reflectors on the extremities allow drivers to better detect the runners' direction of motion. Reflectors should be either yellow, green, or orange. Runners should avoid running along eastbound roads at sunrise or along westbound roads at sunset because of sun glare. Caution should be taken in cold weather if approaching cars have not fully defrosted their windows or removed the snow.

## **Personal Safety**

Runners should run with a buddy whenever possible for personal safety and in case of medical emergency. If not feasible, emergency information (name, contact, telephone number, and medical information) should be written on shoes or written on a paper inside clothing. Always vary running routes and don't publicly post routes online or on social media. Ensure someone is aware of the approximate running route. Dress in brightly colored clothing when running at dusk and utilize headlamps and/or reflectors at night. Avoid distractions while running. It is better to not use earbuds when running or to utilize only one with the volume on low. Do not use noise canceling earbuds when running. Bone conduction headphones may be a safe alternative. Regular, over the ear headphones are always discouraged. Carry a whistle and phone in case of emergency. Don't wear jewelry or carry significant cash while running.

## **Summary**

- Provide a pre-season safety orientation along with a review of venue specific Emergency Action Plan.
- Coaches should plan for safe shelter sites in the instance of lightning or other inclement weather.
- Run in pairs and carry a phone.
- Avoid distractions while running (i.e. headphones, earbuds, phone use etc.)
- Use sidewalks when possible.
- Run facing oncoming traffic.
- Crossroads at crosswalks and intersections and in well-lit locations.
- Avoid running in the dark and wear reflective material.
- Avoid running along eastbound roads at sunrise or along westbound roads at sunset.
- Run during lower traffic times when running.
- Avoid loitering along the road before and after runs.
- Incorporate a process for safe return of all runners.

## **References**

1. Shore E., Delong R., Powell E., et. Al. Pedestrian Safety Among High School Runners: A Case Series. *Sports Health* 2023;16(9):633-637.
2. The Charlotte Observer. 1 Dead, 2 hurt When Car Hits Cross Country Runners along Virginia Rd, College says. <https://www.charlotteobserver.com/news/nation-world/national/article260009835.html>. Accessed 1/19/2024.
3. Pedestrian Traffic Fatalities by State. 2022 Preliminary data (January-December). <https://www.ghsa.org/resources/Pedestrians23>. Accessed 2/12/2024.

4. Runner Safety Tips. <https://www.rrca.org/education/for-runners/runner-safety-tips/>. Accessed 1/18/24.
5. AAOS. *Tips for a Safe Running Program*. Accessed 1/18/2024.
6. NFHS. Tips for Safer Running Along the Roadside. <https://www.nfhs.org/articles/tips-for-safer-running-along-the-roadside/#>. Accessed 1/18/2024.
7. NFHS. *2022-23 High School Athletics Participation Survey*. [https://www.nfhs.org/media/7212351/2022-23\\_participation\\_survey.pdf](https://www.nfhs.org/media/7212351/2022-23_participation_survey.pdf). Accessed 4/21/2024.
8. National Highway Traffic Safety Administration. National Center for Statistics and Analysis. US Department of Transportation. Traffic Safety Facts. *Pedestrians* 2017.

**April 2024**

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