



1. Make sure the athlete is physically and mentally in the game: Parents, with assistance from coaches, should determine whether their children are physically and psychologically conditioned for the sport/activity level they're playing. Do not push children into something they do not want to do. Additionally, if an athlete has been injured and is returning to the sport, they must have the right mindset and confidence to return to play and avoid repeat injury.
2. Get a pre-participation exam: All athletes should have a pre-participation exam to determine their readiness to play and uncover any condition that may limit participation.
3. Follow a team approach to care: In the case of injury, find out who will provide care and ask to review their credentials. For example, many schools and sports teams rely on athletic trainers or parents with medical and first aid training and certification to keep kids safe. Yet less than half of high schools have access to athletic trainers.
4. Beat the heat: Acclimatize athletes to warm weather activities over 14 days. The goal is to increase exercise heat tolerance and enhance the ability to exercise safely and effectively. Should heat illness occur, cool first and transport second: immediate cold water immersion is critical to rapidly reducing the athlete's temperature. Determine core body temperature to assess the athlete's condition.
5. Use your head: Athletes should be encouraged to speak up if they suffer any related symptoms (dizziness, loss of memory, fatigue). Concussions must be carefully managed using follow-up assessments of symptoms, neurocognitive function, and balance before initiating a gradual return to play. Should a more severe brain injury occur, the medical staff should be prepared to transport the athlete to a facility while ensuring adequate ventilation and elevating the head to decrease intracranial pressure.
6. Maintain Heart Health: Recognition is vital to treatment: sudden cardiac arrest should be suspected in any athlete who has collapsed and is unresponsive. Public access to early defibrillation is essential: a goal of less than 3-5 minutes from collapse to delivery of the first shock from an automated external defibrillator (AED) is strongly recommended. Most schools now have AEDs. Ensure that the medical expert and other personnel know where they are located, how to use them, and that they are placed on the sidelines during competitions and games.
7. Share an athlete's medical history: Parents should complete an emergency medical authorization form, providing parent contact information and permission for emergency medical care for the student-athletes. Check with your school/league to obtain the form.
8. Ensure equipment is in working order: Ensure all equipment ranging from field goals, basketball flooring, gymnastics apparatus, and field turf are in safe working order. This also includes emergency medical equipment such as spine boards, splint devices, and AEDs (which should be checked once per month; batteries and pads need consistent monitoring and replacing). For example, all it takes is a slip on a wet surface or an ankle twist on an ungroomed field to lead to lower extremity injuries, among others.
9. Ascertain coaches' qualifications: A background check should always be performed on coaches and volunteers:
  - Coaches should have background and knowledge in the sport they are coaching. In addition, they should be credentialed if that is a requirement in the state, conference, or league.
  - Coaches should have cardiopulmonary resuscitation (CPR), AED, and first aid training.
  - Coaches should strictly enforce the rules of the sport and have a plan for dealing with emergencies.
  - Ensure appropriate credentials for coaching from the respective sport governing body.
10. Check that locker rooms, gyms, and shower surfaces are clean: With MRSA and related bacterial, viral, and fungal skin infections reported in recent years, it is critical to keep these surfaces routinely cleaned and



checked for germs. Athletes must be discouraged from sharing towels, athletic gear, water bottles, disposable razors, and hair clippers. All clothing and equipment, including bags, should be laundered and disinfected daily.

11. Be smart about sickle cell trait: All newborns are tested at birth for this inherited condition, which should be shared during a pre-participation exam. Red blood cells can sickle during intense exertion, blocking blood vessels and posing a grave risk for athletes with the sickle cell trait. Screening and simple precautions may prevent deaths and help athletes with sickle cell traits thrive in their chosen sport. Know the signs and symptoms (fatigue or shortness of breath) to differentiate this condition from other causes of the collapse.
12. Ensure an emergency action plan is in place: Every team should have a written emergency action plan reviewed by the athletic trainer or local Emergency Medical Service. Individual assignments and emergency equipment need to be included in the emergency action plan. If the school or sports league does not employ an athletic trainer, qualified individuals need to render care.
13. Adopt a “Time Out” system: Each health care team should take a “Time Out” before athletic events to ensure emergency action plans are reviewed and in place. Determine each person's role; communication coordination; the presence of ambulance; designated hospital; test of all emergency equipment; issues that could impact the plan, such as weather or other considerations.
14. Build in recovery time: Allow the body to rest and rejuvenate between practices, games, and seasons. “Recovery time is essential,” says Cooper. “Without rest and a change of motion and activity, we put young athletes at risk of repetitive or chronic injury.”
15. Breathe easier: Athletes with asthma should be properly educated about their condition, appropriate medications, use of inhaler equipment, and how to recognize “good or bad” breathing days to prevent exacerbations. In addition, a warm-up protocol may decrease the risk of asthma or reliance on medications.
16. Stay smart about steroids: The use of anabolic-androgenic steroids can lead to a host of adverse effects on the health and well-being of athletes and non-athletes alike. Be aware of signs and symptoms of misuse, including rapid body mass or increase in performance, excessive muscular growth, abnormal or excessive acne, unexplained hypertension, moodiness, aggression, depression, or obsession with exercise and diet. Report this immediately to the athletic trainer or other school medical professionals.