

In July of 2016 the National Federation of State High School Associations (NFHS) hosted the NFHS Summit on the Essentials for Enhancing Participation, Reducing Injury Risk and Optimizing Performance. Gary Musselman, KSHSAA Executive Director is a member of this task force. The purpose of the meeting was to convene stakeholders from all facets of education based activities and evaluate strategies to improve the activities participation experience and increase participation opportunities for our students. This involves looking at several broad range factors such as the role coaches, parents and administrators play in the overall development of the high school athlete. It also involves looking at factors such as single sport specialization, overuse injury prevention and many other factors which affect the overall participation experience for our students. As indicated in the following document, the focus of education based activities is the DEVELOPMENT OF THE STUDENT, and everyone involved in the education experience plays an important role in this process. The following document summarizes the Essentials Initiative and begins providing strategies for all of us in improving the participation experiences for our students. This document is only the beginning of the Essentials Initiative. This initiative will evolve over time and continually produce more resources to be used in our different roles. We encourage all of you to share this information with all stakeholders in your school community.



THE ESSENTIALS INITIATIVE - Executive Summary

National Federation of State High School Associations (NFHS)
Report from the July 2016 NFHS Summit on the Essentials for Enhancing Participation,
Reducing Injury Risk and Optimizing Performance

There are recognized factors that interfere with enjoyable and sustainable sports participation for many students. Burdensome workouts and competition schedules, often coupled with specialization in a single sport, can place unsustainable demands on the scholastic athlete, leading to preventable injuries, burnout and dropout from sport.

All students, regardless of skill level or future athletic potential, should be provided the opportunity to learn fundamental skills and play sports under a system of individualized, progressive development that makes the experience enjoyable and rewarding. Continued participation at an elite level is the exception, not the rule. In reality, only about 5% of high school athletes compete at the NCAA level, with only a small portion of those athletes receiving "full-ride" scholarships.

The Essentials and Key Action Measures outlined in this document are specific to each stakeholder group (athletes, coaches, parents, athletic administrators and state associations) and built upon currently accepted best practices for setting and working toward the goals of healthy, sustainable and enjoyable sport participation. While the roles and perspectives of parents and coaches are integral to the student athletic experience, the development and participation process must always remain student-centered.

The Essentials format presents bullet-pointed, practical Key Action Measures to allow each stakeholder group to set specific goals and take part in and monitor adoption of the best practices presented. All recommended measures are centered upon optimizing the student's scholastic athletic experience. We realize that these Key Action Measures cannot all be achieved immediately. The hallmark of the Essentials Initiative is that it will evolve – change, develop and expand over time – responding to new data, new technologies, end-user feedback and measured outcomes. This document in no way represents a one-time response and approach to this vitally important and multifaceted topic.

The Essentials Initiative will only succeed with a concerted and widespread effort by the NFHS and its member state associations to deliver and continually reinforce all key components to athletes, coaches, parents, athletic administrators and state association personnel. The message must be consistent and distributed through a variety of media and other communication platforms, while being carefully and specifically targeted to intended audiences. Methods to convey this message and information should include, but not be limited to: educational videos, printed materials, traditional media campaigns and social media. The NFHS Sports Medicine Advisory Committee (SMAC) will also play a key role in implementation, monitoring injury data, and directing further studies and evaluations.

At its very heart, the *Essentials Initiative* enhances what is unique and special about scholastic athletics and, by design, supports the NFHS in fulfilling its Vision and Mission.



THE ESSENTIALS INITIATIVE

National Federation of State High School Associations (NFHS)
Report from the July 2016 NFHS Summit on the Essentials for Enhancing Participation,
Reducing Injury Risk and Optimizing Performance

The National Federation of State High School Associations (NFHS) and its member state associations recognize the numerous benefits of healthy sport participation. **However, there are factors that interfere with enjoyable and sustainable participation for many students.**Burdensome workouts and competition schedules, often coupled with specialization in a single sport, **can place unsustainable physiologic, psychologic and social demands on the scholastic athlete, leading to preventable injuries, burnout and dropout from sport.**

In contrast, for many others (especially those with limited sports experience), there are too few opportunities to participate in athletics. In these cases, it would be beneficial **to provide students the opportunity to learn fundamental skills and play sports** under a system of individualized, progressive development that makes the experience enjoyable and rewarding.

The scholastic athletic experience must always be viewed as an evolving and unpredictable continuum. Despite what is commonly believed, truly elite (realistic possibility for high-level collegiate, professional or Olympic participation) athletic ability cannot be accurately identified at a young age. Conversely, seemingly average or poor athletic ability at a young age does not eliminate the chance for future athletic prowess. Either way, early success or struggle is not predictive of future performance, engagement or enjoyment in sport.

Many young athletes and their parents find themselves caught up in a storm of initial success at the youth level followed by invitations to travel teams, "Olympic development" programs, and the lure of potential college scholarships. However, future participation at the elite level is the exception, not the rule. In reality, only about 5% of high school athletes compete at the National Collegiate Athletic Association (NCAA) level, with only a small percentage of those athletes receiving "full-ride" scholarships.

This document is not intended to squelch dreams of achieving a college scholarship or professional or Olympic glory. The emphasis is to address each student's entire scholastic athletic experience with the goals of enhancing participation, reducing injury risk and optimizing performance and athletic success (however defined) during the student's high school career. The ultimate goal: Producing an individual who is competent, confident, connected to his or her peer group and community, and of high character. This essential principle is at the core of the scholastic athletic experience and is fundamental to the NFHS Mission.

Whether an athlete is seen as potentially "elite" or is participating in competitive sports for the first time, it is vital that the sport is taught, and athlete given the chance to develop, holistically and progressively in a manner that minimizes injury risk. While the roles and perspectives of parents and coaches are integral to a young athlete's experience, the athletic development and sport participation process must always remain student-centered.

The Essentials and Key Action Measures outlined in this document are built upon currently accepted best practices for setting and working toward realistic and achievable goals of healthy, sustainable and enjoyable sport participation. These goals must be buttressed by regular and sufficient recovery and rest, while emphasizing and establishing a foundation of fitness and movement, sport readiness and resilience, sound nutrition, and intrinsic motivation to maintain participation and optimize development and performance.

We also recognize threats to health, sustainability, performance and enjoyment, including lack of readiness, physical fatigue and injury. Other contributing factors that undermine the sport experience include: insufficient sleep and recovery, physical overload and overuse, excessive training/competition, poor nutrition, disordered eating, inappropriate supplement use, unsustainable psychological stress and loss of enjoyment of sport, external pressure to succeed, and ineffective or counterproductive coaching. **These threats must be specifically and effectively addressed**.

There has recently been much discussion in the medical literature and media regarding "early single-sport specialization" in youth sports and the need to encourage students to participate in multiple sports. Preliminary research suggests that "specialized" youth and high school athletes are at increased injury risk compared to their multi-sport classmates. However, we must realize that athletes can still be injured in the multi-sport setting, if they are overworked – that is, the physical and/or psychological demands and expectations are unhealthy and unsustainable.

For example, a student participating in track and field while simultaneously participating in daily practices and competitions for her club soccer team is clearly at risk for both physical and mental overload. Even if multi-sport athletes are appropriately limited to a single sport and team per season, inappropriate training, competition and practice schedules may lead to overload/overuse-related injuries. Conversely, students **may be safely ushered through single-sport specialization** with appropriate activity progression, diversity and variability in training and competition, and sufficient rest and recovery. Additional benefits will come from a concomitant focus on holistic, long-term athletic development and appropriate and timely participation in free play and noncompetitive sport and activity.

The Essentials and Key Action Measures are specific to each stakeholder group; but many points are similar, as all are centered on optimizing the student's scholastic athletic experience. We realize that these Action Measures cannot all be achieved immediately. The hallmark of the Essentials Initiative is that it will evolve – change, develop and expand over time – responding to new data, new technologies, end-user feedback and measured outcomes. This document in no way represents a one-time response and approach to this vitally important and multifaceted topic.

A CALL TO ACTION

The Essentials Initiative will only succeed with a concerted and widespread effort by the NFHS and its member state associations to deliver and continually reinforce all key components to athletic administrators, coaches, parents and students. The message must be consistent and distributed by a variety of media and other communication platforms, while being carefully and specifically targeted to the intended audiences. Methods to convey this message and information should include, but not be limited to: educational videos, printed materials, traditional media campaigns and social media.

While the initial introduction of the Essentials Initiative may involve a more concentrated media exposure, the NFHS and its member state associations must be prepared to commit to a sustained and variable engagement of all intended audiences. The participants of the Essentials Summit call upon the NFHS leadership, NFHS staff and NFHS Board of Directors to consider the following:

- Deliver the Essentials of this student-centered model to all pertinent stakeholders.
- Develop, distribute and promote the "Essential Privileges and Responsibilities of the Scholastic Athlete" via posters, handouts, websites and social media.
- Produce educational materials by NFHS and NFHS Sports Medicine Advisory Committee (SMAC) (e.g., A Coach's Guide to the Essentials for Enhancing Participation, Reducing Injury Risk and Optimizing Performance and a related video course to highlight key tenets of the Essentials Initiative; A Parent's Guide to the Essentials for Enhancing Participation, Reducing Injury Risk and Optimizing Performance and related video.).
- Work with athletic administrators through the National Interscholastic Athletic Administrators Association (NIAAA) to encourage adoption and distribution of the Essentials Initiative and its principles.
- Support ongoing evaluation of the performance of the Essentials Initiative in achieving its stated goals.

Essentials for Athletes

The individual athlete is at the center of the scholastic sports experience and enjoys many privileges and bears much responsibility. The foremost privilege is that the athlete is empowered to take greater individual control of the sport experience as he or she matures. The parent-athlete relationship, as well as the coach-athlete relationship, should also evolve over time, as the athlete moves through adolescence and into young adulthood.

Maturing athletes must begin to take control of their health and appreciate the importance of always getting proper amounts of sleep, and maintaining a nutritious, well-balanced diet with adequate energy intake. This also includes promptly reporting injuries and recognizing the importance of discontinuing participation (conditioning, practice and competition) when needed to allow full recovery, without pressure from parents or coaches, as well as participating in prescribed physical therapy when injured. Athletes must also have respect for themselves, their teammates, coaches, opponents and the sport itself, as well as their school and community.

Key Action Measures for Athletes:

• Each day, be responsible for getting enough sleep, eating well and maintaining adequate hydration.

- Promptly report all injuries (or symptoms of evolving injury, such as increasing physical pain or discomfort); and recognize that during injury recovery, limited or modified conditioning, practice or play is often essential to enhance recovery, prevent further injury, and remain in the game and on-track for long-term athletic and sport success.
- Consistently demonstrate respect for self as a person and athlete, as well as to teammates, opponents, coaches, officials and to the sport itself by learning and following the rules of the game.
- Recognize the commitment to teammates and coaches. Participation on multiple teams
 (same or different sport) during a season may affect the athlete's ability to meet scholastic
 sport commitment and play at an optimal and healthy level for the school team, and it may
 also increase the risk of injury.

Essentials for Coaches

We recognize the essential and influential role played by coaches at all levels of athletic participation. We also fully acknowledge the outstanding contributions of thousands of youth and high school coaches. The need to optimize coaching quality through educational initiatives should be seen not as a criticism of coaches in general, but a drive to instill and reinforce fundamental best practices consistently across the nation.

Foundation. Prior to beginning sports participation, it is essential that athletes have a sufficient foundation of fitness, functional biomechanics related to movement, general athleticism, and physical and psychological resilience to support the expectations and demands of sport training and competition.

Life Balance. Training and competition schedules must also be deliberately and appropriately balanced with school, family and social commitments.

Pre-season Conditioning. It is paramount that coaches carefully review practice and competition schedules prior to the beginning of the season and decide upon realistic goals for pre-season conditioning. The conditioning process generally takes at least 3-4 weeks for athletes to *begin* to realize measurable improvements in fitness. Increasing the pre-season workload in an attempt to accelerate "getting into shape" often leads to undue fatigue and greater injury risk. Injuries may also be minimized through a limited progression of activity at the beginning of a sport season (e.g., no more than a 10% increase in activity per week). It is also vital, when applicable, to consider and implement effective heat acclimatization progressions and accommodations in this process.

Sport Training. Sport training should be variable and diverse, while being guided by a long-term process of progressive, individualized athletic and character development enhanced by proper recovery, rest, and sound nutrition. Ideally, such a program of appropriate development progression will encourage sustained sport engagement and lay the foundation and desire for a lifetime of healthy physical activity and fitness.

Rest and Recovery. Adequate rest and recovery between training, conditioning and practice activities (e.g., sets, drills and other bouts of exercise) and sessions, as well as competitions, is vital in maintaining optimal performance and minimizing injury risk. Coaches should also ensure that their athletes have at least one day away from all sports practices, conditioning sessions and competitions each week.

Individual Variation. Notably, there is an individual and variable response for each athlete when exposed to the same training and conditioning program. Clearly, repetitive training and skill development are needed for advancing athletic and sport achievement. However, appropriate and regular variation in training and development activities is essential for optimal, healthy and sustainable individual sport engagement and performance. In contrast, a sustained lack of variation can increase the risk of overuse, overtraining, injury, burnout and poor performance.

Periods of Vulnerability. More does not always mean better, especially at times when student-athletes are particularly vulnerable to injury. An excellent example is the transition from middle school to high school – a time fraught with a significant increase in injury risk as athletes are often compromised physically and physiologically (e.g., bones are at their weakest at a time of rapid growth). Corresponding risk factors include an increase in training volume and intensity that they are not prepared for or able to safely tolerate, as well as emotional stress, owing to an often difficult social transition into high school.

Evolving Injury Recognition. High intensity, high volume and "peak" performance cannot be maintained indefinitely. Coaches need to recognize the warning signs indicating when "training" becomes "straining." It is vital that coaches respond *promptly* to those early, reliable indicators of evolving athletic overload, overuse or apparent injury. For example, when an athlete complains of pain or undue soreness after (and certainly before) activity, or when an athlete seems to be uncharacteristically fatigued, disengaged and/or performing poorly, it is an excellent opportunity and time to stop, examine why and take appropriate corrective action.

Modeling Behavior and Mentoring. Coaches should be empowered in their role as educators. Coaches, through their behaviors, can promote valuable personal assets (e.g., confidence, relationships with others, character) that can impact young athletes' personal and social development. They teach their athletes, staff and parents throughout their coaching careers. Coaches should also be encouraged to engage regularly in self-reflection and responsible mentoring relationships to reinforce and pass along a standard of coaching experience and excellence.

Key Action Measures for Coaches:

- Take advantage of recognized coaching education programs (e.g., NFHS Learning Center) and seminars; and consider becoming an Accredited Interscholastic Coach (AIC) or Certified Interscholastic Coach (CIC) as part of professional development.
- Recognize and embrace the coach's role as educator, especially for those coaches who
 are not teachers. Properly educating athletes on character and healthy athletic
 development will pay dividends for young athletes during and after high school.
- Appreciate and accommodate the concept of athletic readiness and initiate foundational athletic development activities accordingly.
- Prepare and implement a progressive, individualized and variable plan to effectively progress each athlete through the pre-season and season.
- Recognize and accommodate for periods of notable vulnerability to injury.
- Recognize signs of evolving athletic overload, overuse or apparent injury.
- Schedule practices and conditioning sessions to allow for proper rest and recovery.
- Embrace and further develop relationships with the school nurse and athletic trainer, when available, to communicate and work collaboratively in enhancing the health of each student-athlete.

Essentials for Parents

Parents play a vital role in the development of the youth athlete and should evolve over time, initially leading and guiding (and often coaching) their children through youth sports, and then transitioning into what is ideally just a supportive role throughout high school. Parents must also fully embrace the necessity of letting children own their athletic experiences.

Again, the athlete is the focus of the scholastic sports experience and the experience will be on an evolving and unpredictable continuum. Parents must also be patiently supportive, accepting that athletic development, achievement and success unfold uniquely for each child, and an elite status is typically, if at all, revealed over time. Parents should also realize that success as measured by awards and scholarships is not guaranteed, and should not be viewed as the only, or even primary, outcome of a "successful" high school athletic career.

Parents can enhance their children's athletic experiences by embracing the best practices as laid out in this document and in *A Parent's Guide to Essentials for Enhancing Participation, Reducing Injury Risk and Optimizing Performance*. Key points related to injury risk for parents include recognizing signs of evolving overload or apparent injury, such as when an athlete complains of pain or undue soreness after or before activity, or when an athlete seems to be uncharacteristically fatigued, disengaged and/or performing poorly (in sport or academically). Parents should insist that their child has at least one day away from sports practice, conditioning sessions or competition every week. Parents should also be mindful that a limited progression of activity at the beginning of a sport season (e.g., no more than 10% increase in activity per week) can reduce injury risk and assist in more optimal athletic development.

Parents must also appreciate the influence of their behavior during athletic events and when interacting with coaches and administrators. Parents who criticize officials and coaches while in the crowd during a game, or privately to their child after the game, directly undermine the authority of those individuals. Such behavior detracts from the athlete's overall sport experience and character development.

Key Action Measures for Parents:

- Read parent-oriented materials made available by NFHS.
- Recognize signs of evolving athletic burnout, boredom, overload, overuse and acute injury.
- Attend Parent Nights at school that focus on healthy athletic participation and injury prevention.
- Embrace and act as a role model for behavior and accountability best practices adopted by coaches, athletic administrators and fellow parents.
- Adapt behaviors to the needs and context of the child sport experience.

Essentials for Athletic Administrators

The athletic administrator plays a key role in championing the Essentials Initiative throughout the school community, as well as seeing that coaches and parents are properly focused on the student-centered developmental model. Athletic administrators can also work with key community stakeholders such as booster clubs, youth sports organizations, and local health care providers and facilities to promote a clear and consistent message on enhancing participation, reducing injury risk and optimizing performance.

The athletic administrator is also responsible for providing educational resources for coaches, parents and athletes. Ultimately, the athletic administrator is responsible for determining if coaches are complying with the Essentials Initiative and must hold them accountable. The athletic administrator can also affect meaningful change through proper scheduling of competitions and practices.

Key Action Measures for Athletic Administrators:

- Consider becoming a Certified Athletic Administrator (CAA) or Certified Master Athletic Administrator (CMAA) through the NIAAA as part of professional development.
- Take advantage of and participate actively in NIAAA meetings and with the membership.
- Deliver the Essentials Initiative message to entire coaching staff.
- Hold Parent Nights at school that focus on healthy athletic participation and injury prevention.
- Develop formal mentorship relationships and encourage coaches to regularly meet with fellow staff members as well as other coaches in the community (youth and other schools).
- Require coaches to engage in educational programs on the components of the Essentials Initiative.
- Confirm that each athletic team and venue has an Emergency Action Plan (EAP)
 prominently recognized and in place with clearly defined written and practiced protocols.
 When possible, an athletic trainer should be present at all practices and games.
- Continually assess coaching staff, parents and athletes for compliance with the Essentials Initiative.
- Continually assess the athletic needs of the school for Enhancing Participation, Reducing Injury Risk and Optimizing Performance with a particular focus on:
 - Junior Varsity-2 and Freshman programs
 - "Non-traditional or emerging sports" opportunities

Essentials for State Associations

The state associations are in the unique position to drive the discussion of the Essentials Initiative throughout the state through discussions with athletic administrators, coaches and statewide stakeholders. At its very heart, the Essentials Initiative enhances what is unique and special about scholastic athletics. Sell what you do on a daily basis!

Key Action Measures for State Associations:

- Assemble a menu of opportunities to increase active engagement in the Essentials Initiative by all stakeholders in the state.
- Evaluate current sport participation levels, particularly focusing on multi-sport athletes and attrition from sports over a high school career.
- Distribute and promote related information from the NFHS and other recognized sources to the states through email, My Groups, NFHS Repository, annual meetings and social media.
- Form alliances with other stakeholders at the state level (youth sports associations, school board association, principals' association, coaches' association, athletic trainers' association) to reinforce the Essentials Initiative.
- Open discussion with schools on expanding sub-varsity sports opportunities, "creative scheduling," intramural sport participation and non-traditional and emerging sports.

 Continue to educate parents about the "value-added" rewards of scholastic sport participation.

OUTCOME

NFHS Vision Statement

The National Federation of State High School Associations (NFHS) is the national leader for education-based high school athletics and activities that prepare tomorrow's leaders for the next level of life through innovative programs, healthy participation, achievement and development of positive relationships.

NFHS Mission Statement

The National Federation of State High School Associations (NFHS) serves its members by providing leadership for the administration of education-based high school athletics and activities through the writing of playing rules that emphasize health and safety, educational programs that develop leaders, and administrative support to increase participation opportunities and promote sportsmanship.

In essence, the Essentials Initiative is designed to support the NFHS in fulfilling its Vision and Mission. To meet this end, the NFHS Sports Medicine Advisory Committee (SMAC) will engage selected participants of the Essentials Summit over the coming years to review participation and injury data and to direct further studies and evaluations.

RESOURCES

Bergeron MF, Mountjoy M, Armstrong N, Chia M, Côté J, Emery CA, Faigenbaum A, Hall G Jr, Kriemler S, Léglise M, Malina RM, Pensgaard AM, Sanchez A, Soligard T, Sundgot-Borgen J, van Mechelen W, Weissensteiner JR, Engebretsen L. International Olympic Committee consensus statement on youth athletic development. *British Journal of Sports Medicine*. 2015 Jul;49(13):843-51.

Côté J, Lidor R, Hackfort D. ISSP Position Stand: To sample or to specialise? Seven postulates about youth sport activities that lead to continued participation and elite performance. *International Journal of Sport and Exercise Psychology*. 2009;7(1):7-17

Valovich McLeod TC, Decoster LC, Loud KJ, Micheli LJ, Parker JT, Sandrey MA, White C. National Athletic Trainers' Association position statement: prevention of pediatric overuse injuries. *Journal of Athletic Training*. 2011 Mar-Apr;46(2):206-20.

Approved by the NFHS Essentials Initiative Task Force in September 2016; and Approved by the NFHS Board of Directors in October 2016.

DISCLAIMER - NFHS Position Statements and Guidelines

The NFHS regularly distributes position statements and guidelines to promote public awareness of certain health and safety-related issues. Such information is neither exhaustive nor necessarily applicable to all circumstances or individuals, and is no substitute for consultation with appropriate health-care professionals. Statutes, codes or environmental conditions may be relevant. NFHS position statements and guidelines should be considered in conjunction with other pertinent materials when taking action or planning care. The NFHS reserves the right to rescind or modify any such document at any time.



2016 NFHS Essentials Initiative Task Force

Michael F. Bergeron, PhD, FACSM

Co-Chair of NFHS Task Force

Michael Koester, MD

Co-Chair of NFHS Task Force

John Black

NFHS General Counsel

Bob Colgate

NFHS Director of Sports and Sports Medicine

Cordelia W. Carter, MD

Department of Orthopaedics at Yale University

Lisa Correa

Head Soccer Coach at Bowling Green High School (Bowling Green, KY)

Jean Côté, PhD

Professor and Director at Queens University School of Kinesiology and Health Studies

Bob Gardner

NFHS Executive Director

Bill Heinz, MD

NFHS Sports Medicine Advisory Committee

Ty Jones

IDHSAA Executive Director

Mark Lahr, ATC

Methodist Sports Medicine

Larry Lemak, MD

NFHS Sports Medicine Advisory Committee

Timothy A. McGuine, PhD, ATC

Sports Medicine Program - University of Wisconsin School of Medicine and Public Health

Tamara C. Valovich McLeod, PhD, ATC, FNATA

Professor and Director of Athletic Training Programs at A.T. Still University

Gary Musselman

NFHS President and KSHSAA Executive Director

Karissa Niehoff, EdD

NFHS Board of Directors and CIAC Executive Director

Charla Parrish

Head Softball Coach at Alma High School (Alma, AR)

John Parsons, PhD, ATC

Director of NCAA Sport Science Institute

Paul Pendleton

NIAAA Board of Directors and Athletic Director at Tennessee High School (Bristol, TN)

Andy Pedersen

Head Swimming Coach at Hamilton Southeastern High School (Fishers, IN)

Yvette Rooks, MD, CAQ, FAAFP

Head Team Physician – University of Maryland at College Park

Dan Schuster

NFHS Director of Educational Services

Jerome Singleton

NFHS President Elect and SCHSL Commissioner

Davis Whitfield

NFHS Chief Operating Officer