

## Special Issue: The Role of Youth Sports in the Promotion of Children's Health

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With an unprecedented focus in recent years on the childhood obesity epidemic, there has been a renewed interest in the role of youth sports in the promotion of children's health. Over the last century, youth sport programs have been promoted for keeping kids out of trouble, for building character, for teaching life skills, and for providing children with adult role models in a competitive setting. While these benefits are still important today, children in contemporary America face many of the same health issues once "reserved" for adults. Clinical depression, cardiovascular disease, sleep apnea, Type II diabetes, social isolation, impaired cognitive functioning, high blood pressure, osteoporosis, and other orthopedic problems are threatening the long-term health of millions of children, especially those who are overweight or obese.

Children and adolescents who participate in organized sport, however, often lead much different lives. For one, youth sport programs offer children supervised instruction during the after-school hours of 4-6 pm, when instances of crime, sexual activity, drug use, and car accidents are most committed by or against youth. Participation is also a healthy alternative to the 25-30 weekly hours of "screen time" (television, video game, or computer viewing) the average American child is exposed to. Long-term participation in youth sports results in positive changes in body composition, muscular and skeletal strength, blood pressure, mood, confidence, school attendance, and other behaviors, such as refraining from smoking, drug use, or unwanted pregnancies. All told, the potential of youth sports to increase children's health is extraordinary, and you should be proud of your role in such an effort.

This special issue highlights a few specific ways that youth sports can promote health among children and adolescents. We hope that you are as excited as we are about the many ways that we can improve the quality of life of young children on the fields, courts, tracks, pool, rinks, and gyms nationwide. Thank you for your commitment to this cause!

### Coaches Can Help Prevent Future Melanomas By: Dana N. Rutledge, PhD, RN

Melanoma is a type of skin cancer, and the 6th most common cancer in males and 7th in females. California is one of the five states with the highest predicted incidence of new cases of melanoma. Melanoma is the type of skin cancer that can kill.

What does melanoma have to do with your role as coach? In your sports program, do you have any players who have the following characteristics:

- ✦ Light natural skin color
  - ✦ **Chronic exposure to the sun**
  - ✦ Skin that burns, freckles, gets red easily, or becomes painful in the sun
  - ✦ Blue or green eyes
- Blond or red hair
- Notice that any ONE of these can be a risk factor. While you may have a team of all dark haired, dark skinned soccer players, if those players are out in the sun

for 4 to 6 hours several days a week, particularly in the summer, they may be at risk for melanoma.

Preventing skin cancer, and particularly melanoma, should be on your mind. What can you do? Help your players or participants to prevent skin exposure to sunlight. The risk of developing melanoma cannot be eliminated; however, it can be reduced by minimizing exposure to ultraviolet (UV) radiation from the sun, especially during childhood and adolescent years.

Recommended coach behaviors to help minimize player/participant exposure to damaging sunlight.

1. Be a role model.
  - a. Wear a hat that at least covers your face.
  - b. Wear wraparound sunglasses that are labeled UV-protective (eyes can be damaged by UV exposure).
  - c. Put on sunscreen of at least SPF 30 every hour or two.
2. Have reasonable rules about skin exposure.

- a. No one on the playing field, on the pool deck, etc. unless they have properly (generously) applied waterproof sunscreen of at least SPF 30.

- b. Sunscreen is to be reapplied regularly (after 30 minutes of sweating, after 30 minutes of pool time, etc.).

- c. Hats are to be worn when players/participants are in the sun.

- d. Wrap around sunglasses are to be worn at all times when outdoors on sunny days.

3. Go for the shade when possible. Eliminate activities that occur in direct sunlight when possible.

#### References

- [http://www.aocd.org/skin/dermatologic\\_diseases/sunscreens\\_and\\_tan.html](http://www.aocd.org/skin/dermatologic_diseases/sunscreens_and_tan.html)
- <http://www.cdc.gov/chooseyourcover/skin.htm>
- [http://www.skincheck.com/#Why\\_Do\\_You\\_Need\\_To\\_Know](http://www.skincheck.com/#Why_Do_You_Need_To_Know) and Protecting Your Children

## CDC Fact Sheet

### Play it Safe in the Sun: A Guide for Parents



By: Dana N. Rutledge, PhD, RN

Hey Moms and Dads! Not all sun protection comes in a bottle. There are lots of ways to protect your child's skin all year long.

1. UV rays are most harmful during midday, so it's best to plan indoor activities then. If not, seek shade under a tree, an umbrella or a pop-up tent. Use these options to prevent sunburn, not to seek relief once it's happened.

2. Clothing that covers your child's skin helps protect against UV rays. Although a long-sleeved shirt and long are best, they aren't always practical. A T-shirt, long shorts or a beach cover-up are good choices, but it's wise to double up on protection by applying sunscreen and keeping your child in the shade when possible.

3. Protect your child's eyes from UV rays, which can lead to cataracts later in life. Look for sunglasses that wrap around and block as close to 100% of both UVA and UVB rays as possible.

4. Hats that shade the face, scalp, ears, and neck are easy to use and give great protection. Baseball caps are popular among kids but they don't protect their ears and neck.

5. Use sunscreen with at least SPF 15 and UVA/UVB protection every time your child goes outside.

## A Team Approach to Asthma Prevention

By: Dawn Stone, MN, RN, NP

Topping the list of coaching nightmares must be the athletic emergency! More worrisome than losing the game during play-offs is the athlete with asthma. How to recognize symptoms and prevent attacks while engaged in sports requires a team approach. This special team involves the athlete, coach, parent and health care professional.

Asthma is a condition in which the airways narrow. This constriction of the bronchial tubes, or bronchospasm, may cause wheezing (a whistling sound when exhaling) or shortness of breath especially when it's combined with exposure to cold air, low humidity like during Santa Ana wind conditions or poor air

quality. Symptoms may also include coughing, chest tightness and prolonged recovery time from exercise. Sometimes an athlete may deny these symptoms due to peer pressure, embarrassment or fear of losing their position on the team. Maintaining privacy when expressing concern will go a long way towards developing good communication and trust critical to preventing asthma attacks.

If it is known that an athlete has asthma, start the season by developing a written plan of action involving the youth, parents and the treating health care professional.

First, find out how the athlete normally manages their own attacks. Attacks may be triggered by exposures to freshly

cut grass, pollen, smoke or chemicals. Insecticides, pesticides, herbicides, fertilizers and paint are often used to maintain playing fields. Once you have identified the triggers to your athlete's asthma, determine the best locations and times of day for practice sessions and games. Next list the medications and details of how and when they are to be administered. Finally, include a complete list of emergency telephone numbers including the nearest hospital. Be sure to keep the signed consent forms for treatment and insurance information readily available in your duffle bag.

Equipped with your action plan, encourage your athlete to actively participate and fitness. Cont. on p.3

## Strength Training for Pre-Adolescent Athletes

By: John White, M.S., CSCS

Resistance or strength training programs are encouraged by the American College of Sports Medicine (ACSM), American Academy of Pediatrics (AAP), and the National Strength and Conditioning Association (NSCA). These endorsements come with the understanding that the resistance training programs are appropriately designed and properly supervised for the age, maturation, and developmental levels of the participants.

The benefits of a resistance program for children include improvements in muscular strength, muscular endurance, body composition, injury pre-

vention, and sports performance. Potential psychological benefits include increases in self-confidence and self-image. With children, increases in muscular strength results from neuromuscular adaptations, instead of an increase in muscle size (hypertrophy). Low levels of testosterone in children and appropriate program design emphasizes makes size increases unlikely, but improvements in muscle fiber coordination and recruitment can certainly result in increased strength (30% to 50% increases in strength have been recorded in only eight weeks).

Adults and children should

understand the purpose of resistance training programs as beneficial for improving technique, preventing injury, and improving neuromuscular coordination (which may result in increased speed, strength, and other performance variables). Resistance exercises for children must be sub-maximal and not include high intensity lifts (i.e., lifts to failure, low repetitions). The NSCA recommends 10-15 repetitions per set, and using primarily the child's own body weight as the main form of resistance. Activities like running and jumping, jumping off of boxes, stair climbing, push-ups

Cont. on p.3

## Talking to Athletes About Drug Use in Sport

### Stacy Michael, Drug Control Coordinator USA Swimming

It has become common to read about athletes who have been suspended for positive drug tests. These articles appear in our newspapers on a regular basis and are often noted by the young athletes who admire these individuals. While the increasing number of cases is discouraging, they provide an excellent opportunity for you to educate your young athletes about performance enhancing substances.

I regularly speak to ath-

letes and coaches of all ages. It never ceases to amaze me when a coach of a young athlete says “why are you talking to me about this? It doesn’t apply to my athletes.” I have to refrain from shouting “Yes it does!” The fact that an athlete is not currently subject to drug testing is irrelevant. The importance of fair play, good health habits, and responsibility for one’s actions are lessons to be learned from Doping Control Education.

### Talking to Athletes and Parents About Performance Enhancing Drugs

USA Swimming created an educational program called A.W.A.R.E (Act with Awareness, Responsibility, and Ethics). We encourage athletes to take responsibility for their actions in the area of Doping Control, regardless of whether they are subject to testing. With recent, high profile cases of steroid abuse in

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## Strength Training for Pre-Adolescent Athletes (cont. from p. 2)

(on toes or knees), crunches, squats, lunges, modified pull-ups or flexed arm hangs (simply hanging off the pull-up bar with bent elbows) are all recommended resistance training exercises for children. Resistance training programs should be designed for the purpose of increasing strength, *not* “body building.”

With pre-adolescents, safety is always a major consideration. Safety is often achieved through attention to correct technique. Some technique components that are especially relevant are: (a) maintaining an erect spine (i.e.,

straight back), (b) proper breathing - inhaling and exhaling for each repetition with the exhalation occurring during the working phase, (c) drawing in of the abs (e.g., keeping the “core” of the body stable by tightening the abdominal muscles during the movement, and (d) maintaining a consistent tempo throughout the exercises/ repetitions.

This is not an exhaustive list of things to look for but will provide some guidance in considering a resistance training program for the pre-adolescent athlete. For pre-

adolescents remember that learning proper form and technique will be the foundation for their teenage and adult strength training regimens. Pre-adolescents will benefit by increasing strength through neuromuscular coordination, having fun, and developing an awareness and respect for proper training techniques. Please see the following website for additional guidance in setting up resistance training programs for children: <http://www.nasca-lift.org/Publications/postatements.shtml>

## A Team Approach to Asthma Prevention (cont. from p. 2)

During practices and games be watchful for the following signs and symptoms that may indicate an asthma attack in progress: Breathing so hard that speaking is difficult; using the abdominal muscles to breathe, widened nostrils and pale or blue skin. Immediately activate your action plan if these symptoms are present.

If asthma attacks routinely interrupt practices and games, recommend follow up with a health care professional. You may also make modifications to practice sessions in order to keep your athlete involved as a member of the team. Longer warm-ups and cool-downs; walking instead of running may be helpful in

preventing attacks. Serving as a score keeper, equipment manager or assistant to the coach may also provide meaningful participation on the team. Keep in mind each athlete with asthma will need a different action plan unique to their triggers and symptoms. Planning is the best preparation for a successful season for all!

## Facts to Consider about UV Protection

By: Dana N. Rutledge, PhD, RN

1. The intensity of UV radiation does not depend on temperature. Winter exposure can be as damaging as summer exposure.

2. Reflection of UV radiation from light surfaces such as sand, concrete, snow, and water can worsen skin damage. Because of reflection from sand, beach umbrellas only provide about 50% protection. Hazy or lightly overcast skies offer little or no protection against UV exposure.

3. Being in the water (or wet) does not prevent UV damage to your skin and may even magnify the damage.

4. A typical T-shirt has a UPF (a rating system for clothing similar to SPF) of only 5, not enough to prevent sun damage to your skin.



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## Talking to Athletes About Drug Use in Sport (cont. from p. 3)

### CARYS Mission

Serving primarily Orange County, CARYS has as its mission the promotion of positive and developmentally appropriate sport and physical activity programs for youth populations. The goals of CARYS are based on the understanding that parents, leaders, coaches, and professionals have a responsibility to provide a safe, enjoyable, and developmentally appropriate experience for children and adolescents involved in organized youth sports. The structure of leagues, the training of coaches, and the behavior of adults and spectators ought to be consistent with this responsibility. As such, the mission and goals of CARYS reflect the needs of a community increasingly reliant on sport and physical activity as an important educational tool for healthy children and adolescents.

Professional baseball, young athletes become curious about performance-enhancing drugs and may be confused by the behavior of athletes they see as role models. The scandal may scar professional baseball for years to come, but may provide a wonderful opportunity to address the issue with young athletes, regardless of competitive level.

### Health Issues

Athletes, parents, and coaches should be aware of the health risks associated with the use of a prohibited substance, and over the counter substances. The health risks and common side effects associated with steroid use are severe. Coaches can download a list from the National Institute of Drug Abuse at [www.steroidabuse.org](http://www.steroidabuse.org) to share with their athletes. It is easy to pretend that young athletes are not exposed to steroids or have the ability to obtain, but in reality they hear things in the locker room and read about them on the internet.

It is not just steroids that are a health risk to athletes. The supplement industry is not strictly regulated by the Food and Drug Administration, which means that athletes may be ingesting ingredients in their supplements that are not clearly indicated on the label. There have been cases of positive drug tests caused by basic supplements being contaminated with steroid precursors. Those athletes were sanctioned and suspended from their sport because they were responsible for the consumption. While this is a risk in the area of Doping Control, it is also a health risk. If an athlete is consuming something that is not clearly listed on the label, what are the long term effects? Does the ingredient have an adverse reaction to a medication the athlete is taking? These health risks are very real and important for athletes, their parents and their coaches to be aware of. Another critical concern surrounding the use of supplements is the fact that many supplements have had no long term studies done on their effects. Ten years from now a commonly used supple-

ment could be associated with disease or health consequences.

### Ethics: The Decisions You Make Impact More Than Yourself

It often hits close to home when you explain to an athlete that he/she is not only letting himself down by doping, but also the people who surround him/her. If an athlete competes on a relay and tests positive, the entire relay is disqualified. In team sports, the entire team may be disqualified if one of their athletes fails a drug test. Coaches of athletes who are suspended for positive tests are scrutinized. Parents are upset and embarrassed when their son or daughter is the subject of an article in the paper. Teammates are disappointed and their successes questioned. If one cheated, surely others did. It's a ripple effect that touches many people.

### Your Resources

Tell your athletes NOW how to find out if something they take or plan to take is prohibited. Check any medication at the United States Anti-Doping Agency (USADA) website [www.usantidoping.org/dro](http://www.usantidoping.org/dro). The site includes (but is not limited to) cold and acne medications, birth control pills, ear drops, eye drops, nasal sprays, topical creams, ADD medications, inhalers, over the counter and prescription medications. Athletes may be surprised to see what is prohibited in competition.

USADA also provides an ethics module that helps young athletes to understand how to make ethical choices [www.usantidoping.org](http://www.usantidoping.org).

### Resources

United States Anti-Doping Agency 2004  
Guide to Prohibited Substances

World Anti-Doping Code 2003 [www.wada-ama.org](http://www.wada-ama.org)

National Institute on Drug Abuse  
[www.steroidabuse.org](http://www.steroidabuse.org)

USA Swimming Doping Control Education:  
[www.usaswimming.org](http://www.usaswimming.org)