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InMotion

SUMMER 2010

Be Smart About Sun Protection

by Daniel Solomon, MD

As we slide from spring into summer, be sun-smart. Use shade, clothing, hats and sunscreen to keep from getting overexposed to the sun's potentially harmful rays. Experts suggest that four out of every five cases of skin cancer are avoidable. Some interesting tips to help protect your skin:

- As few as five sunburns will increase your risk of skin cancer.
- Ultraviolet (UV) rays are the strongest midday. Try to avoid prolonged exposure between 10am and 3pm. Sun exposure for as short as 15 minutes can be harmful.
- Use shade – but be aware that it filters and does not completely block exposure. Water sand, concrete, snow and other similar surfaces reflect light and can add to the sun's direct effect. Hats can be very helpful to provide increased shade. For best benefit, use a wide-brim hat to add to ear and nose protection.
- Don't forget the shades. Sunglasses with UV-A and UV-B protection can help protect your eyes from too much sun exposure which can potentially lead to cataracts.
- Avoid tanning salons. Adding excess UV exposure damages your skin and unprotected eyes.
- Use sunscreen with an SPF of 15 or greater. It should be reapplied every two hours if you are working or exercising outdoors or are swimming or doing watersports.

Source: Centers for Disease Control and Prevention. Guidelines for school programs to prevent skin cancer. (<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5104a1.htm>) MMWR 2002;51(No. RR-4):1-16.

Bike Helmets Save Lives

By Brian Wolf, MD

Bicycle riding for recreational and transportation purposes is very popular. Unfortunately, bicyclists are at risk for serious injuries if an accident happens. Even at low speeds a bicycle accident or fall from a bike can have devastating consequences. This is especially true for children and young people. It is estimated that 700 people die annually from bicycle accidents and 75 percent of those deaths are due to head injuries.

The use of bicycle helmets has greatly reduced the number of severe injuries to bicycle riders. The stiff foam of helmets lessens that sharp impact to the head from most bike accidents. It has been estimated that 90% of fatal bicycle injuries occurred in riders that were not wearing a helmet. Research also has shown that helmets decrease the risk of head and brain injury by 60-88% and decrease risk for upper face injuries by approximately 70%.

Helmets are protective not only for getting hit by a car but for all kinds of bicycle accidents.

It is important to remember to ALWAYS wear a helmet no matter how far you are going. The helmet should fit comfortably and touch the head on all sides. It should be snug enough to stay on the head without sliding around more than 1 inch in any direction, and have a secure strap. White or other bright colors can help car drivers see bike riders, especially children. Reflective material can be added to helmets for those that ride at nighttime. If a helmet is cracked, dented or broken it should be replaced.

If you'd like more information on bicycle injury prevention, please send an e-mail to inmotion@aossm.org and put cycling in the subject line.



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Summer Time Fun in the Water Doesn't Come Without Hazards

by Kenneth Fine, MD

Swimming pools, oceans, lakes and the like are familiar and enjoyable outlets for swimming and other recreational activities. However, there are dangers about which we must be aware and precautions which must be taken. Six thousand people drown each year in the United States and many more are permanently disabled from near-drownings. Two thirds of these victims never intended to be in the water. The danger of water is especially scary in young people, as drowning is the second leading cause of death from injury in children under 14 years old.

Drowning can occur in as little as two minutes. As such, there are some rules that apply to all forms of water recreation, including boating, water skiing, personal water craft, surfing, sail boarding, SCUBA diving, snorkeling, bathing, and swimming. These rules even apply to small collections of water around the house such as bathtubs, and include:

- Individuals should never be in or near water alone. For children, there should always be adult supervision and for adults, there should always be at least one additional adult present.



“Drowning can occur in as little as two minutes. As such, there are some rules that apply to all forms of water recreation...”

- All individuals, regardless of whether they plan to engage in swimming as a recreational activity, should learn basic swimming skills.
- While swimming or engaging in water activities, individuals should be aware of environmental conditions. This includes weather, distance from shallow water or shore and not overestimating your own swimming ability or that of your child.
- Have the proper rescue and safety equipment available such as personal flotation devices (PFD's); know and practice rescue and emergency

procedures. Because water conducts electricity all swimmers should immediately exit water when there is any lightning or thunder, even if it seems distant. Ideally, adults responsible for supervision in water environments should be trained in CPR.

- Avoid alcohol when participating in water sports or water recreation. Studies show that a large percentage of drownings are related to alcohol, especially in young males.

Water is a familiar source of fun and recreation and it can also be a great medium in which to exercise. By adopting proper safety procedures, water can be an enjoyable activity for adults and children.

For more information on water safety and additional resources visit <http://www.aap.org/healthtopics/watersafety.com>

Athletes No Match for Lightning

By Robert Gallo, MD.



Lightning represents a significant risk to outdoor athletes. Lightning-related deaths are the third most common among weather-related deaths and account for between 50 and 300 deaths per year in the United States. In order to ensure safety during a lightning storm, the National Athletic Trainers' Association has issued a series of recommendations:

- Under no circumstances should athletes be allowed to practice outdoors during active lightning storms.
- The "30-30 rule" is a useful guide to direct suspension and resumption of play during lightning activity:
 - Play should be halted whenever the time lightning is seen to the time thunder is heard is less than 30 seconds. At this "flash-to-bang time," lightning is within six miles.
 - Play should not resume until at least 30 minutes after the last sound of thunder or flash of lightning.

- During a thunderstorm, shelter should be sought within a substantial building. Buildings with electric and telephone wiring and plumbing are ideal because these pathways assist in grounding the building. If a building is not available, a hard-topped automobile with the windows closed is the next best option. To prevent injury from conduction of the electric current, no part of the metal framework should be touched during the lightning storm.
- If caught in a thunderstorm, avoid contact with the tallest object in an open field or any body of water. The safest position to assume is a crouched position with the feet close together and weight entirely on the balls of the feet.

In addition to strict adherence to these recommendations, each team and/or league should have a designated weather-watcher and protocol to direct stopping and resumption of play and identifying "safe locations" at each facility.

Sources:

- Walsh KM, Bennett B, Cooper MA, Holle RL, Kithil R, Lopez RE. National Athletic Trainers' Association Position Statement: Lightning safety for athletics and recreation. *J Athletic Training* 2000;35:471-477.
- Whitcombe D, Martinez JA, Daberkow D. Lightning injuries. *Southern Medical J* 2002;95:1331-1334.

CORRECTION: In the Spring issue of *In Motion*, the x-ray in the stress fracture article did not illustrate a stress fracture. We are sorry for the error.





About AOSSM and *In Motion*

As a world leader in sports medicine education, the American Orthopaedic Society for Sports Medicine (AOSSM) is pleased to provide you with this complimentary copy of *In Motion: Active Living for All Ages*. We have designed the publication to highlight relevant information for multiple age groups from exercise and rehabilitation to nutrition and psychology.

This important educational tool is published quarterly and can be purchased in bulk for a nominal fee for distribution in waiting rooms and other public areas. **If you purchase 50 or more copies of any three issues (Spring, Summer, Fall, Winter) you'll get the fourth set of issues free!**

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Planning Ahead Before You Hike, Prevents Injuries

By Richard Hinton, MD



Hiking is a great way to explore the outdoors, breathe some fresh air and vary your exercise routine. But a day of hiking can turn into an unwanted adventure or trip to the emergency room if you do not plan ahead. Following a few simple rules for safety can help prevent injury:

- Map out your destination and begin with a short hike.
- Never hike alone and check in with the park ranger when possible, sticking to your planned itinerary. Trail maps are often available and a great resource for distance, terrain, elevation, trail markers and types of nature you may encounter.
- Always check the weather report before your hike.
- Know the animals, insects and plants indigenous to your surroundings to avoid bites, stings, or rashes as you enjoy nature.
- Prepare a first aid kit that will provide immediate attention to sunburn, bug bites, blisters, poison plants, or injuries due to slips or falls.

- Wear well worn hiking boots or supportive shoes that have been broken in weeks prior. Socks should be made of wick moisture to keep feet dry.
- A lightweight backpack should contain sunscreen, water, sports drinks, salty food, snacks, a small whistle, compass, and a flashlight.
- Layer your clothing and wear a hat to shield your head and face from the sun.
- Keep an efficient pace. You should be able to talk and hike at the same time. A good rule of thumb is to cover one to two miles per hour.
- Know the signs of exhaustion, dehydration, altitude sickness and how to treat these.
- Take time to rest and replenish your body with fluid and food. Drink 8 to 12 ounces of fluid per hour.
- Know your physical abilities and those of the people hiking with you.
- Hike sober – alcohol and drugs can change your reaction time and cause injury.

Advanced preparation is the key to an enjoyable hike. Be aware of your surroundings at all times, the terrain you are hiking, changes in weather, and your overall condition and energy level while hiking and seek medical attention when necessary.