



# Health & Safety Tips

FOR YOUR SUMMER VACATION



AMERICAN COUNCIL ON SCIENCE AND HEALTH

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ACSH PRESENTS

# Health & Safety Tips

## FOR YOUR SUMMER VACATION

Revised for The American Council on Science and Health  
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Whether you are traveling around the world or relaxing at home, a safe, healthy vacation will add to your enjoyment.

Here are some health and safety tips to keep in mind when planning your summer vacation.

## The Darker Side of the Sun

**S**unbathing is a favorite summer activity, but if you plan to soak up some rays, do so with caution. Why be wary of acquiring a tan? First, sunburn may ruin your vacation. In addition, it is now thought that the long-term effect of severe sunburn may be an increased likelihood of various types of skin cancer.

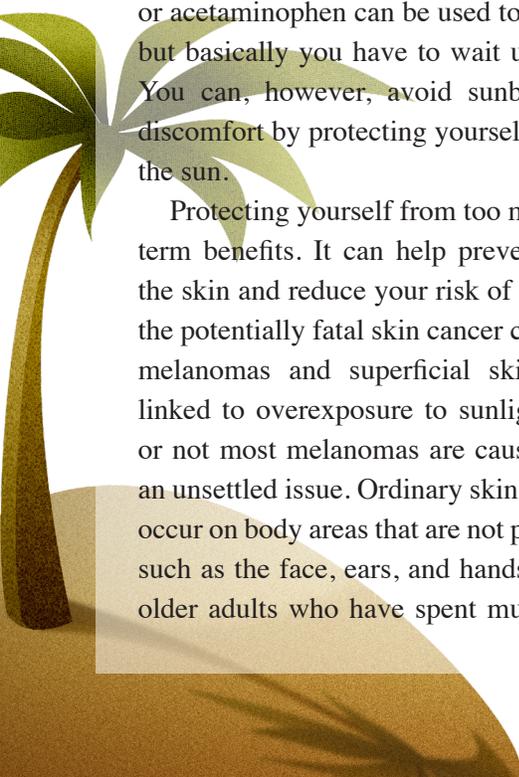
It is far better to prevent sunburn than to deal with it after the fact. There is relatively little that you can do for sunburn; cold compresses or cool baths may relieve discomfort. A steroid-containing prescription lotion or a 1% hydrocortisone cream may also be beneficial. Aspirin or acetaminophen can be used to reduce fever and pain, but basically you have to wait until the burn subsides. You can, however, avoid sunburn and the resulting discomfort by protecting yourself from overexposure to the sun.

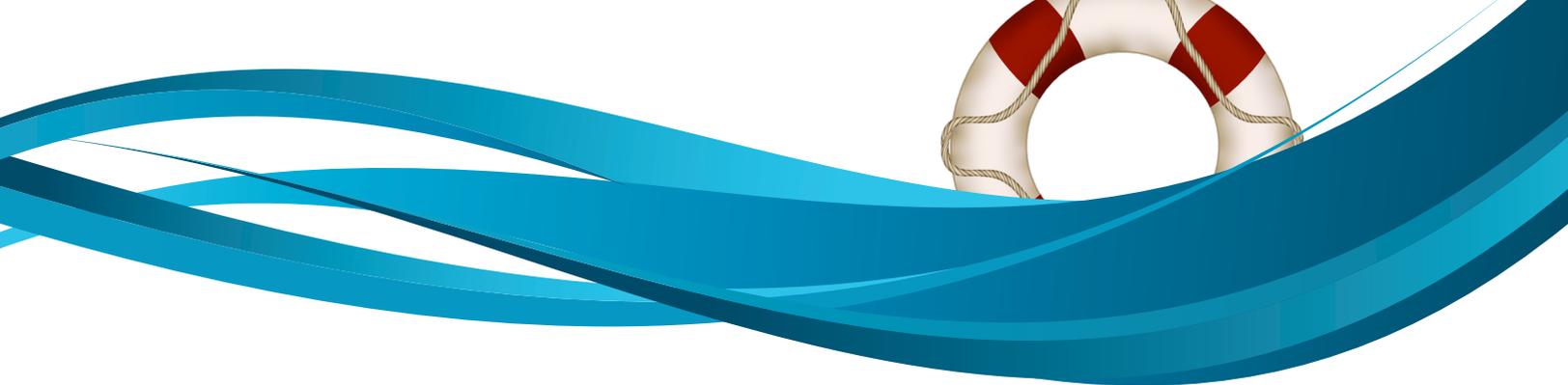
Protecting yourself from too much sun also has long-term benefits. It can help prevent premature aging of the skin and reduce your risk of skin cancers, including the potentially fatal skin cancer called melanoma. Some melanomas and superficial skin cancers have been linked to overexposure to sunlight—although whether or not most melanomas are caused by sun exposure is an unsettled issue. Ordinary skin cancers, which usually occur on body areas that are not protected from sunlight, such as the face, ears, and hands, are most common in older adults who have spent much time outdoors over

many years. Some types of melanoma, however, occur on body areas that are exposed to the sun only occasionally, such as the trunk and legs, and may be associated with a history of intermittent but intense sun exposures early in life—the kind of exposure that many people experience on vacation. Thus, it pays to be particularly vigilant about children’s sun exposure.

To reduce your risk of cancer, as well as prevent sunburn, remember that moderation is the key to sun exposure—along with some well-planned protection against the sun’s ultraviolet rays. Two types of ultraviolet (UV) radiation—UV A and UV B— are the components of sunlight that damage the skin. The UV B radiation is responsible for the burning effects of sunlight and contributes to cellular changes in skin that can lead to cancer. UV A, which once was thought to be harmless tanning rays, now is also implicated in the development of skin cancer.

Buy a good sunscreen and do not forget to use it. If your skin is sensitive to the sun, it is particularly important to seek out products with high SPF (Sun Protection Factor) ratings. SPF ratings are multipliers of the skin’s exposure time before burning. For example, an SPF of 5 means that a person can stay in the sunlight without burning five times longer than he could without sunscreen. Keep in mind that the SPF rating system was developed to protect against sunburn—typically caused





by UV B radiation. There is no rating system yet for UV A. Thus, by using a sunscreen that protects against only UV B one may increase his exposure to UVA. However, it is possible now to find so-called broad spectrum sunscreens that protect against both UV A and UV B. Look for products that contain ingredients like benzophenone, oxybenzone, sulisobenzene, titanium dioxide, zinc oxide, and avobenzone; these also offer protection against UV A radiation.

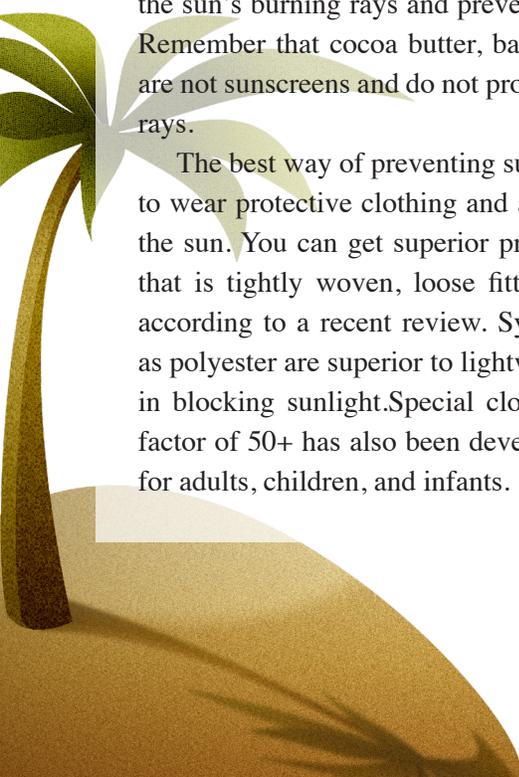
An SPF rating of 15 or above is recommended. The sunscreen should be applied 15 to 30 minutes before going outdoors, and reapplied after swimming or engaging in vigorous physical activity. Even if your skin is less sensitive, you should bring a high SPF sunscreen with you on vacation for use when outdoor activities keep you in the sun for long periods of time. Once you have reached your personal sun exposure limit, switch from your usual product to one that gives you maximum protection, that is, a sunblock. These products typically contain compounds like titanium dioxide and/or zinc oxide, which provide a physical block to the sun's rays, while the other, chemical sunscreens absorb the sun's burning rays and prevent it affecting the skin. Remember that cocoa butter, baby oil, and mineral oil are not sunscreens and do not protect you from the sun's rays.

The best way of preventing sun damage, however, is to wear protective clothing and a hat if you must be in the sun. You can get superior protection from clothing that is tightly woven, loose fitting, and dark-colored, according to a recent review. Synthetic materials such as polyester are superior to lightweight linen and cotton in blocking sunlight. Special clothing that has an SPF factor of 50+ has also been developed, and is available for adults, children, and infants.

Tune in to your local weather channel to get advance notice of how intense the sun will be in your area with the UV index. The National Weather Service, in conjunction with the Environmental Protection Agency (EPA) and the Centers for Disease Control and Prevention (CDC) developed this index. Essentially, the UV Index takes into account the time of year, latitude, altitude and forecasted amount of cloud cover to predict how much UV radiation will reach the surface of the earth at noon on a given day. The index ranges from 0-10, with 10 being the most intense. The higher the index, the more important sunscreen use will be. Also, remember that the sun's rays are most intense (at any index level) between 10 a.m. and 4 p.m., so plan exposure accordingly.

While a natural suntan helps to protect you from sunburn, it does not protect you from further damage from the sun's ultraviolet rays. "Artificial" tans—those acquired from topical self-tanning creams—are equally unprotective. While the creams are safe for use, the American Academy of Dermatology recommends applying them at least one night before you plan to lie outside in the sun, and using sunscreen when you are exposed to the sun. [Note that tanning pills that are taken internally have been removed from the market and are illegal. The pills consist of huge doses of coloring materials commonly found in foods (for example, carotenes). Although these pigments are safe when consumed in the small amounts present in food, they have not been shown to be safe when taken in doses large enough to discolor your skin.]

Even if you never get sunburn at home, keep the sun in mind when you travel. In tropical regions, the sunlight is intense enough to burn almost everyone. The sun's ultraviolet radiation is also stronger at higher altitudes.





A few medicines can cause photosensitivity, making you more susceptible to the sun's ultraviolet light; therefore, you are more likely to get sunburn. Examples of such compounds include some acne medications, oral contraceptives containing estrogen, tetracyclines and sulfa drugs. Your doctor or pharmacist can inform you if a prescription drug is likely to cause this problem.

Although tanning parlors have been touted as the "safe way to get a tan", their sun lamps do emit UV A radiation, and can cause long-term skin damage. Further, the American Academy of Dermatology warns that exposure to indoor ultraviolet radiation increases the

risk of melanoma and other types of skin cancer. They note that tan skin is damaged skin, no matter whether the color results from natural or artificially produced UV radiation.

Considering the long-term damage and cancer risk associated with extensive exposure to the sun, you might want to reconsider cultivating a suntan. Many health authorities now recommend that people not attempt to tan at all. Perhaps it soon will be fashionable to have healthy skin and maintain normal skin color year-round rather than deliberately subjecting the skin to harmful ultraviolet radiation.

## Sunglass Savvy

Sunglasses are not just a fashion accessory. They can add greatly to your comfort if you choose the proper pair. Exotic lens colors may be stylish, but for real protection your best bet is plain gray, with green as a second choice.

Sunglasses should block 99 to 100 percent of UV A and UV B radiation; they should be labeled to so indicate. Over-exposure to UV radiation increases the risk of cataract formation, and exposure to certain portions of the UV spectrum are thought to increase the risk of macular degeneration.

If glare is a problem, polarized sunglass lenses are a good choice. "Mirror" coated glass lenses, the type favored by skiers, also help to reduce glare since they screen out more light than tinted lenses.

Sunglasses should not be worn at night. If you find it too inconvenient to remove your sunglasses at night, or when indoors, you may want to try light sensitive or photochromic lenses, which darken and lighten

automatically in response to changes in lighting.

The American Optometry Association says that "quality" nonprescription sunglasses are those with lenses that are free of distortion, imperfection, and mismatching of color and absorptive power. To check refractive quality, hold the glasses at arm's length and look through them at a straight line or edge in the distance. If the line curves or appears distorted when you move the lens back and forth, the lens is optically imperfect. Also, check to see that the color of the lenses is uniform.

Regardless of whether you choose glass or plastic lenses, you will get an impact-resistant product. The Food and Drug Administration defines sunglasses as medical devices. They are, therefore, subject to regulatory requirements for safety and effectiveness, including an impact resistance standard. Manufacturers must perform tests to show that their lenses meet impact resistance requirements.



## Safety in and on the Water

**F**or many of us, summer would not be summer without swimming and other water sports. These activities, however, can lead to tragedy if you are unfamiliar with water safety precautions. Each year, thousands of people drown in the United States (3,443 in 2007 alone—not including boating accidents), and most of these deaths could have been prevented. More than 25

percent of these drownings involved children under 14 years of age. [Indeed, drownings are the leading cause of injury death for kids aged 1 to 4.]

Here, we outline some of the most basic precautions that can keep you and loved ones from becoming a statistic.

### Tips for Safe Swimming and Diving

- ★ Learn to swim and dive well enough so that you can survive in the water in an emergency.
- ★ Do not swim in unsupervised areas.
- ★ Do not swim or dive alone, and do not swim when the only other people in the water are non-swimmers. Their presence might seem reassuring but they would be of little help in an emergency.
- ★ Know your limitations and do not overestimate your ability. Do not forget that your ability to swim may not be up to par under some circumstances, such as when you are tired or overheated.
- ★ **Do not swim or dive if you have been drinking alcoholic beverages. Alcohol is the underlying cause of many drownings and other accidents because it impairs both judgment and coordination.**
- ★ Stay out of the water during electrical storms.
- ★ Do not dive into shallow or unfamiliar waters. A resulting neck injury can lead to paralysis.
- ★ **Flotation devices can lead to overconfidence. Do not substitute an air mattress, inner tube, or other floating object for swimming ability.**
- ★ Stay a safe distance away from diving boards, platforms, and floats.
- ★ Do not hyperventilate before swimming underwater. hyperventilation can cause mental confusion and even blackout.
- ★ A ban on swimming after eating has no scientific basis. Stomach (or other) cramps are no more likely at that time than at any other.



## Safety Tips for Swimming Pool Owners

- ★ Never permit anyone to swim in your pool alone.
- ★ Never leave a child unattended in the pool area, even if he or she is not in the water.
- ★ Make sure that the pool is adequately fenced (many communities have laws that specify fence height) and has a self-locking gate to prevent children and pets from entering the pool area when no adult is present.
- ★ Make sure that emergency equipment is readily available, and that someone in the pool area knows how to use it.
- ★ Post emergency instructions, emergency telephone numbers, and pool rules.
- ★ Mark the deep and shallow sections of the pool clearly.
- ★ Do not allow running, pushing, or horseplay near the pool.
- ★ Make sure that the water filtration system and chemical treatment of pool water are adequate.
- ★ Do not allow people to bring bottles, glasses, or sharp objects into the pool area.
- ★ If you have a transparent solar pool cover, remove it completely before using the pool. Uncovering only one part of the pool has led to accidents in which people surfaced under the cover and drowned.
- ★ Do not use the telephone if you are in the pool (or the bathtub or shower, for that matter). If you drop the phone in the water you could get a serious electrical shock. (This warning does not apply to cordless phones. If you drop a cordless phone in the water, you may damage the phone, but you will not hurt yourself.)
- ★ Read and follow our **Tips for Safe Swimming and Diving**, above.
- ★ Ask your pool's manufacturer what kind of diving board, if any, is appropriate.

## Safety Tips for Ponds and Swimming Holes

- ★ Mark off safe swimming areas with buoyed lines.
- ★ Remove underwater debris, such as bottles and cans, from swimming areas.
- ★ Do not use areas near steeply sloping banks for swimming.
- ★ Post warning signs in dangerous areas where people should not swim.
- ★ Have the water checked for chemical and sanitary quality and approved by the local health department.
- ★ Make sure that floats, diving boards, piers, and similar structures are well built and securely anchored in place.
- ★ Post emergency instructions, emergency telephone numbers, and rules for the swimming area.
- ★ Read and follow the **Tips for Safe Swimming and Diving**, above.



## Safety Tips for Beaches

- ★ Swim in areas supervised by lifeguards.
- ★ If you get caught in a current, swim with it or diagonally across it until you can get free or call for help. Do not attempt to swim against a current.
- ★ Do not use breakable objects on the beach.
- ★ Do not leave children unattended, even in areas where lifeguards are on duty.
- ★ If you want to try a long-distance swim, swim parallel to the shore and close enough to the shore so that you can reach it easily.
- ★ Do not strike up conversations with lifeguards or interfere in any other way with the performance of their jobs.
- ★ Read and follow the **Tips for Safe Swimming and Diving**, above.

## Safety Tips for Boating

- ★ All boat occupants should wear Coast Guard-approved life jackets.
- ★ Know the “rules of the road” of the area in which you are boating.
- ★ Remember that alcohol and driving don't mix, whether the vehicle is a car, powerboat, jet ski, or canoe.





## Protective Gear

The combination of sunny days and warm temperatures often means that people (especially children) want to wear as little as possible when engaging in outdoor activities. One item of apparel that should not be omitted, however, is the protective helmet. Whether used for bicycle or horseback riding or in-line skating, properly fitting helmets can prevent serious and often life-threatening head injuries. According to the Centers for Disease Control and Prevention (CDC), each year **nearly 1000 people die as a result of bicycle-related injuries, and 62 percent of these result from head injuries**[<http://www.cdc.gov/mmwr/preview/mmwrhtml/00036941.htm>]. A study in Seattle in 1989 revealed that the use of helmets reduced the risk for bicycle-related head injury by between 74 and 85 percent.

- ★ Riders should choose light-colored helmets that are easier to see at dusk or at night.

- ★ Helmets should have a hard outer shell and a crushable liner, and should fit snugly, with straps to keep them securely in place.
- ★ Bicycle helmets should carry a label indicating that they have been approved by the Snell Memorial Foundation or American National Standards Institute (ANSI) or American Standards Testing Materials (ASTM).

Other sports will require other types of protective gear in addition to helmets. For example, in-line skating has become an enormously popular sport, according to the AMA, the fastest-growing sport in the United States. In-line skaters can reach speeds of 30 mph or more, yet many don't wear protective helmets, or knee, wrist or elbow pads. This sport alone is responsible for over 150,000 injuries per year, according to the Injury Free Coalition for Kids. Over 10,000 of these are from head or face injuries.

## Safety During Electrical Storms

You can minimize your chances of being injured during an electrical storm by avoiding open areas and seeking shelter indoors or inside a closed automobile. Hiding under trees or touching metal objects (e.g. golf clubs) increases your chances of being struck by lightning.

You should not use a land-line phone during an electrical storm. Although protective measures are used to keep dangerous electrical surges from entering your home through your telephone wires, complete protection is impossible.

Thus, there is a quite remote but real risk of electrical shock if you use the phone during an electrical storm. Use of cordless or cell phones, however, is safe.



## Don't Hold the Mayo!

**M**any people are uneasy about eating chicken salad, potato salad, and similar dishes at summer picnics because they have heard that foods made with mayonnaise are the most likely ones to cause food poisoning. And somehow, the mayo has gotten the blame for this problem.

Scientists have shown, however, that adding mayonnaise to food does not make it more dangerous; the acid in the mayonnaise can actually prevent or slow the growth of bacteria that cause food poisoning. Mixed foods, like chicken salad, probably get their bad reputation simply because they are handled a lot during preparation, and this can contaminate them with bacteria.

To prevent bacterial food poisoning, the basic rule is to keep hot foods hot and cold foods cold. Perishable foods (with or without mayonnaise) may not be safe to eat if they have been held at temperatures between 40 and 140 degrees Fahrenheit (4-60 degrees Celsius) for more than two hours. In very hot weather, over 90 degrees Fahrenheit, that time should be reduced to one hour.

One practical way to keep foods safe for a summer picnic is to keep them in a cooler with ice or reusable cold packs until you are ready to eat. If you use ice, remember to pack the food in tight containers or plastic bags to prevent the food from getting wet when the ice begins to melt.

If you are taking hamburgers or other raw meat to a cookout, the meat should be placed in a cooler and kept separate from other foods. Uncooked meats contain relatively large numbers of bacteria, some of which could be harmful.

Fortunately, the bacteria that commonly cause food poisoning are sensitive to heat. Therefore, proper and thorough cooking will most often kill them, making the meat safe to eat. These bacteria can cause problems, however, if they cross-contaminate other foods, such as salads, which will not be cooked prior to being eaten.

Although one doesn't often think of hand washing at a picnic, bacteria and viruses are no respecters of vacation or leisure-time activities. If no hand washing facilities will be available, take pre-moistened towels with hand soap added, and fresh ones for "rinsing." Alternatively, use one of the widely available alcohol-based hand sanitizers. These precautions are particularly important for those who prepare and handle the food!

Some actions (or inactions) that may increase the risk of food contamination, yet escape our notice were brought up recently:

- ★ Neglecting to wash reusable grocery bags
- ★ Keeping foods in the car in hot weather without cold packs or ice
- ★ Not checking the temperature of the refrigerator (it should be no higher than 40 degrees Fahrenheit)
- ★ Cleaning with an unsanitized sponge
- ★ Quickly rinsing (not washing) a glass or utensil after use
- ★ Overusing antacids, which may lower the bacteria-fighting level of stomach acid
- ★ Letting pets have access to countertops and tables. If you can't keep them off, be extra careful about sanitizing them before you use them for food preparation.



## Insect Bites and Stings

**N**ot only are insect bites and stings annoying and sometimes painful, they may also pose serious health risks. In some areas, mosquitoes can transmit diseases such as encephalitis and West Nile virus, and ticks can carry serious illnesses like Rocky Mountain Spotted Fever and Lyme disease (see section following). The best way to deal with bites and stings is to prevent them whenever possible. Repellents, while easy and effective, should be used with care. The EPA recommends:

- ★ Apply repellents only to exposed skin and/or clothing—not under clothing.
- ★ Don't use on cuts, wounds or irritated skin.
- ★ Do not let children handle repellents, and don't apply to their hands.
- ★ Apply to hands and then apply on face—don't apply or spray directly on face.
- ★ Don't spray repellent in enclosed areas, or around food. Avoid breathing sprays.

Insect bites and stings can also pose serious threats to those who become allergic to them. In the most serious cases, a sting or bite can cause anaphylaxis, a life-threatening condition that requires immediate medical attention. Its symptoms can include localized swelling, dizziness, shortness of breath, a drop in blood pressure, and loss of consciousness. Fortunately, most bites and stings result in much less serious and more localized reactions, like pain, itching and swelling. Warning signs of impending allergic reactions may include some wheezing and swelling of the tongue.

To avoid any of the above reactions, it's important to avoid stings and bites whenever possible. Stinging insects such as honeybees, wasps and hornets,

are more active during the summer. Unfortunately, repellents don't work against them. Be cautious when working or playing in areas where their nests are likely to be located, such as near bushes, trees, and buildings. Some additional precautions you can take include:

- ★ Wear shoes—not sandals—when working outside, and don't go barefoot.
- ★ Never swat at flying insects.
- ★ Keep food covered as much as possible when outdoors.
- ★ Keep garbage in tightly closed containers.
- ★ Avoid perfumes, hairsprays, and sweet smelling fragrances when spending time outdoors.
- ★ Avoid brightly colored clothing.
- ★ Drive with the car windows closed.
- ★ If stung by a honeybee, scrape the stinger out—don't squeeze it or you'll squeeze more venom into the skin.
- ★ Anyone with a known allergy to insect stings should carry an epinephrine "pen" when spending time outdoors—and should know how to use it.

If you're unfortunate enough to be stung or bitten, the best management, aside from allergic reactions, may be simple first aid with cold compresses. This will help itching, pain and swelling. You will also want to clean the area to prevent any secondary infections, according to a recent review in the *Drug and Therapeutics Bulletin* of April, 2012. The review also points out that most over-the-counter topical anti-itch preparations are of dubious value, and suggests that counter-irritants, such as household ammonia, may help to relieve



itching, burning or painful mosquito bites. A painful sting or bite may be somewhat alleviated by ibuprofen or topical corticosteroids, but the latter should be used sparingly and

only for allergic eczema triggered or worsened by insect bites. Obviously, avoidance is the best strategy.

## Lyme Disease

If your idea of a great way to spend a vacation includes hiking or camping in brushy and wooded areas, or if you live in such an area, be aware of the possible presence of the tiny deer ticks that carry Lyme disease. The deer ticks are much smaller—about the size of a sesame seed—than the more common dog ticks. Although cases of Lyme disease have been reported by 48 states and the District of Columbia, most cases are concentrated in the northeastern, north central and Pacific coastal areas. About 15,000 cases of Lyme disease are reported each year. The great majority are in the north eastern and north central states.

Lyme disease is the most common tick-transmitted illness, and though there is a wide range of variability in the severity, order of appearance, and duration of symptoms amongst those with Lyme disease, the “typical” illness pattern is manifested in three clinical stages:

- ★ Stage I: Skin rashes and flu-like symptoms
- ★ Stage II: Neurological, cardiac, and musculoskeletal symptoms
- ★ Stage III: Arthritic and other neurological symptoms (i.e., sleepiness, inability to concentrate, loss of memory)

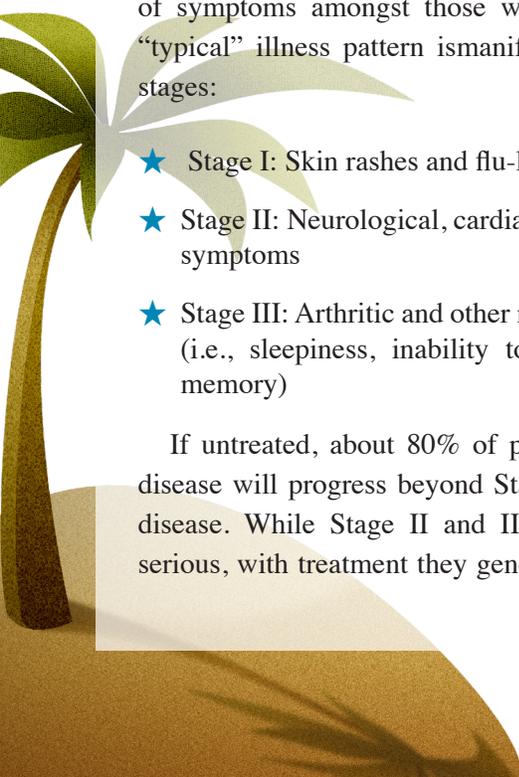
If untreated, about 80% of patients who get Lyme disease will progress beyond Stage I symptoms of the disease. While Stage II and III symptoms are more serious, with treatment they generally disappear within

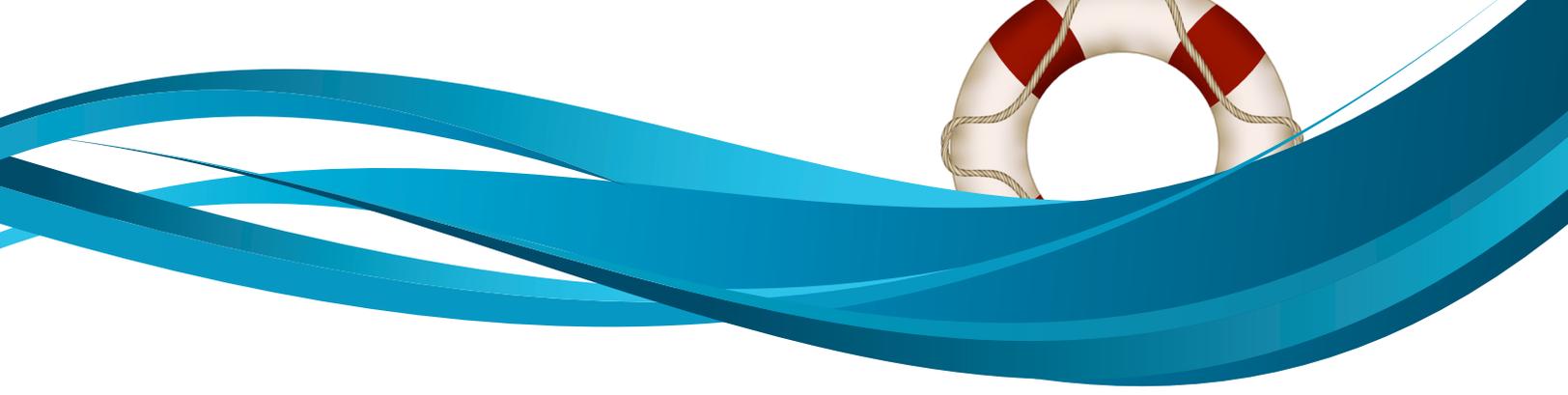
weeks. Authorities at the Centers for Disease Control do not recommend immediate treatment with antibiotics if an attached tick is found. Recent research indicates that transmission of Lyme disease does not occur immediately when a tick bites. It may take up to 24 hours after the bite for the bacteria to be transmitted. Thus, if a tick is removed soon after it has attached, it may not have passed on the bacteria.

Studies have been performed on the utility of immediate antibiotic treatment for tick bites before the appearance of disease symptoms. The researchers found that side effects from early antibiotic treatment were more common than the development of Lyme disease in those who had not been treated.

If you find a tick attached to your body, remove it (see below for proper technique), save it in a vial or plastic bag for later identification, and keep a record of when the bite occurred. If any of the symptoms of the disease follow, see a physician as soon as possible. Since these ticks are tiny, you can be bitten without being aware of it—until a rash develops. If you get a rash after being outdoors in an area where ticks are found, see a doctor for an accurate diagnosis of the rash.

Most likely, he or she will draw blood to test and prescribe antibiotics, the front-line treatment for Lyme disease and its complications. Early treatment is important once symptoms occur, to shorten the course of the disease and significantly reduce the frequency of late-stage complications such as arthritis. Thus, if symptoms develop, seek immediate treatment.





## Tips for avoiding Lyme Disease

Certain precautions can help reduce the risk of acquiring Lyme disease, although none of them can ensure against contracting it. Heed the following advice during the peak season of April–August and when walking in grass, low brush, or wooded areas:

- ★ Avoid tick-infested areas if possible?contact local or state health officials to determine which areas are endemic.
- ★ Avoid tick bites - Avoid contact with shrubs by walking on paved surfaces or in the center of paths and trails.
- ★ Wear light-colored, long-sleeved shirts and long pants; do not wear open footwear. Tuck pant legs into socks.
- ★ Apply insect repellent containing DEET.
- ★ Inspect clothes and body carefully after returning indoors.
- ★ Immediately remove ticks from body—brush off ticks that are not yet attached, and use tweezers to slowly remove those ticks that are. Use a fine-tipped pair of tweezers to grasp the tick by its mouthparts as close as possible to where it has attached to the skin. Pull it out. Do not grasp or squeeze the tick's body, as this can cause it to release bacteria-laden secretions into the skin.
- ★ Check children carefully at least once a day if they have been playing outdoors in an area known to be a home for deer ticks. Don't forget to check hair and scalp.





## Don't Let an Itch Ruin Your Vacation: Poison Ivy, Poison Oak, and Poison Sumac

**T**hese plants are widespread in the United States, and all produce an oily resin called urushiol that causes an itching dermatitis in sensitive individuals (and about 90% of adults are sensitive to some degree). The dermatitis may result from either direct contact with the plants, or from contact with contaminated clothing, tools, or pets. If you know you've brushed up against some poison ivy, oak, or sumac, the damage can be minimized. Wash the exposed skin as soon as possible with cold water and soap, or special soap such as "TechNu," which is designed to break down urushiol. Contaminated clothing can be cleaned with laundry detergent.

If you know you will be exposed to any of these plants on an outing, it's now possible to prevent the dermatitis, even if you come into contact with the offending plants. Use of a lotion containing bentonite clay (e.g., "IvyBlock") can protect against urushiol penetrating the skin. It should be applied to clean, dry skin at least 15 minutes before exposure, and reapplied every 4 hours.

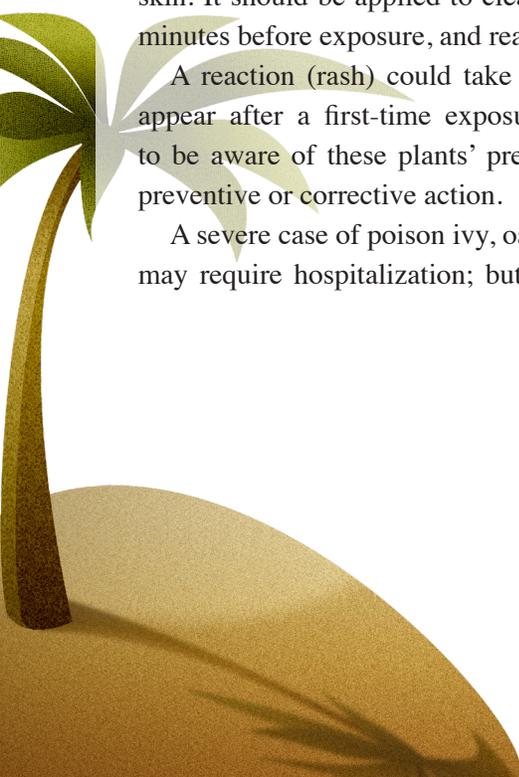
A reaction (rash) could take up to 7 to 10 days to appear after a first-time exposure, so it is important to be aware of these plants' presence in order to take preventive or corrective action.

A severe case of poison ivy, oak, or sumac dermatitis may require hospitalization; but most cases will clear

up within a few weeks. But the discomfort caused by even lesser cases can be painful and disruptive. Cold compresses, a paste of baking soda and water, calamine lotion, or a nonprescription cream containing one percent hydrocortisone may relieve itching.

The best defense is avoidance, so if you are in an area occupied by these plants, learn to recognize them and be aware that the shape of their leaves and their growing habits (i.e., as ground cover, shrubs, or trailing vines on trees) can vary from place to place. If you're unfamiliar with an area, ask someone knowledgeable whether the plants grow there and what they look like.

- ★ It is possible to contact urushiol on the fur of pets that have been moving around brushy areas, so be aware of their travels, and wash thoroughly after petting them.
- ★ Wear protective clothing — long sleeves and pants, and be careful when removing clothes so that plant resin doesn't contact the skin.
- ★ Wash thoroughly with soap and water after hiking in an affected area.
- ★ Watch where you sit!





## Overheating in the Summer Sun

**V**ery hot and humid weather causes an increase in internal body temperature, which places greater demands upon the body's cooling mechanisms. There is a limit beyond which these mechanisms can no longer maintain a normal internal temperature of 98.6 degrees Fahrenheit. If body temperature continues to rise without sufficient cooling, a serious heat disorder can occur. Those people particularly at risk are:

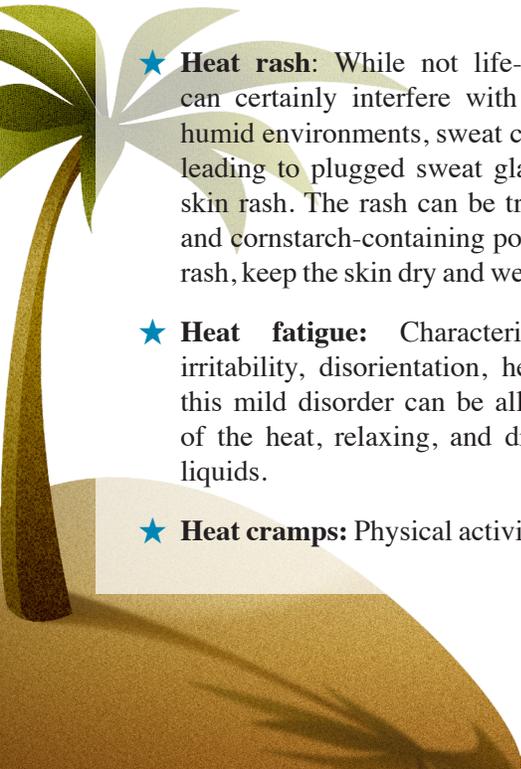
- ★ Workers in hot environments, especially if the job requires physical labor
- ★ Athletes and frequent exercisers
- ★ Infants, young children, and elderly people
- ★ The chronically ill, and people with heart or circulatory problems
- ★ Alcoholics, drug abusers

Heat disorders can be mild or severe:

- ★ **Heat rash:** While not life-threatening, heat rash can certainly interfere with vacation fun. In hot, humid environments, sweat cannot evaporate easily, leading to plugged sweat glands and a consequent skin rash. The rash can be treated by cool showers and cornstarch-containing powders. To prevent heat rash, keep the skin dry and wear fast-drying clothing.
- ★ **Heat fatigue:** Characterized by discomfort, irritability, disorientation, headaches, and fatigue, this mild disorder can be alleviated by getting out of the heat, relaxing, and drinking plenty of cool liquids.
- ★ **Heat cramps:** Physical activity in a hot environment

can cause these painful muscle spasms. Massage the affected muscles and drink both water and electrolyte replacement drinks, as cramps are indicative of an imbalance in the body's normal fluid and salt content.

- ★ **Heat syncope/fainting:** Those unused to hot environments, or who are active for long periods in the heat, may experience such a reduced blood flow to the brain that fainting results. Fainting victims should lie down and rest in a cool place and drink plenty of fluids.
- ★ **Heat exhaustion:** A more serious loss of body fluids and salt, and decreased blood flow to the brain and other organs, heat exhaustion leads to symptoms such as excessive sweating; cool, pale, and clammy skin; weakness; nausea, headache, dizziness; and slightly elevated body temperature. Victims of heat exhaustion should be moved to a cool place to rest with their feet slightly elevated and their clothes loosened or removed, and they should drink plenty of cool liquids.
- ★ **Heat stroke:** The most serious of heat disorders, heat stroke is the result of a complete breakdown of the body's cooling mechanisms. Symptoms include lack of perspiration; red, bluish, or mottled skin; hot and dry skin; strong, rapid pulse; temperature of 105 degrees Fahrenheit or higher; severe headache, chills, or nausea; mental confusion, dizziness; unconsciousness, convulsions, and eventual coma. Heat stroke should be treated immediately because it can cause brain damage and death. Call for emergency help, then remove the victim's clothing and cool the body by rubbing with a cold sponge or ice pack, cold compresses, a fan, or by immersing in tepid water.





## Tips to Beat the Summer Heat

- ★ Pay attention to weather reports and adjust daily routines accordingly.
- ★ Schedule physically strenuous activities for cooler times.
- ★ Allow several days to adjust to hot environments.
- ★ Dress in light, loose, cotton clothing. Wide-brimmed hats help keep you cool as well.
- ★ When working outside, take periodic rest breaks in a cool area.
- ★ Drink plenty of noncarbonated fluids before, during, and after physical activities. Avoid alcohol and caffeine, which are diuretics—substances that increase water loss via the urine.
- ★ Never leave children or pets inside a car, even if the windows are open.
- ★ If you are taking medication, ask your doctor about its side effects.
- ★ Keep cool with fans, air conditioning, and cool baths or showers.
- ★ Get plenty of sleep and eat light, nutritious, and non-fatty meals.
- ★ Be aware that when active in a hot, dry climate (for example when playing tennis) salt as well as water are lost in sweat. Under such conditions, restriction of dietary salt by healthy individuals may be unwise. However, salt tablets are rarely necessary.





## The Healthy Suitcase

**W**hen packing for your vacation, remember to include medical supplies. In addition to a first-aid kit, other basic necessities include:

- ★ Your health insurance card, eyeglass prescription, and copies of prescriptions for any drugs that you are taking. People with chronic health problems may also want to carry a medical summary prepared by their physicians that includes an electrocardiogram (EKG) when available.
- ★ An ample supply of any prescription medicines that you take routinely. Remember when traveling overseas to leave all over-the-counter drugs in their original packaging. Prescription medication should be left in the prescription bottles you brought home from the pharmacy. It is also a good idea to travel with a letter from your doctor listing who is under his care and the medications that the person is taking.
- ★ Over-the-counter remedies for common problems. These might include a pain reliever, an antacid, a laxative, a diarrhea remedy, an antihistamine, and a cough remedy.
- ★ Sunscreen, lip balm, and insect repellent, if you will be spending any time outdoors.
- ★ Anyone who is subject to life-threatening allergies should wear a bracelet or necklace to alert others to that condition and, with their physicians, should discuss carrying an “Epi-Pen” with them to use in case of an allergic reaction

### Other Helpful Hints

- ★ If you are traveling by air, put prescription drugs in your carry-on bag, not your checked luggage. Travelers and their baggage are sometimes parted, and it may be dangerous to skip even one dose.
- ★ It is particularly important to bring medicines with you if you are traveling abroad. Drug names, doses, and availability differ in different countries, and in some parts of the world, drug safety and effectiveness may not be up to U.S. standards.
- ★ Check the labels on your medicines for the possibility that they might increase your sensitivity to sun and/or heat.
- ★ Don't store medicines in the trunk or glove compartment of your car, or take them to the beach unless you will need them there. High heat and humidity can alter the potency of many drugs.
- ★ If you are traveling with small children, make sure that all drugs are in containers with child-resistant caps. It may be difficult to keep medicine out of reach or under lock and key the way you would at home.



## Avoid Traveler's Maladies

### Traveler's Maladies: Motion Sickness

If you ever suffer from the discomfort and embarrassment of motion sickness, you are not alone. Nine out of ten people have had this problem, and the experts say that nobody with a normal sense of balance is immune. Some authorities even think that motion sickness should not be considered a disorder at all. They say that it is so pervasive that it should be called the normal response to motion.

Unfortunately, knowing that motion sickness is normal is small comfort when your child is ruining the upholstery in your car. (Motion sickness is most common between the ages of 2 and 12. It then decreases gradually, and is rare in adults.) Fortunately, much can be done to prevent motion sickness. If you are susceptible, you should prepare in advance, because prevention is easier and more effective than treating motion sickness after it has started.

Equipping your car with some disposable bags if you have a child who is prone to carsickness is one form of preparation. There are also other precautions you can take which may make these bags unnecessary. The Food and Drug Administration suggests the following:

- ★ Place yourself where there is the least motion: on deck and amidships on a ship, in the front seat of a car, and over the wing on a plane.
- ★ When traveling in a vehicle where seat belts are not necessary, lie on your back, in a semi-reclined position, and keep your head as still as possible. In an automobile, do this only to the extent possible without removing your seat belt. Safety must take priority over motion sickness prevention.
- ★ Do not watch the waves when in a boat or fast moving scenery when on land: keep your eyes fixed on the horizon.

- ★ Avoid fresh paint, intense chemical, food and tobacco odors.
- ★ Eat and drink in moderation (especially alcohol) the night before a trip.

For those people for whom these simple preventive measures are not enough, there are both prescription and non-prescription medications available. Most of these are antihistamines, which work by blocking nerve signals between the inner ear and the brain's nausea center. A non-oral treatment—in the form of a dermal patch containing scopolamine—is now available by prescription. It can prevent nausea and vomiting for up to 3 days. The patch should be placed behind the ear at least 4 hours before its effects will be needed. It has not been shown to be safe for use by children, however, and should be used only with caution in elderly persons.

Oral anti-motion sickness medicines work best when taken 30 minutes to an hour before traveling. If you wait until you start to feel sick before you take the pills, they probably will not have enough time to take effect. If you wait until you are really sick, the pills will suffer the same fate as your lunch.

When buying over-the-counter remedies for motion sickness, read the labels carefully. Some are unsuitable for children. All are unsuitable if you have certain medical problems or if you are the one who will be driving or piloting the vehicle in question (they cause drowsiness). It is dangerous to drink alcoholic beverages while using them, because alcohol intensifies the drugs' depressant effects. If you must take other medication, consult your doctor before using motion sickness remedies; some drugs should not be mixed because they magnify or antagonize each other's effects.



## Traveler's Maladies: Diarrhea

International travelers must take food and water precautions to prevent stomach and intestinal problems caused by poor sanitation in developing areas of the world such as South Asia; North, East, and West Africa; Latin America; and the Middle East. Called traveler's diarrhea, the syndrome is also characterized by cramps, nausea, dizziness, and fever. It can last from 3-7 days and affects 20-50% of short-term travelers. If you do get traveler's diarrhea, the Centers for Disease Control and Prevention and the National Institutes of Health advise travelers to take antibiotics only if absolutely necessary, because they may cause additional problems.

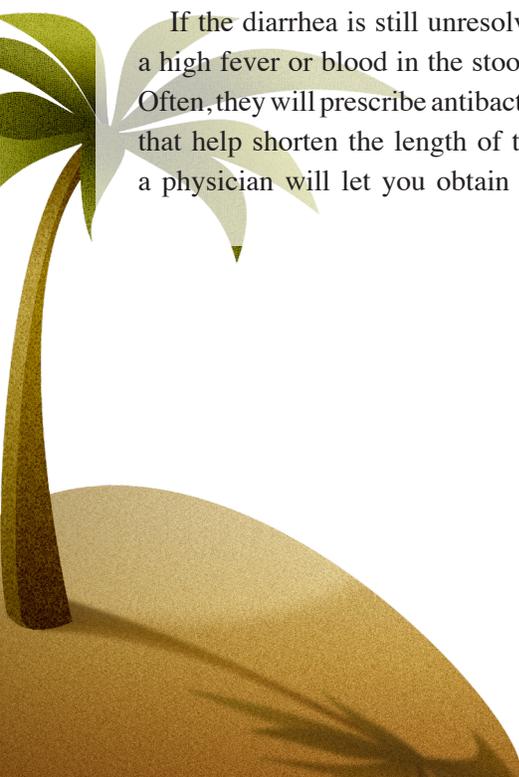
Initially, in the absence of high fever and blood in the stools, you can take an over-the-counter anti-diarrheal medicine such as Imodium. Dehydration is a consequence of traveler's diarrhea, and can become a serious problem especially for children and infants, so it is important to drink plenty of fluids such as soft drinks and pure fruit juices (never any water or dairy products) coupled with a source of sodium chloride (e.g., salted crackers).

If the diarrhea is still unresolved, and/or if you have a high fever or blood in the stools, consult a physician. Often, they will prescribe antibacterial drugs (antibiotics) that help shorten the length of the illness. (Sometimes a physician will let you obtain this medication before

leaving the country as a preventive measure, to be taken if you become very ill.) Antibiotics are very effective in preventing traveler's diarrhea, however about 3% of people who take them develop adverse reactions such as skin rash, gastrointestinal disturbance, and vaginal yeast infections. Children cannot use certain types of antibiotics.

The primary preventive measure is careful selection of food and beverages. Raw vegetables, raw meat, and raw seafood are particularly risky. Cooked foods are safer, because the heat kills bacteria. The safest drinks are hot coffee, hot tea, beer, wine, and bottled carbonated beverages. Yogurt and similar fermented milks are also safe. They even provide beneficial bacteria that should be welcome in case of diarrhea and losses of the natural intestinal bacterial population.

Unpasteurized milk and ice made from tap water should be avoided. Fruits are fine if you wash (in boiled water) and peel them yourself, but cut-up fruits, or types where the peel is eaten, may be contaminated. According to Dr. Sherwood L. Gorbach, former chief of the infectious diseases division at the New England Medical Center in Boston, it is best to follow the time-honored formula: "If you can't peel it, boil it, or cook it, then forget it."





In summary, in order to avoid easily preventable spoilers of summer leisure time fun and travel, we at ACSH encourage you to take seriously the tips given above. It is our hope that they will help you to

**HAVE A HAPPY, HEALTHY SUMMER VACATION!**



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Summer Health and Safety Tips 2011

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