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Mosquitos

West Nile Virus is transmitted by the bite of an infected mosquito. Symptoms of West Nile Virus include: fever, headache, body aches, skin/rash, and swollen lymph glands. There are several steps you can take to protect yourself from mosquitoes this summer. These include:

- Wear long sleeves and long pants.
- Avoid unnecessary outdoor activities at dawn and dusk when mosquitoes are most active.
- Wear light-colored clothing, long pants, long sleeve shirts and hat when outdoors.
- Use mosquito repellents with DEET according to package directions.
- Check for and eliminate trapped water in plastic or canvas tarps used to cover boats, bikes, etc.
- Pump out bilges in boats. Turn canoes and small boats upside down for storage.
- Don't leave garbage can lids lying upside down. Be sure water does not collect in the bottom of garbage cans.

Bees

Most bees and insects will not attack if left alone. If provoked, a bee will sting in defense of its nest or itself.

First Aid for Bee and Insect Stings:

- The stinger can be removed using a 4x4-inch gauze wiped over the area or by scraping a fingernail over the area. Never squeeze the stinger or use tweezers. It will cause more venom to go into the skin and injure the muscle.
- Have someone stay with the victim to be sure that they do not have an allergic reaction.
- Wash the site with soap and water.
- Apply ice to reduce the swelling.
- Do not scratch the sting. This will cause the site to swell and itch more, and increase the chance of infection.

Reduce Risk of being stung by:

- Wear light colored clothing
- Avoid perfumed soaps, shampoos, and deodorants.
- Avoid flowering plants.
- Cover the body as much as possible with clothing.
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• Keep areas clean. Social wasps thrive in places where humans discard food.
• If a single stinging insect is flying around, remain still or lie face down on the ground. The face is the most likely place for a bee or wasp to sting. Swinging or swatting at an insect may cause it to sting.
• If you are attacked by several stinging insects at the same time, run to get away from them. Bees release a chemical when they sting. This alerts other bees to the intruder. More bees often follow. If possible, get indoors when there are a few, if any, bees around you. Outdoors, a shaded area is better than an open area to get away from the insects.

Ticks

Ticks are not insects; they are arachnids, along with spiders and scorpions. Some ticks carried by deer transmit a sickness called Lyme disease. Lyme disease is caused by the bacteria *Borrelia burgdorferi*. Symptoms of Lyme disease include flu-like symptoms such as:

• fever,
• headache,
• fatigue; as well as,
• a "bull’s eye" rash around the tick bite.

If you have symptoms and/or a “bull’s eye” rash you should seek medical attention. If a tick that is infected with Lyme Disease is removed within 24 hours it is unlikely the disease was transmitted to you. The longer a tick feeds the more likely it will transmit the bacteria to you. Remove ticks promptly. The best way to remove an attached tick is to grasp the tick close to the skin with tweezers and pull it straight away from the skin. To avoid being bit:

• Wear long sleeves, long pants and socks.
• Wear light-colored clothing.
• Tuck your pant legs into your socks.
• Avoid tall grass, avoid areas frequented by deer and walk in the center of trails.
• Check your body for ticks after being outdoors – especially under your arms, in and around your ears, inside your belly button, back of your knees, in your hair, around your waist, and your feet and ankles.
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Heat Related Problems

Heat rash
If you have a rash of tiny red dots and your skin feels all "pins and needles," you're probably suffering from prickly heat, or heat rash. Prickly heat occurs when the sweat ducts become plugged and sweat leaks into the skin instead of out of it. There are two types of heat rash.

- Miliaria rubra (A), one type of heat rash, appears as red clusters of small blister-like bumps that can produce intense itching.
- Miliaria crystallina (B), another type of heat rash, appears as clear, fluid-filled bumps that produce no other signs or symptoms

Remedies: Spend a day or two in AC, wear loose clothes, wash with mild soap, soothe with lotion, and use absorbent powders.

Heat Cramps
Heat cramps are painful, involuntary muscle spasms that usually occur during heavy exercise in hot environments. The spasms may be more intense and more prolonged than are typical nighttime leg cramps. Fluid and electrolyte loss often contribute to heat cramps. Muscles most often affected include those of your calves, arms, abdominal wall and back, although heat cramps may involve any muscle group involved in exercise.

If you suspect heat cramps:

- Rest briefly and cool down
- Drink clear juice or an electrolyte-containing sports drink
- Practice gentle, range-of-motion stretching and gentle massage of the affected muscle group
- Don't resume strenuous activity for several hours or longer after heat cramps go away
- Call your doctor if your cramps don't go away within one hour or so.
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Heat Exhaustion
Heat exhaustion is a condition whose symptoms may include heavy sweating and a rapid pulse, a result of your body overheating. It's one of three heat-related syndromes, with heat cramps being the mildest and heatstroke being the most severe. Without prompt treatment, heat exhaustion can lead to heatstroke, a life-threatening condition. Fortunately, heat exhaustion is preventable. Symptoms include:

- Cool, moist skin with goose bumps when in the heat
- Heavy sweating
- Faintness
- Dizziness
- Fatigue
- Weak, rapid pulse
- Low blood pressure upon standing
- Muscle cramps
- Nausea
- Headache
- If you think you're experiencing heat exhaustion:
  - Stop all activity and rest
  - Move to a cooler place
  - Drink cool water or sports drinks

Contact your doctor if your signs or symptoms worsen or if they don't improve within one hour. Seek immediate medical attention if your body temperature reaches 104 F (40 C) or higher.

Heat Stroke
Heatstroke is a condition caused by your body overheating, usually as a result of prolonged exposure to or physical exertion in high temperatures. This most serious form of heat injury, heatstroke can occur if your body temperature rises to 104 F (40 C) or higher. Heatstroke requires emergency treatment. Untreated heatstroke can quickly damage your brain, heart, kidneys and muscles. The damage worsens the longer treatment is delayed, increasing your risk of serious complications or death.
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Heatstroke symptoms include:

- High body temperature. A body temperature of 104 F (40 C) or higher is the main sign of heatstroke.
- Altered mental state or behavior.
- Confusion, agitation, slurred speech, irritability, delirium, seizures and coma can all result from heatstroke.
- Alteration in sweating. In heatstroke brought on by hot weather, your skin will feel hot and dry to the touch. However, in heatstroke brought on by strenuous exercise, your skin may feel moist.
- Nausea and vomiting. You may feel sick to your stomach or vomit.
- Flushed skin. Your skin may turn red as your body temperature increases.
- Rapid breathing. Your breathing may become rapid and shallow.
- Racing heart rate. Your pulse may significantly increase because heat stress places a tremendous burden on your heart to help cool your body.
- Headache. Your head may throb.

If you think a person may be experiencing heatstroke:

- Seek immediate medical help.
- Call 911 or your local emergency services number.

Take immediate action to cool the overheated person while waiting for emergency treatment.

- Get the person into shade or indoors.
- Remove excess clothing.
- Cool the person with whatever means available — put in a cool tub of water or a cool shower, spray with a garden hose, sponge with cool water, fan while misting with cool water, or place ice packs or cold, wet towels on the person's head, neck, armpits and groin.

Sun sensitivity

Protection from ultraviolet (UV) radiation is important all year round, not just during the summer or at the beach. UV rays from the sun can reach you on cloudy and hazy days, as well as bright and sunny days. UV rays also reflect off of surfaces like water, cement, sand, and snow. The hours between 10 a.m. and 4 p.m. daylight savings time (9am to 3 p.m. standard time) are the most hazardous for UV exposure outdoors in the continental United States. The CDC recommends easy options for protection from UV radiation—
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- Seek shade, especially during midday hours.
- Wear clothing to protect exposed skin.
- Wear a hat with a wide brim to shade the face, head, ears, and neck.
- Wear sunglasses that wrap around and block as close to 100% of both UVA and UVB rays as possible.
- Use sunscreen with sun protective factor (SPF) 15 or higher, and both UVA and UVB protection.
- Avoid indoor tanning.
- If you take medicines, ask your health care professionals about sun-care precautions; some medications may increase sun sensitivity.

Poisonous plants

Many native and exotic plants are poisonous to humans when ingested or if there is skin contact with plant chemicals. However, the most common problems with poisonous plants arise from contact with the sap oil of several ever-present native plants that cause an allergic skin reaction—poison ivy, poison oak, and poison sumac. Poison ivy, poison oak, and poison sumac release an oil, urushiol, when the leaf or other plant parts are bruised, damaged, or burned. Burning these poisonous plants can be very dangerous because the allergens can be inhaled, causing lung irritation. You can't get poison oak, ivy, and sumac by touching the fluid from blisters caused by the poisonous plant. This fluid doesn't contain the oily resin (urushiol) of the poisonous plant.

Symptoms:
- A rash begins 1 hour or up to 5 days after contact.
- Throat swelling shut
- Dizziness
- Burning feeling
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- Weakness
- Breathing problems

Prevention:
- Wear long sleeved shirts and long pants tucked into your boot.
- Rubbing alcohol removes the oily resin up to 30 minutes after exposure.
- To prevent poison-plant rashes, try using one of the new lotions that stop the plants allergenic chemicals from being absorbed into the skin (such as Ivy Block or Work Shield).

Snakes

Snakes are beneficial to man and hold an important place in the ecology of all parts of the world where they occur. They can effectively control the populations of small mammals, like mice and rats. They are also important food sources for hawks and other predators. Maryland boasts 27 species and subspecies of snakes, only two of which are venomous. These are the timber rattlesnake and copperhead. Snakes are mostly found in leaf piles, woodpiles, under rocks, cool places and in dense vegetation. They like to lie in the sun to get warm and find cool, wet places to cool off. Snakes are rarely aggressive towards humans. According to the Department of Natural Resources, if you encounter a snake simply maintain a safe distance and move away from it, or allow it to move away from you. If, you do find that you have been bitten:
- First and foremost is to stay calm.
- Remove all constricting devices (jewelry and tight clothing).
- Do not apply a tourniquet or ice to the area.
- Do not attempt to suck out the venom, as you will probably do more harm than good.
- Position yourself, if possible, so that the bite is at or below the level of your heart.
- Clean the wound, but don’t flush it with water. Cover it with a clean, dry dressing.
- Do not cut into a snakebite to release venom and seek medical attention immediately.
- Don’t drink caffeine or alcohol, which could speed the rate at which your body absorbs venom.

80 % of snakebites in the US are by nonpoisonous snakes, which just cause mild pain and no swelling. For these bites just local wound care, and perhaps a tetanus shot, may be the only treatment necessary. Generally poisonous snakebites are immediately painful and swelling may be delayed or rapidly
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progressive. Prevention is probably the best advice. Use caution when overturning logs or rocks. If walking, use a walking stick to tap the area in front of you to alert your presence. Do not provoke a snake, as this is when the most bites occur.

For more information and/or suggestions contact the Environmental Safety Compliance Officer (ESCO) at Ext. 8441 or Email hplsafety@hpl.umces.edu