

Summertime Health Issues for Outdoor Workers: What to Know and How to Stay Safe

By [Dan Hendey with an assist from AI]

For park maintenance crews and others who work outdoors, summer can bring welcome warmth and sunshine. However, summer also introduces a host of hazards that can compromise your health and safety. Warm weather and sun carry increased risks, including heat-related illnesses, poisonous plants, insect and animal bites, and sun exposure.



Understanding these dangers is the first step in prevention. Let's take a closer look at the health hazards you can face when working outdoors and some strategies for protection.

1. Heat Illness: A Silent Threat

Perhaps the most pervasive and potentially life-threatening summer danger is heat illness. Heat is the leading cause of death among all hazardous weather conditions in the United States. Excessive heat can cause a number of adverse health effects. Heat Illness encompasses a spectrum of conditions that can quickly escalate from cramps and minor dehydration to heatstroke if not treated promptly.

Heat Cramps: are usually the first reaction to excessive heat and are characterized by painful muscle spasms. This is caused by excessive sweating and a loss of salt. Without cooling and fluids, heat cramps can advance to **Heat Exhaustion** with symptoms that include heavy sweating, weakness, dizziness, nausea, and headache. Now is the time to stop, rest, cool, and rehydrate. If someone fails to seek aid, they enter the dangerous area of **Heatstroke**, a medical emergency. This is when a body's temperature regulation system fails, and the core body temperature may exceed 104°F. Symptoms include confusion, fainting, hot and dry skin, and possible unconsciousness. This is a life-threatening situation that demands immediate professional medical attention.

To avoid these conditions, start with **hydration**. When working in the heat, drink at least 8 oz of water every 15–20 minutes. Don't wait until you're thirsty. Drinks with electrolytes are also acceptable. Schedule **rest breaks** in shaded or air-conditioned areas. New employees should be allowed to gradually increase their time spent in the heat, and, if your situation allows, wear **loose, light clothing** and **work in pairs**.

2. Sunburn and Exposure

Outdoor workers receive significantly more sun and UV exposure. In addition to sunburn, workers run the risk of acute and long-term skin damage. The sun's ultraviolet radiation can cause painful burns and contribute to premature aging, eye damage, and various types of skin cancer, including melanoma.

Sunburn appears as red and painful areas on exposed skin. **First-degree** burns can develop within 15 minutes of exposure. **Second-degree burns** are characterized by blisters and swelling that may take weeks to heal. Sometimes called **Sun Poisoning**, severe sunburns can cause headache, fever, nausea and dizziness. Long-term sun exposure can lead to other skin conditions such as wrinkling, loss of elasticity, blotchy patches, and cancers, including carcinoma and melanoma.

To prevent sunburn and avoid long-term effects, use **sunscreen** with an SPF of 30 or higher and reapply every two hours. Wear **protective clothing** such as long-sleeve or UV-blocking shirts, wide-brimmed hats and UV-blocking **sunglasses**. Along with heat, the sun will dry you out, so remember to **keep hydrated**. **Schedule** your outdoor tasks to avoid direct sun between 10 a.m. and 4 p.m. Additionally, get regular skin checks with your medical provider.

3. Poisonous Plants: Hidden in Plain Sight

Plants clean our air, give us oxygen, and some provide us with food and shade. However, some plants can be harmful to humans. In the summer, plants such as poison ivy, poison oak, and poison sumac can pose real threats to park workers and users.

Poison Ivy is the most common and can be found across most of the U.S. It is characterized by three shiny green leaves. **Poison Oak** is similar in appearance to poison ivy but often has more rounded leaves. **Poison Sumac**: Grows in more swampy areas and has 7–13 leaflets arranged in pairs. Contact with these plants' oil will result in an itchy, red rash that advances into blisters. The rash appears within 12- 72 hours after exposure, and severe cases (highly allergic or intense exposure) may require medical treatment.



All these plants contain the toxin, urushiol oil, which is found not only in the leaves but also in the vines, stems, and roots. Running a chainsaw or weed eater through these plants can spray your skin and clothing with this rash-inducing oil. It only takes about 60 minutes for urushiol to absorb into the skin.

Prevention is the best way to avoid these plants. The plants are relatively easy to **identify in the field**, and being able to recognize them will enable you to avoid or remove them successfully. Wear long pants, long sleeves, and gloves to prevent exposure and wash your clothes after working around these plants. There are also protective creams you can use to create a barrier against the oil. Above all, If you suspect coming in contact with any of these plants, do not touch your eyes and wash exposed skin immediately with soap and cool water. After 60 minutes, the oil is absorbed and soap and water is no longer effective.

4. Insect Bites and Stings: More than Just a Nuisance

Bugs and bug bites are part of outdoor life. However, some bites can carry diseases or cause severe allergic reactions. Mosquitoes, ticks, bees, and wasps are among the most dangerous.

Mosquitoes breed anywhere there is standing water, with their activity peaking at dawn and dusk. Females need blood meals to fuel their reproductive cycle and their bites can be irritating, itchy, and cause redness or swelling. Bites can also transmit West Nile virus, Zika virus, and Eastern Equine Encephalitis. **Ticks** are known carriers of Lyme disease, and other species can transmit Rocky Mountain spotted fever, and more. Ticks need blood to survive and will feed on any warm-blooded host. Most ticks are found in grass and brushy areas and travel by attaching themselves to passing bodies. **Bee, Wasp, and Hornet** stings can trigger allergic reactions ranging from mild swelling to life-threatening anaphylaxis.

We can take several precautions to avoid insect bites in the field. First is to use an EPA-approved **insect repellent** that contains DEET or picaridin. Your **Clothes** can also provide protection. Consider tucking pants into your socks and shirts into pants when walking through high grass. Wearing **light-colored clothing** is cooler and will help you to spot ticks early. Finally, perform regular **self-checks** in the field and make sure to carry an epinephrine auto-injector and **alert** others if you are allergic to bites.

5. Animal Bites and Encounters



Summer also means increased activity from wildlife and feral animals, which raises the risk of animal bites or scratches. Encounters may include snakes, raccoons, coyotes, and dogs or cats, some of which can carry rabies or other diseases. **Venomous Snakes** such as Copperheads, rattlesnakes, and cottonmouths are common in many regions. These bites can cause severe pain, swelling, and tissue damage. **Rabies** is a virus that can infect wild or feral mammals, particularly raccoons, skunks, bats, and unvaccinated pets. Bites can infect humans through bacteria in the animal's mouth.

The key to Prevention is Awareness. Be alert and avoid areas with tall grass, wood piles, or other potential hiding spots for animals. **Don't Feed Wildlife**, as this encourages interaction and increases the risk of bites. If you are scratched or bitten by an animal, clean the bite area immediately and seek medical attention. Report any animal that appears sick or behaves strangely. Workers in high-risk areas may need pre-exposure rabies vaccination.

Staying Safe: A Shared Responsibility

Employers and workers share responsibility for minimizing these summertime risks. Federal OSHA regulations require employers to provide a safe workplace, which includes protection from known environmental hazards. Key Safety Practices for employers include conducting hazard assessments and safety training, providing appropriate personal protection equipment (PPE), establishing emergency response plans, providing first-aid kits equipped for summer-specific dangers, ensuring access to water and shade, and encouraging timely reporting. Workers include should understand their rights and safety procedures, wear their PPE, take preventative measures seriously, watch for coworkers in distress, and communicate with supervisors about unsafe conditions.

Working outdoors in the summer can be rewarding but requires constant attention to possible health threats. Whether it's a stifling heat wave, an unexpected sting, or contact with a poisonous plant, outdoor workers face unique risks that demand preparedness and awareness.

With proper education, protective measures, and a culture of safety, we can enjoy a safer, healthier summer season.