June 2017 **Safety Training Article**

Summer Season Precautions

Key Points

- In our industry, summer brings more work, but also more hazards – and not just because of the tasks crew members are completing. Landscape workers face increased risks for heat-related illnesses and skin cancer compared to those in most other industries.
- Federal OSHA lists grounds maintenance and landscaping services as two of the six industries most affected by heat-related illness. In 2014, more than 2,600 workers across industries experienced heat illness and 18 died on the job from heat stroke and related causes, according to the agency.
- Heat-related illnesses include dehydration, heat exhaustion and heat stroke – a literal stroke that can be fatal. Know the symptoms of each illness:
  -Dehydration – decreased perspiration; thirst; a cool, clammy feeling; headache; poor appetite; dark-colored urine
  -Heat exhaustion – dizziness, headache, sweaty skin, weakness, cramps, nausea, vomiting, rapid heart beat
  -Heat stroke – Red/dry skin, high temperature, confusion, convulsions, fainting
- Skin cancer is the most common form of cancer, and sun exposure causes more than 90 percent of skin-cancer cases, according to the Skin Cancer Foundation. Sun exposure at any age can cause skin cancer.
- Heat-related illnesses are preventable, as are most skin cancers.

Employers' and Supervisors' Checklists

- ✓ Know that workers become overheated based on two factors: internal heat generated by physical labor and external heat in the environment.
- ✓ Follow federal OSHA's general duty clause and any other federal, state or local regulations related to heat illness or sun exposure. Federal OSHA requires employers to provide workplaces free of known safety hazards. This includes protecting workers from extreme heat and dangerous sun exposure. At least one standard interpretation letter states employers must provide employees who are overexposed to the sun's radiation with personal protective equipment.
- ✓ Create a written program outlining steps for protecting workers from heat illness and sun exposure that could cause cancer.
- ✓ Understand and use the heat index when managing workers. Heat and humidity raise workers' risks for heat-related illnesses, and the heat index takes both into account. See OSHA's heat index guide for employers here: osha.gov/SLTC/heatillness/heat_index/pdfs/all_in_one.pdf. The OSHA Heat Safety Tool, an app available in English and Spanish for Android and iPhone,

allows supervisors to calculate jobsite heat index, displays a risk level for workers and generates reminders about protective measures such as providing fluids, scheduling rest breaks and adjusting work operations. Get the app here: osha.gov/SLTC/heatillness/heat_index/heat_app.html.

- ✓ Be aware workers performing strenuous activities, those using heavy or non-breathable protective clothing and equipment, employees who are new or have been away from outdoor work a week or more and those with certain health conditions (diabetes, hypertension, high cholesterol, kidney or heart problems) and those who are pregnant, overweight or taking certain medications should take precautions beyond those warranted by heat index.
- ✓ During warm months, schedule strenuous work and tasks involving direct sun exposure for early morning or evening hours.
- ✓ Train employees to recognize, prevent and respond to heat-related illness.
- ✓ In summer, have crew leaders talk about heat-related illness, sun exposure and related precautions as part of regular safety meetings. Also discuss these topics in any other safety meetings your company holds.
- ✓ Provide workers with plenty of water. Consider purchasing low-profile hydration packs, which are worn like backpacks and hold up to 2 liters of liquid. Workers drink from the packs, available from safety-supply and outdoor-recreation stores, via plastic tubes they pull over their shoulders.
- ✓ Allow employees to take frequent breaks in the shade. In full sunlight, heat index values can increase 15 degrees F compared to a shady spot on the same site. If a shady area is not available on a jobsite, you can provide an outdoor canopy, sold at most sporting-goods stores. Employees can even work under these canopies in some cases, reducing their skin-cancer risks.
- ✓ Allow new or returning workers to gradually increase workloads and take more frequent breaks as they acclimatize, or build a tolerance for working in the heat.
- ✓ Monitor workers for signs of illness and teach them to monitor one another.
- ✓ Understand the human body gradually builds up heat tolerance through changes in blood vessels and in sweating, and those who are not acclimatized are most at risk for heat illness. Of 25 incidents of heat illness Cal/OSHA investigated, the person involved was on his/her first day of an outdoor job. In 80 percent of cases, the worker had been on the job four or fewer days.
- ✓ Workers new to outdoor jobs are generally most at risk for heat-related illnesses. For example, Cal/OSHA investigated 25 incidents of heat-related illness in 2005. In almost half of the cases, the worker involved was on their first day of work and in 80% of the cases the worker involved had only been on the job for four or fewer days.
- ✓ Develop a heat-acclimatization plan as part of your program to prevent heat-related illnesses. For instance, you might have new workers and those who have been away from the job a week or more begin with 20 percent of the usual workload on the first day and increase the workload no more than 20 percent each subsequent day. These workers also should take more frequent breaks than others. When a rapid change to hot weather occurs, adjust all crew members' workloads. Complete acclimatization can take up to 14 days, depending on an individual's health conditions and medications. To learn more about acclimatizing crew members, see osha.gov/SLTC/heatillness/heat_index/acclimatizing_workers.html
- ✓ See OSHA's heat-illness-prevention website at osha.gov/SLTC/heatillness/index.html for training guides and educational materials including posters and fact sheets. A social-media toolkit includes sample tweets and Facebook posts you can use to help educate your

employees and industry contacts about heat illness.

- ✓ Train workers to wear appropriate clothing, PPE and sunscreen when exposed to heat and UV radiation. Protective clothing and gear includes lightweight, long-sleeved shirts, pants, wide-brimmed hats and UV-resistant eye protection. Consider providing company shirts made from materials meant for outdoor workers or athletes. You can even find clothing with embedded sunscreens since lightweight clothing usually doesn't provide full sun protection.
- ✓ Encourage employees to examine their bodies often for signs of skin cancer (see below) and to consult a doctor about anything suspicious.

Crew members' dos and don'ts

Do:

- Understand two sources of heat can contribute to heat illness: internal heat generated by physical labor and external heat in the environment. When you work in hot weather, your body temperature can rise to dangerous levels if you don't drink enough water and rest in the shade.
- Drink water every 15 minutes, even if you are not thirsty.
- Take frequent breaks in shade or air conditioning, if possible.
- Move to shady areas during breaks. The temperature can feel up to 15 degrees cooler.
- During warm weather, wear lightweight, long-sleeved shirts, pants, and a loose hat with at least a 4-inch brim and a drape to cover the back of your neck. This will keep you cooler and help protect your face, ears and neck from sun exposure.
- Learn the signs of heat illness (see Key Points above) and what to do in an emergency. Monitor yourself as well as fellow workers for signs of heat-related illness, and remind co-workers to replenish fluids.
- Know that it takes your body weeks to adjust to working in a hot environment. You should gradually build up to a full workload when new to such work and after being away from the job a week or more.
- Be especially careful if you have hypertension, high cholesterol, or diabetes; are obese; or take anti-inflammatory medication as this increases your susceptibility to heat-related illness.
- If you have any of the conditions listed above, make sure your employer knows about them. Also let your employer know about any medications you take.
- Tell a co-worker or supervisor if you experience symptoms of heat-related illness. Go to a cool, shaded area and rehydrate with water or sports beverages if you are dehydrated. You can return to work when you feel better. If symptoms are still present after 30 minutes, seek medical attention.
- Call 911 and direct a co-worker who is displaying signs of heat exhaustion to a cool, shaded area. Take off the person's hat, shoes and socks and provide a sports beverage while waiting for medical attention.
- If a person displays signs of heat stroke, take the steps noted above for heat exhaustion and spray or wipe the person's skin with cool water and fan him/her. If a seizure occurs, turn the person on his/her side, tilt the head back and thrust the jaw forward in order to keep the airway open.
- To help prevent skin cancer, apply sunscreen with an SPF of at least 30 every day you work outdoors. You should apply 1 oz. of sunscreen, which is about a shot glass full. Most people apply only a quarter to half the required amount.
- Apply sunscreen 30 minutes before sun exposure and reapply it every 2 hours. Also reapply after sweating a great deal or toweling off.

- Since lightweight clothing doesn't provide full sun protection, consider wearing clothing with embedded sunscreens or using laundry detergent that increases your clothing's ultraviolet protection factor (UPF).

Don't

- Wear a tight-fitting hat or rag on your head. Snug garments prevent evaporation of perspiration — the process that cools your body.
- Wear tight clothing or synthetic materials. Instead, dress in loose-fitting, breathable clothing. Cotton and fabrics manufactured for outdoor workers or athletes are best.
- Remove your shirt. Workers sometimes think this will give them an even "base tan" that will protect them during future sun exposure, but this is a myth. The chronic sun exposure that creates a "base tan" increases your risk of developing skin cancer. There are no safe suntans.
- Think you don't need to take precautions because you have naturally dark skin. Skin cancer caused by sun exposure occurs in all ethnic groups.
- Ignore spots on your skin that change size, shape or color. Skin cancers often appear as:
  -Pale, pearly, wax-like nodules;
  -Red, scaly, sharply outlined patches;
  -Sores that don't heal; or
  -Small, mole-like growths (melanoma, the most serious form of the disease).
  Examine your body regularly and schedule an appointment with a doctor if you notice any of these skin changes.

***Prepared by Olivia** Grider for:*

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