Skin cancer can kill, so don’t think you’re immune to it. Here’s how to protect yourself from its threat.
The first time certified superintendent Mark Woodward had a skin cancer lesion removed, he was 31 and didn’t think much of it. After all, the lifelong Arizona resident was young and healthy. Besides, when you’re a superintendent in a state that has more than 350 sunny days a year, it’s a hazard of the job.

As with any occupational hazard, Woodward, who runs Dobson Ranch and Riverview golf courses in Mesa, Ariz, soon learned about taking the necessary safety precautions. And after several more treatments and a relatively major skin surgery, Woodward, 48, doesn’t mess around with the sun.

While most of his work today is behind a desk, Woodward makes sure to cover up — hat, long sleeves and sunscreen — whenever he goes outside, even when playing 18 holes recreationally.

“In our area, [the sun] is a serious hazard,” says Woodward, also a member of the GCSAA Board of Directors. “We used to think it was normal to get burned, peel and then do it all over again. I didn’t wear hats or long sleeves when I was younger. It simply wasn’t the ‘cool’ thing to do.”

But as Woodward, other superintendents and dermatologists can attest, getting skin cancer isn’t cool, either. It can kill you.

Bright, sunny and deadly
Skin cancer affects one in five Americans. The American Cancer Society estimates that about 1.3 million new cases of highly curable basal and squamous cell cancers will be diagnosed this year. These cancers are more common among individuals with lightly pigmented skin.

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Skin Cancer FAQs

What are UVA/UVB rays?
UVA (ultraviolet-A) rays are long-wave solar rays of 320 to 400 nanometers (billions of a meter). Although less likely than UVB to cause sunburn, UVA penetrates the skin more deeply and is considered the chief culprit behind wrinkling, leathering and other aspects of photo aging. The latest studies show that UVA not only increases UVB’s cancer-causing effects, but also may directly cause some skin cancers, including melanoma.

UVB (ultraviolet-B) rays are short-wave solar rays of 290 to 320 nanometers. More potent than UVA in producing sunburn, these rays are considered the main cause of basal and squamous cell carcinomas, as well as melanoma.

What does SPF mean?
Sun Protection Factor (SPF) measures the length of time a product protects against skin reddening from UVB, compared to how long the skin takes to redden without protection.

If it takes 20 minutes without protection to begin reddening, using an SPF 15 sunscreen theoretically prevents reddening 15 times longer — about five hours. (Actually, it may take up to 24 hours after sun exposure for redness to become visible.)

While SPF is the universal measurement of UVB protection, no comparable standard exists for UVA. Scientists worldwide are working to develop a standardized testing and certification method to measure UVA protection.

The Skin Cancer Foundation recommends using products with a SPF of at least 15, which blocks 93 percent of UVB. While an SPF higher than 30 blocks only 4 percent more UVB, many experts recommend these levels for sun-sensitive individuals, skin cancer patients and people at high risk of developing skin cancer.

What is broad-spectrum protection?
The phrase indicates that a product shields against UVA as well as UVB but does not guarantee protection against all UVA wavelengths. Most broad-spectrum sunscreens and sunblocks with an SPF of 15 or higher do protect against UVB and short UVA rays. If they also contain avobenzone, zinc oxide, or titanium dioxide, they should be effective against the entire UVA spectrum.

What are the early warning signs of skin cancer?
The Skin Cancer Foundation suggests remembering your ABCDs when doing a skin exam:

A – Asymmetry: Common moles are round and symmetrical.
B – Border: Skin cancers may have uneven borders.
C – Color: Varied shades of brown, tan or black and also red, white, and blue.
D – Diameter: If a spot is larger than a pencil eraser, it could be trouble.

How is skin cancer diagnosed and treated?
Every diagnosis begins with a thorough examination of the skin growth or lesion under a bright light. Your doctor likely will take a biopsy — a sampling of the growth or lesion — for further diagnosis.

Treatment entails one of several methods including excisional surgery, curettage-electrodesiccation, cryosurgery, radiation therapy, topical chemotherapy or a newer procedure called Mohs micrographic surgery. Almost all skin cancer diagnosed early and treated promptly and appropriately can be cured, according to the Skin Cancer Foundation.

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The most serious form of skin cancer — melanoma — is expected to be diagnosed in about 51,400 persons in 2001. Melanoma begins in the melanocytes, the cells that produce the skin coloring or pigment known as melanin. Because of the presence of pigment, many melanoma tumors are brown or black.

Melanoma is much less common than non-melanoma skin cancers, but it is far more serious. It accounts for only about 4 percent of skin cancer cases, but it causes about 79 percent of skin cancer deaths, according to the American Cancer Society.

Anyone can get melanoma, especially people who freckle or burn before tanning; have fair skin or blond, red or light brown hair; spend a lot of time outdoors; and have a family history of skin cancer.

Skin cancer can be cured if caught early, particularly basal and squamous cell cancers. While malignant melanoma can spread to other parts of the body quickly, it is highly curable with proper treatment when detected in its earliest stages. The five-year relative survival rate for patients with malignant melanoma is 88 percent, the American Cancer Society estimates.

For localized malignant melanoma (meaning it has not spread), the five-year relative survival rate is 95 percent. Survival rates for melanoma that has spread range from 13 percent to 58 percent, depending on how far the disease has spread. About 82 percent of melanomas are diagnosed at a localized stage.

The incidence of melanoma has more than tripled among Caucasians since 1980. Out of the estimated 9,800 people who will die from the effects of skin cancer in 2001, 7,800 of those deaths will be melanoma related.

The solution to these staggering statistics is simple: Properly protecting your skin from the sun every time you go outside could prevent the vast majority of skin cancers. But despite ongoing education from the dermatological, medical and cancer awareness organizations, the prevalence of this potentially deadly disease continues to increase nationwide.

The big question is whether or not superintendents have stayed ahead of the learning curve.
Skin cancer savvy

Statistics from the Skin Cancer Foundation show that 80 percent of a lifetime’s sun exposure is experienced before the age of 18. A history of five or more severe sunburns during adolescence more than doubles the risk of melanoma, according to a study in the April 29, 1999, issue of The New England Journal of Medicine.

The good news is that starting a good habit of protection later in life reduces the risk of skin cancer, experts say. It comes down to education and awareness.

The golf industry has increased its focus on skin cancer prevention on all fronts, and the golf course maintenance industry is doing its part. Jeff Bollig, GCSAA director of communications, says the issue has been widely covered in association seminars and other industry continuing education initiatives.

“It’s a major occupational health issue for our members,” Bollig says, adding that the skin cancer-screening booth co-sponsored with the American Cancer Society is a major attraction at the association’s annual conference. This year in Dallas, three booth volunteers performed 125 screenings. Only 62 attendees took advantage of the free program the year before.

Bollig says skin cancer issues are also covered in various GCSAA-sponsored seminars and courses dealing with occupational safety issues. Association publications and literature also occasionally deal with the issue. “I don’t think there’s a lack of information,” Bollig adds.

On the player side, Senior PGA Tour star Hale Irwin has teamed with the American Academy of Dermatology as the national chairman of the medical organization’s “KNOW Skin Cancer: Cover Up.” Irwin, with the help of other LPGA and PGA tour golfers, appears on the airwaves and in print ads reminding golfers at every level to take care of their skin.

The initiative grew out of the results from a national online survey conducted by the National Golf Foundation and USA Today. The 1999 study indicated that less than 20 percent of golfers regularly slather on a protective sunscreen before taking to the greens.

“The results of the survey speak to the need for the campaign,” Irwin says. “Clearly, there is a lot of work to be done in educating golfers and all Americans about the need to take sufficient precautions if they’re going to expose their skin to the sun.”

Despite the ever-increasing supply of readily available skin cancer facts and figures, there’s one segment of the industry that still believes it’s immune: students.

Trey Rogers, a professor in the department of Crop and Soil Sciences at Michigan State University in East Lansing, Mich., says he constantly reminds his students to cover up when in the field.

“I ask them why [they don’t wear] hats and sunscreen,” he says. “But most of them still have the attitude that they’re young, and it won’t affect them. They’re 18, 19, 21 and 22. [They think] they’re bulletproof.”

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Identifying Skin Cancer

Basal Cell
The most common form of skin cancer, along with Squamous Cell. It usually occurs on skin areas that have been in the sun. It often appears as a small, raised bump with a smooth, pearly appearance. Another type looks like a scar, and it is firm to the touch.

Squamous Cell
The most common form of skin cancer, along with Basal Cell. Squamous cell tumors occur on skin areas that have been in the sun, often on the top of the nose, forehead, lower lip and hands. It often appears as a firm red bump.

Melanoma
It’s the most serious and deadly form of skin cancer and the rarest. It begins in the melanocytes, the cells that produce the skin coloring or pigment known as melanin. Because of the presence of pigment, many melanoma tumors are brown or black.

Source: National Cancer Institute
Serious About Skin Cancer

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Each year, Rogers holds senior seminars in which students select topics to present to the rest of the class. In the 12 years that Rogers has graded these seminars, only three of the small groups have presented information on the hazards of sun exposure in the industry. But Rogers says he hopes more students will discuss the issue in the future. “You make them aware of it and hope and pray as they evolve that they’ll consider the hazards of it,” he adds.

Woodward agrees. His son Matt, 23, works as an assistant superintendent and doesn’t always use sunscreen.

“I try to make him aware and educate him,” Woodward says. “He says he doesn’t like the greasy feeling. At my age, I realize protection has no beauty.”

The big cover up

As a Sunshine State native, Joseph Boe, superintendent of Coral Oaks GC, a municipal course in Cape Coral, Fla., spent the early part of his life as a sun worshipper.

“I remember we’d spend every waking hour of our weekends on the beach so that we could be deep, dark and tan,” Boe recalls. “We’d use oil without any SPF and even add tanning accelerators.”

Like many “recovering” sun worshippers,

SPF: Sun Protection Fashions

Increased awareness about skin cancer prevention has launched an industry unto itself. From creams and lotions to entire wardrobes designed for total sun protection, there’s a product out there for most everyone. Here’s a sampling of what’s on the market:

Fiesta Hat Co. of Carpinteria, Calif. – The company’s Solarbrim hats have been tested and rated by the textile research laboratory at Cal Poly State University as having an ultraviolet protection factor of 50 and a sun protective factor of 32, twice the sun protection factor recommended by the American Academy of Dermatologists.

For more information, contact 800-479-4979 or www.fiestahatcompany.com

Randall International, Carlsbad, Calif. – Its patented Golfer’s Defense sunscreen contains the necessary agents to provide protection from the damaging effects of the sun. It’s formulated to go on like a lotion and smooth to a soft, absorbent powder to provide a “non-slip grip.”

For more information, contact www.golfersdefense.com

Sun Precautions, Everett, Wash. – Company president Shaun Hughes set out to create a head-to-toe sun protection solution after being diagnosed and successfully treated for melanoma at the age of 26. He found that he sunburned through his shirts and tanned through his high SPF sunscreen. Hughes’ line of sun-protective clothing, Solumbra, uses an SPF 30-plus fabric to provide all-day UVA and UVB sun protection.

For more information, contact 800-882-7860 or www.sunprecautions.com

Wallaroo Hat Co., Boulder, Colo. – This line of Australian sun hats for women and children provides an SPF rating of more than 50.

For more information, contact 888-925-2766 or www.wallaroohats.com

Rocky Mountain Sunscreen, Arvada, Colo. – The company offers large, refillable sunscreen pumps that can be stationed at golf courses and golf shops, encouraging sunscreen use among golfers and course maintenance workers. The pumps are similar to soap dispensers. The company manufacturers greaseless and fragrance-free sunscreen.

For more information, contact www.rmsunscreen.com.

Compliance Safety, Northbrook, Ill. – OSHA requires that an employer must protect employees against overexposure to the sun’s radiation. For superintendents, the good news is that compliance with this regulation doesn’t need to add a big number to the operating budget. Industrial sunscreen products are designed specifically for the outdoor worker with non-greasy, non-tropical fruit formulations available in towelettes, wall-mounted dispensers or lotion bottles and require only a single application per day.

For more information, contact 800-340-3413 or www.compliancesafety.com

Sunday Afternoons, Ashland, Ore. – This company manufactures lightweight, wide-brim, unisex sun hats with a patented design that shields from sunburns and offers a UV block for wearers’ faces, ears, noses, eyes and neck. Its Derma-Safe line (SPF 30) blocks UVA and UVB rays.

For more information, contact 888-874-2642 or www.sundayafternoons.com
Boes attitude has changed over the years. Now he never steps out into the sunshine without first liberally applying sunscreen with an SPF of 15 or more, a hat and a good pair of wraparound sunglasses to protect his eyes from both UV and UVB rays.

Boe admits that he and his crew don't wear long pants or long sleeves because of the high levels of heat and humidity common to Southern Florida year round.

"I can't picture going around in long pants and long sleeves," he says. "My crew members would be dropping like flies. They can cover all exposed skin with a good sunscreen or they can cover up in long clothing and pass out from heat stroke."

In Arizona, where the heat is drier, Woodward and his crew do cover up, not only with sunscreen but with long pants and long sleeves as part of the provided uniform. But it hasn't always been that way.

Woodward recalls in his younger days how he'd marvel that his grandfather, Jay Woodward, would go to work as a superintendent wearing long sleeves and long pants, despite the heat. The younger Woodward would wear shorts and a golf shirt.

"Now I know why he choose that uniform," Woodward says. "The Arizona sun can be intense from the middle of April until October."

The Skinny on Skin Cancer

1. Practicing regular and proper sun protection could prevent about 80 percent of skin cancers.

2. Everyone is at risk for skin cancer, whatever his or her skin color, and everyone needs protection from the sun.

3. Cloudy skies may make the air temperature cooler, but UV rays are still coming through the clouds.

4. Wear clothing to protect skin as much as possible. Choose long-sleeve shirts and long pants, and wear a hat that shades your face, neck and ears.

5. Some medications, such as antibiotics, can increase your skin's sensitivity to the sun. Ask your doctor or pharmacist about drugs you are taking.

6. Always use a broad-spectrum sunscreen with a Sun Protection Factor (SPF) of 15 or greater. Look for the number on the label.

7. For best results, apply sunscreen about 20 minutes before going outside to allow it time to bond with your skin.

8. Reapply sunscreen after swimming, perspiring heavily or drying skin with a towel.

9. Don't use sunlamps or tanning booths. A tan from these artificial methods won't protect you in the sun when you go on a vacation. They damage the skin and don't help or protect you.

10. It's never too late to protect your skin. Even if you've tanned or burned before, you can begin protecting your skin today by following these recommendations.

Source: American Cancer Society/Skin Protection Federation

Skin cancer takes many forms. Anything that changes, grows or fits any of the "ABCD" warning signs (see sidebar on page 28) should be taken seriously. A doctor should examine anything suspicious.

Common warning signs include a change in a mole, a sore that does not heal, a skin growth that increases in size, or a spot that continues to itch, hurt, scab.

A 1999 study at the Johns Hopkins School of Medicine revealed that more than half of melanomas were detected by the patients themselves while another quarter of tumors were detected during full skin exams by physicians.

Having had skin cancer in the past, Woodward says he no longer takes chances. He visits his dermatologist every three months for a routine exam.

"In fact, I have one coming up soon," he says. "I want to be sure I keep on top of it and not have any surprises."