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It's a new year, and with every January, we make resolutions. In many cases, these resolutions involve our health and physical fitness. And in a beautiful place like the Bay Area, that can mean getting outside more – to walk, run, hike, ride, ski, or climb. As a physician, I strongly encourage this... and I wanted to remind you not to forget the sunscreen!

Skin cancers are the most common malignancy in the United States, with around 3.5 million new cases each year. Skin cancers come in three main types: basal cell, squamous cell, and malignant melanoma. Basal cell (BCC) is by far the most common and tends to look like a “pearly papule” – a slightly raised, shiny patch, sometimes with a little blood vessel on top. The next most common is squamous cell (SCC), which presents as a rough spot or a scab that never heals completely. The least common, but by far the most serious, is melanoma. This can have a broad range of appearances but generally looks like an oddly shaped, overly dark, or ulcerated freckle or mole.

Non-melanoma skin cancer rates are similar for men and women, though some variability exists in location. The majority of these occur in areas of the body with the greatest sun exposure, such as the face, scalp (men more than women), forearms, shoulder region, and upper chest (women more than men). Though it is very uncommon to die from non-melanoma skin cancer (BCC and SCC), melanoma claims the lives of nearly 10,000 Americans each year – including, on average, two Californians each day. Almost twice as many men than women die from melanoma, a fact that is often attributed to less attention to sun protection and delays in diagnosis or seeking treatment. Warning signs include changes in size, shape, or color; bleeding or ulceration; and localized pain or swelling.

The best way to diagnose a skin cancer early on, particularly if you are fair-skinned, prone to burns, or have a history of sun exposure, is a regular skin check with your dermatologist. The good news is that most skin cancers are treatable, and the success rate for treatment of non-melanoma skin cancer is nearly 99%. In many cases, treatment includes a specific technique called Mohs micrographic surgery. In this procedure, named after early 20th century dermatologist Frederick E. Mohs, very thin layers of skin are meticulously removed, stained, and sequentially examined under a microscope. By taking layers of tissue in such an incremental manner, the physician can be sure that *all tumor tissue is excised*, and can simultaneously *spare as much nearby normal tissue as possible*. Frequently, skin cancers affect the delicate and complex facial structures. In these cases, the Mohs surgeon will often refer patients for reconstruction to a plastic surgeon. This helps to ensure the best possible

outcome, both in terms of cancer care and cosmetic appearance – especially in highly visible and functional areas, such as the nose, eyelids, lips, and ears.

Most skin cancers are related to sun exposure, specifically, the ultraviolet radiation (UV) that filters through the Earth's atmosphere. This comes in two forms, UVA and UVB, which have some different effects based on their wavelengths. In the aesthetics field, we often say that UVA contributes to "Aging" (wrinkles, "sun spots," and the changes in texture and elasticity of the skin), while UVB causes "Burns." The distinction is not exact and the truth is a little more complicated, but the take-home message is this: both types are damaging to the skin and can contribute to skin cancer formation, therefore your sun protection regimen needs to address UVA and UVB. This is just as true on overcast and cold days as when it's sunny and warm. To help you prepare, the UV Index is calculated daily and can be found on many local weather websites.

By now, you may be asking, what do I do with this information? First, congratulations on your resolution to get outside and enjoy the beauty of Northern California! Second, I want you to take a closer look at the label on your sunscreen. In my practice, I recommend sunscreens that specifically protect from UVA and UVB, and I have a strong preference for products that contain a physical blocker and an SPF rating of at least 30. These sunscreens actually reflect the UV radiation away from the skin with tiny particles of zinc or titanium, rather than using chemicals to absorb it. Lastly, when you're sweating it out or if you're doing water sports, waterproof sunscreens can be very helpful. Regardless of the type or brand, however, make sure to reapply regularly. And finally, have a happy, healthy 2014!

Evan R. Ransom, MD is a facial plastic surgeon practicing in San Francisco and Marin County. He specializes in aesthetic and reconstructive surgery of the face, neck, nose, and eyelids. Dr. Ransom regularly performs Mohs surgery reconstructions for complex facial skin cancer defects. For more information, visit him on the web at www.SanFranciscoFacialPlasticSurgery.com.