



**THE COMPREHENSIVE
GUIDE TO SUN CARE:
PREVENTING AND
REVERSING SUN DAMAGE**



THE COMPREHENSIVE GUIDE TO SUN CARE: PREVENTING AND REVERSING SUN DAMAGE

In the last few decades, there has been a surge in public awareness of how sun exposure affects the skin. However, even with an increasing number of sun protection products on the market, sun damage remains one of the top aesthetic concerns for both men and women. In recent years, wrinkles, sun damage, and facial redness were among the most common skin conditions treated, with over 2.2 million treatments performed using laser, light, and energy-based devices to treat them.¹ Additionally, sun damage treatments were up 29% this year and a striking 63% in just two years.

Treating sun damage and preventing further signs of photoaging is a must if you want to help your clients achieve their aesthetic goals by maintaining a healthy, youthful appearance—and also protect their health. More than 9,500 patients are diagnosed with skin cancer in the U.S. each day, according to the Skin Cancer Foundation.² The solution? Educating patients on how to protect themselves from the sun properly and offering the best treatments to address their sun damage.

¹ Skin experts. Over 12.5M Procedures in 2018. (n.d.). Retrieved July 22, 2022, from <https://www.asds.net/skin-experts/news-room/press-releases/asds-members-performed-more-than-125-million-treatments-in-2018>

² Skin cancer facts & statistics. The Skin Cancer Foundation. (2022, May 24). Retrieved July 22, 2022, from <https://www.skincancer.org/skin-cancer-information/skin-cancer-facts/>

WHY IS SUN PROTECTION SO IMPORTANT?

The reasons for sun protection go far beyond aesthetics. Many of your patients likely underestimate the effect that sun exposure can have on their health, as well. Sunlight consists of two types of harmful radiation, UVA rays and UVB rays:

- **UVA rays** transmit harmful radiation that's responsible for photoaging, such as age spots and wrinkles, and can pass through window glass.
- **UVB rays** transmit harmful radiation that causes sunburn and are blocked by window glass.

Overexposure to either type is associated with health risks that include an increased risk of skin cancer, eye damage, and immune suppression.



Skin Cancer

One in five Americans will develop skin cancer in their lifetime, even though sun damage is one of the most preventable risk factors for cancer.³ Melanoma, the most serious form of skin cancer, is now one of the most common cancers among adolescents and young adults ages 15-29. While melanoma accounts for about three percent of skin cancer cases, it causes more than 75 percent of skin cancer deaths. UV exposure and sunburns, particularly during childhood, are risk factors for the disease. Non-melanoma skin cancers are less deadly than melanomas; however, they can spread if left untreated, causing disfigurement and more serious health problems. Both types are easily preventable by incorporating proper sun protection into one's routine.

Eye Damage

Less pervasive than skin cancer, but equally worth avoiding, is the potential for eye damage caused by the sun's rays. Research has shown that UV radiation increases the likelihood of certain cataracts, a form of eye damage in which the lens of the eye becomes clouded, hindering vision. Left untreated, cataracts can lead to blindness. Other kinds of eye damage include pterygium, a tissue growth that can block vision, and cause degeneration of the macula, the part of the retina responsible for visual perception. The risk of eye damage can be reduced by using proper eye protection, ideally sunglasses with 99 to 100 percent UV protection.

Immune Suppression

As the skin plays a huge role in protecting the inner organs from the environment, it follows that any damage to the skin is going to compromise its ability to do this. Scientists have found that overexposure to UV radiation suppresses the skin's natural defenses, affecting the overall functioning of the body's immune system as a whole. For example, the skin normally mounts a defense against foreign invaders such as cancers and infections. But overexposure to UV radiation can weaken the immune system, reducing the skin's ability to protect against these invaders.

³ENVIRONMENTAL PROTECTION AGENCY. (N.D.). EPA. RETRIEVED JULY 22, 2022. FROM [HTTPS://WWW.EPA.GOV/SUNSAFETY/HEALTH-EFFECTS-UV-RADIATION](https://www.epa.gov/sunsafety/health-effects-uv-radiation)



THE AESTHETIC EFFECTS OF SUN DAMAGE

To understand the aesthetic effects of sun damage, it helps to understand the two types of UV radiation mentioned above: UVA and UVB. These rays carry ultraviolet (UV) photons that are invisible to the naked eye but can cause mass damage to the skin, beginning on the surface and extending deep below.

UVB photons are absorbed by the epidermis, where they excite molecules in the skin. To release the absorbed energy, skin's molecules begin to warp via chemical reactions, resulting in the development of sun spots, melasma, a burn, or worse.

UVA photons, on the other hand, penetrate deeper into the skin, causing damage to elastin and collagen proteins, which are two building blocks for smooth, firm skin. Over time, this results in the molecular breakdown and death of skin cells, which your skin will eventually be unable to keep up with.

All of this can occur regardless of your skin type and skin tone, from Fitzpatrick Type I (very fair) to Fitzpatrick Type VI (darker skin tones). What's more, the effects are cumulative. On average, one's risk of developing melanoma from UV radiation increases 200% with just five sunburns in their lifetime.⁴

⁴*BID.*



AESTHETIC SIGNS OF SUN DAMAGE

The visible outcome of the damage discussed above manifests in the skin in the following ways:

- Wrinkles and fine lines
- Pigmentation changes such as age spots, liver spots, freckles, and melasma
- Loss of skin tone and decreased elasticity
- Rough, uneven skin texture
- Broken capillaries and spider veins, usually around the nose and chest
- Redness and blotchiness
- A worsening of conditions such as rosacea
- Overall, more rapid aging

HOW TO PRACTICE PROPER SUN PROTECTION

Applying proper sun protection is the best way to reduce sun damage in the future, and for patients receiving any form of treatment for photoaging, it will be a necessary part of their aftercare. Make sure your clients know the facts about sun protection by sharing some tips and emphasizing the importance of using a daily SPF. Sunscreen that contains an SPF of 30 or higher is the best way to protect skin from the signs of sun damage—and other risks as well. Regular daily use of sunscreen can reduce the risk of developing squamous cell carcinoma by about 40 percent and lower the risk of melanoma by 50 percent.⁵ Consider including a range of sun protection products in your clinic offerings for clients to choose from. This is also a great way to expand your clinic's retail revenue.

⁵SUNSCREEN. THE SKIN CANCER FOUNDATION. (2022, JANUARY 28). RETRIEVED JULY 22, 2022, FROM [HTTPS://WWW.SKINCANCER.ORG/SKIN-CANCER-PREVENTION/SUN-PROTECTION/SUNSCREEN/](https://www.skincancer.org/skin-cancer-prevention/sun-protection/sunscreen/)



SUNSCREEN: WHAT PATIENTS NEED TO KNOW

For some patients, the sunscreen options can be overwhelming, causing them to give up in defeat or use the wrong sunscreen rendering the effort somewhat useless after all. To add to this, some patients may be wary of chemical sunscreens while others may be averse to using sunscreens that are too thick, oily, or otherwise uncomfortable when applied—especially on the face.

The best way to help patients get on board with regular sunscreen use is to have a list of recommendations ready for them. By making the process of finding the right sunscreen easy, you've taken a lot of the weight off your patient's shoulders while improving overall patient satisfaction by going above and beyond.

Here are the factors to consider when making the appropriate sun care recommendations to your patients.

Sun Protection Factor (SPF)

Dermatologists recommend using a sunscreen with an SPF of at least 30, which blocks 97% of the sun's UVB rays.⁶ Higher SPFs block slightly more of the sun's UVB rays, but no sunscreen can block 100% of the sun's UVB rays. One important thing to remember is that sunscreen with a higher SPF doesn't last longer and still needs to be reapplied approximately every two hours when outdoors.

Broadspectrum Coverage

Look for a sunscreen that protects from both UVB, the rays that cause sunburn, and UVA, the rays that cause tanning and premature aging. Now that UVA dangers are well known, broad-spectrum sunscreen provides clear information on product labels about protection against both UVB and UVA.

Physical & Chemical Protection

There are two main types of sunscreen protection, **physical** and **chemical**. Physical sunscreens most commonly contain titanium dioxide and zinc oxide, creating a physical barrier that reflects dangerous UV rays. Chemical sunscreens contain chemicals that protect the skin by interacting with and absorbing ultraviolet energy. Both are effective, though some patients may prefer one or the other, or a combination to give them the best protection.

Water Resistant

These are best for activities like swimming or intense exercise. Sunscreens labeled water resistant are effective at protecting your skin for up to two hours, even if you're swimming or sweating.

Delivery Type

Sunscreens come in many forms, including lotions, creams, gels, ointments, wax sticks, and sprays. Patients with dry skin may prefer a cream or lotion, while those with oily skin might have better luck with a light gel. Gels are also excellent for areas with hair, and should be recommended to your patients with chest or facial hair or for use on the scalp. Sticks are handy for easy reapplication on the face, and sprays are useful for on-the-go application, for kids, or for those with an active lifestyle.

⁶Sunscreen faqs. American Academy of Dermatology. (n.d.). Retrieved July 22, 2022, from <https://www.aad.org/media/stats-sunscreen>

MORE TIPS FOR DAILY SUN PROTECTION

- Limit time in direct sunlight by sticking to shady spots while outdoors, especially between the hours of 10 a.m. and 4 p.m. when UV rays are at their strongest.
- Pay attention to the UV index. The UV index tells you how high the risks of sun exposure are on any given day, and you can usually find this number on your favorite weather app or site. A UV index rating of 10 or higher is a good reason to stay inside.
- Accessorize to protect your skin. Hats with broad brims and sunglasses with a high UV absorption rate are essential for guarding the sensitive skin around the eyes, face, and neck during sunny weather.
- Avoid sunbathing, sunlamps, tanning beds, and tanning salons. Spray tans and tanning lotion are safer alternatives if you want to achieve a golden glow.
- Finally, advise patients to avoid retinol use or chemical/physical exfoliants for at least one week before going on vacation to a sunny destination or having prolonged sun exposure as they make your skin more sun-sensitive.





HOW TO TREAT A SUN BURN?

Once a sunburn has been sustained, the best thing to do is avoid further exposure and treat the area right away. Here are the steps you can recommend patients to follow to help heal a sunburn:

1. Avoid the sun, wear sunscreen and protective clothing if exposure is unavoidable.
2. Apply a cold compress to soothe the area and immediate symptoms.
3. Stay hydrated by drinking lots of water.
4. Keep the sunburnt area clean and hydrated with a light, oil-free moisturizer.
5. Incorporate skin care products with ingredients like aloe vera, peptides, and ceramides to assist in barrier repair.

AESTHETIC TREATMENT OPTIONS FOR SUN DAMAGE AND PHOTOAGING



According to the American Society for Dermatologic Surgery, sun damage is a top condition treated within the laser/light/energy-based category — up 14% year over year and up 22% in just three years. In 2019, sun damage led to the types of conditions treated, with over 2.4 million treatments performed.⁷ Here are the popular treatments leading the field in resolving sun damage and the photoaging resulting from sun exposure.

Chemical Peels

Chemical peels involve applying one or more exfoliating compounds such as glycolic acid, trichloroacetic acid, salicylic acid, lactic acid, or carbolic acid to the treatment area for a controlled amount of time. The solutions essentially “burn” off the surface layers of skin, promoting healing so that a new skin layer replaces the damaged one. Depending on the strength of the peel, patients may experience a burning sensation, and numbing or pain medication may be required for deeper peels. Although they can have results after just one session, chemical peels are one of the harsher options for treating sun-damaged skin, which already has a reduced ability to heal itself. During recovery, patients usually experience redness, peeling, and flaking, and this can take up to six weeks to resolve. Other potential risks include a temporary or permanent change in skin color, scarring, and reactivation of cold sores.

⁷Skin experts. 2019 ASDS Procedures Survey Release. (n.d.). Retrieved July 22, 2022, from <https://www.asds.net/skin-experts/news-room/press-releases/asds-members-performed-nearly-14-million-treatments-in-2019>

AESTHETIC TREATMENT OPTIONS FOR SUN DAMAGE AND PHOTOAGING

Lasers

Laser resurfacing is an effective way of reversing the damaging effects of sun exposure on the skin. Resurfacing lasers are either ablative or non-ablative. Ablative lasers use rapid pulses of high-intensity light to remove the damaged upper layers of the skin, thereby smoothing and tightening the skin, removing wrinkles, stimulating collagen growth, and correcting pigmentation problems. Non-ablative lasers are non-wounding and less invasive but produce less visible results. They act by stimulating collagen growth and tightening the underlying skin to promote healing and skin renewal. While lasers using advanced technology have fewer drawbacks to patients, they still involve some discomfort and recovery time, as well as potential side effects like scarring and pigment changes.

Intense Pulsed Light (IPL)

As opposed to chemical peels and lasers, Intense Pulsed Light (IPL) treatments are a rejuvenating therapy that uses wavelengths of light to improve the signs of sun damage. They achieve many of the same results that lasers do but in a gentler, more targeted way. IPL incorporates several wavelengths of light at once, fighting sun damage and improving the appearance of the skin from multiple angles. Because of this broad-spectrum approach, IPL treatments are milder than lasers or chemical peels, and they're great for skin maintenance to preserve a healthy, youthful appearance at any age. The latest photorejuvenation technology is safe and effective for most skin types, and patients usually experience no downtime at all and can resume normal activity right away—so there's no need to hide in a dark room for a month, the way some chemical peel patients have to. Because of its safety, effectiveness, and low downtime, photorejuvenation using IPL technology is going to be the best option for most people experiencing sun damage.



VENUS CONCEPT POST-SUN AESTHETIC TREATMENTS

Non-invasive treatments continue to gain market share as patients seek out aesthetic procedures that produce good results without the discomfort and downtime more invasive treatments require. As a leader in providing the best in medical aesthetic devices for non-invasive treatments, Venus Concept empowers you to treat your patients' sun damage and photoaging with the following powerful technologies:

Venus Versa™ Intense Pulsed Light Photorejuvenation

To treat the millions of people who experience sun damage, consider adding Venus Concept's Venus Versa™ photorejuvenation device to your clinic's offerings. Through IPL technology, our device delivers direct bursts of energy onto targeted areas of the skin to treat both pigmented and vascular lesions. To maximize comfort for patients, our IPL photorejuvenation device uses SmartPulse™ technology and a real-time cooling system to provide precise and consistent energy delivery with no downtime. Venus Versa™ IPL treatments provide patients with a safe, reliable way to counteract the effects of sun damage on the skin. As part of a nimble, multi-application platform, Venus Versa™ also enhances your practice overall by multiplying your clinic offerings to include the most sought-after procedures today, addressing other common aesthetic concerns with acne treatments, wrinkle treatments, fat reduction, cellulite reduction, and skin tightening.



INDICATIONS FOR USE:

Venus Versa™ is cleared by the FDA, licensed by Health Canada, and has CE Mark as a multi-application device intended to be used in aesthetic and cosmetic procedures. The SR515 and SR580 applicators are cleared by the FDA, licensed by Health Canada, and have CE Mark for the treatment of benign pigmented epidermal and cutaneous lesions and treatment of benign cutaneous vascular lesions. The HR650/HR650XL and HR690/HR690XL applicators are cleared by the FDA, licensed by Health Canada, and have CE Mark for the removal of unwanted hair and to effect stable long-term or permanent hair reduction for Fitzpatrick skin types I-IV. The AC Dual applicator is cleared by the FDA, licensed by Health Canada, and has CE Mark for the treatment of acne vulgaris. The DiamondPolar™ and OctiPolar™ applicators on the Venus Versa™ system are cleared by the FDA for non-invasive treatment of moderate to severe facial wrinkles and rhytides on females with Fitzpatrick skin types I-IV. The DiamondPolar™ applicator is licensed by Health Canada and has CE Mark for non-invasive treatment of moderate to severe facial wrinkles and rhytides on females with Fitzpatrick skin types I-IV. The OctiPolar™ applicator on the Venus Versa™ system is licensed by Health Canada and has CE Mark for temporary body contouring via skin tightening, circumferential reduction, and cellulite reduction. The NanoFractional RF™ (Viva) applicator is cleared by the FDA, licensed by Health Canada, and has CE Mark for dermatological procedures requiring ablation and resurfacing of the skin.



Venus Glow™ Dermal Renewal

As part of a comprehensive approach to aesthetic skin care, Venus Glow™ skin renewal treatments cleanse skin right down to its subcutaneous layers. The device uses a vacuum, 360-degree rotating tip, and two ultra-fine jet streams to open up and deep-clean pores by removing impurities from the stratum corneum for optimal dermal renewal. Enhanced with Venus Glow Serums™, the treatment evolves into a two-step process for superior pore cleansing and customized facial renewal. Oscillating jet streams finer than an average strand of hair allow the serums to effectively reach into the depth of the pore, allowing for enhanced nutrient absorption and can be tailored to each client's individual needs. The serums can boost the skin's protective barrier to bar against sun damage, and also treat signs of photoaging by brightening sun spots and hyperpigmentation.

Venus Legacy™ Skin Tightening and Wrinkle Reduction

Collagen and elastin are the two essential building blocks for having firm, youthful skin. Over time, sun exposure can impact the skin's production of these two important elements. Venus Legacy™ is powered by proprietary (MP)² technology (a combination of Multi-Polar Radio Frequency and Pulsed Electro Magnetic Fields) and features cutting-edge VariPulse™ technology to deliver targeted wrinkle reduction and skin tightening treatments. The treatments enhance the skin's natural production of collagen and elastin to improve skin's firmness, smoothness, and elasticity. Both of these comfortable, no-downtime treatments visibly restore tighter, smoother, and younger-looking skin.



INDICATIONS FOR USE:

Venus Glow™ is listed by the FDA and marked by Health Canada as a Class I device. It provides a dermal renewal* treatment that works to open up and deep-clean pores. Dermal Renewal treatments open up and deep clean pores by removing impurities such as daily dirt and debris, dry or dead skin cells and excess sebum, which can clog pores and cause blackheads and whiteheads. Venus Concept is the exclusive distributor for Venus Glow™. Venus Glow™ Serums are for external use only. For professional use only. Concentrated solution. Shall be diluted and used immediately thereafter per instructions for use. To be delivered by the Venus Glow device.

Venus Legacy™ is cleared by the FDA for the non-invasive treatment of moderate to severe facial wrinkles and rhytides in females with Fitzpatrick skin types I-IV with the OctiPolar™ and DiamondPolar™ applicators, and temporary reduction in the appearance of cellulite with the 4D Body (LB2) and 4D Face (LF2) applicators. It is licensed by Health Canada and has CE Mark for the temporary increase of skin tightening, temporary circumferential reduction, temporary cellulite reduction, and temporary wrinkle reduction.



 **VENUSCONCEPT**
delivering the promise

CONTACT US AT
888.907.0115

Speak to our experts about bringing the best devices for treating sun damage to your clinic. For all your patients' aesthetic needs, we have the industry-leading medical aesthetic technology to take your practice to new heights of success.

We're here to help, so give us a call today!