



Short Safety Subject

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Protect Your Skin

If all sunburns were reported, they would probably be the most common heat injury. The simple fact is that sunburn is just that - a burn, and really no different than any other thermal burn. In the worst cases, you can experience severe blistering. If a large area is burned, you can get fever, infections, and wind up in shock.

A soldier with a minor burn could have serious consequences, especially if the burn made it hard to use or wear required equipment. Let's face it, trying to carry a rock with a burn on the shoulders and back isn't really going to be much fun.

UVA vs. UVB

Sunburn is caused by exposure to ultraviolet (UV) light. The UV light from the sun that reaches the earth is either UVA or UVB. UVA has a longer wavelength than UVB; UVB is the more dangerous of the two. The amount of UVB that reaches the surface of the earth is variable and depends on many factors; for example, exposure increases with higher altitude and being closer to the equator. Sand and snow reflect light, thus increasing exposure.

On the other hand, ordinary window glass filters out almost all UVB, as will smoke and smog. For the tanning enthusiast, sunlamps and tanning beds are mainly UVA, but there is still some UVB, so they are not completely safe.

It's no surprise, but the lighter your skin, the more likely you are to burn. If you have naturally blonde or red hair, you are more at risk. Some medications may also increase your risk, as can some colognes, perfumes, and soaps.

Aside from sunburns, you can run into other problems. Long-term exposure to sunlight ages the skin prematurely and can lead to wrinkled, mottled, or discolored skin. Actinic keratoses, which are pre-cancerous, are much more common. Every year, there are about 400,000 new cases of basal cell skin cancer, 80,000 new cases of squamous skin cell cancer, and 25,000 new cases of malignant melanoma. Although basal cell is usually cured by removing the cancer, squamous cell and malignant melanoma can spread—there are around 6,000 deaths each year from malignant melanoma alone.

Obviously, the best way to avoid sunburn is to avoid exposure. No, that doesn't mean you can't go outside. Like anything else, you can take some preventive steps.

- Cover up. If you can prevent the sun's rays from getting to your skin, it is harder to get burned. Be careful, it is possible to get burned through some light fabrics.
- Limit exposure. Hitting the beach for 8 hours a day after a winter at Fort Drum probably isn't a real good idea. Work up gradually. Start with not more than 30 minutes and work up from there. If you do go outside in most of the U.S. and similar latitudes, UVB is increased between 10 AM and 3 PM. Don't think you're safe in a pool. Often the water just cools the skin enough so that you don't notice you are getting a burn. And don't let an overcast day fool you—clouds aren't much protection either.
- Use sunscreen. All sunscreens are not created equal and all suntan lotions aren't sunscreens—you have to read the labels. Look for 5 percent para-aminobenzoic acid (PABA). Sunscreens with PABA should be put on 30 to 60 minutes before going into the sun so that it will have time to bind to the skin, so it doesn't wash off with swimming or through perspiration. Look for a sunscreen with an SPF of at least 15, though some common sense is in order. Remember, the higher the SPF number, the better the protection. An SPF 15 is probably fine to use if you are mowing your lawn on a cloudy day, but not near enough for a full day of volleyball at the beach. If you are allergic to PABA, there are other sunscreens; look for anthranilate or cinnamate; another is benzophenone, but this works better for UVA. Zinc or titanium oxide creams can also be used.

If you do get a burn, get out of the sun! Cold water compresses are one of the best first-aid measures to relieve pain. Over-the-counter steroid creams aren't really useful, but analgesic ointments or sprays may be. Be careful, these can sometimes cause allergic reactions.

There are a lot of folk-remedies for sunburn, whether they work or not is a topic for debate. One thing about them is certain, however, if the skin is broken or if there is blistering, don't put things you don't know about on the burn! When in doubt, check with the medical folks.

Sunburn is preventable. You only have one skin, and it has to last a lifetime—protect it!