

## Ultraviolet (UV) Light Eye Exposure Fact Sheet

Photokeratitis is a very painful eye condition which results from unprotected eye exposure to ultraviolet (UV) rays from various sources:

**Sun and its reflection off snow/ice, water, sand, cement**

**Welding arcs**

**Tanning beds**

**Germicidal UV lamps**

The UV rays are absorbed by the outer layer of the eye (cornea) causing a "sunburn" of the eye. Longer exposures cause more severe symptoms, but usually symptoms will resolve in a few days. Symptoms can be delayed for up to a day post-exposure, although often develop within 6-12 hours. Recovery can take from 1-3 days.

### **SYMPTOMS**

- Pain
- Redness
- Gritty feeling in the eyes
- Teary/watery eyes
- Headache
- Twitching of the eyelids
- Distorted vision (halos, blurriness)
- Sensitive to light
- Swelling
- Temporary loss of vision (rare)

### **PREVENTION**

- Make sure you have appropriate eye protection, even on overcast days.
- Sunglasses or goggles should be rated for 99-100% UV absorption.
- They should be wraparound or side shielded with large lenses that fit close to the face. Brimmed hats can also help reduce sun exposure to the eyes.

### **FIRST AID TREATMENT**

- If you experience symptoms, remove yourself from the exposure and go into a darkened room or tent.
- Remove your contact lenses if you wear them.
- Do not rub your eyes.
- Apply a cool compress to your closed eyes.
- Use artificial tears.
- Manage pain with an oral over-the-counter pain medication like ibuprofen (Advil, Motrin), if appropriate given your medical history.
- Usually, the condition will go away within a few hours to a few days; if your pain or vision distortion continues more than 2 days after exposure, seek medical attention.

## **REFERENCES AND ADDITIONAL RESOURCES**

American Academy of Ophthalmology [Photokeratitis](#)

World Health Organization [The known health effects of UV](#)

*Illness, injury and close call events shall be reported by submitting an [SU-17](#).*

If you have questions or need support, contact EH&S's Field Safety Program at [ehs\\_field\\_safety\\_support@lists.stanford.edu](mailto:ehs_field_safety_support@lists.stanford.edu).

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