



# Sunlight Allergies May Affect up to 20 Percent of the World's Population

The Dark Side of the Sun -- Allergies

By LIZ NEPORENT

April 3, 2013—

After just a few moments in the sun, [Chelsey Madore](#) knows a field of itchy red bumps will spread across her neck, chest, forearms and hands. Sometimes she gets a headache. And sometimes the rash on her hands is so severe it erupts into angry, pus-filled blisters.

"I can't stay out in the sun for more than 10 minutes at a time without having a reaction," she said. "It's hard not to feel like a vampire."

Madore, a makeup artist who lives in San Diego, Calif., has an allergy to the sun called polymorphous light eruption -- PMLE -- a condition that's estimated to affect 5 to 20 percent of the global population.

Women seem to be more susceptible than men, and in some cases, there can be a hereditary or genetic component. The condition often arises in early adulthood, but young children sometimes contract a related allergy -- juvenile spring eruption -- that tends to attack the ears and face.

## [How to Beat Allergies and Get Outside](#)

Childhood sun allergies usually improve with increased sun exposure and disappear with age. Not so for adult-onset sun allergies. In Madore's case, she first began developing sun-related rashes when she was about 16 years old. But the condition worsened significantly when she moved from cloudy Maine to sunny California in her early 20s.

"In Maine, the sun isn't so obvious, but once I moved that's when I really began noticing the connection between the sun and rashes," she said.

Madore has a fair complexion, but according to Dr. Chris Adigun, an assistant

professor and dermatologist at NYU Langone Medical Center, there is little connection between solar allergies and skin color.

"Sun allergies are unrelated to how light your skin is or how easily you sunburn. Any skin pigmentation can have this condition," she said.

Though some medical experts don't recognize PMLE as a true allergy, Adigun said she believed that was because the body's immune system identifies a foreign invader -- in this case sun-altered skin -- and unleashes a defense in the form of antibodies.

A more severe form of a solar allergy-like condition called porphyria can cause blisters, swelling, cramping, paralysis -- and in extreme cases, psychosis. Though exceedingly rare, porphyria has become something of a celebrity, having been featured on "House," "Scrubs" and ABC's "Castle."

### **Is the Weather Wearing on Your Mood?**

PMLE symptoms are rarely life threatening, and they typically vanish within hours, unlike sunburn, which often doesn't appear until 24 hours after sun exposure, and can last for weeks.

But Madore said having PMLE forces her to alter her lifestyle. She said it's difficult to enjoy a day at the beach or a stroll through the park. She even has to take care when riding in a car. When her arms and hands are exposed to the sunlight streaming through the windows red bumps appear and she's forced to cover up.

To Adigun, this makes perfect sense because UVA are the only waves of the spectrum that trigger allergies, and coincidentally, they are the only light wavelength that can penetrate glass.

Solar allergies are frequently misdiagnosed, said Adigun.

"I always ask patients what medications they are taking and what type of sunscreen they wear, because these can trigger reactions that look similar to a sun allergy but aren't necessarily caused by the sun," she said.

Both topical and oral medications can cause allergic reactions when skin is exposed to sunlight. Sunscreens and products that contain chemical sunblock rather than mineral sunblock are often the culprit in breakouts as well, Adigun explained.

Even when a PMLE diagnosis is confirmed, Adigun lamented there wasn't much

the doctor could do for the patient.

"I stress prevention and tell them photo-protection is of paramount importance," she said.

That means slathering on sunscreen containing zinc oxide or titanium dioxide whenever you go out or plan to spend time near windows. Besides being a potential allergen, chemical-based sunscreens don't block the entire spectrum of UVA rays.

"Clothing is the best defense because it really, truly covers you. It doesn't wear off, and you can't miss a spot," Adigun said.

Madore agreed that the best defense against her symptoms is prevention.

"If I'm outdoors for any length of time, I wear sunscreen and carry an umbrella. But even then I can't stay out too long," she said.

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