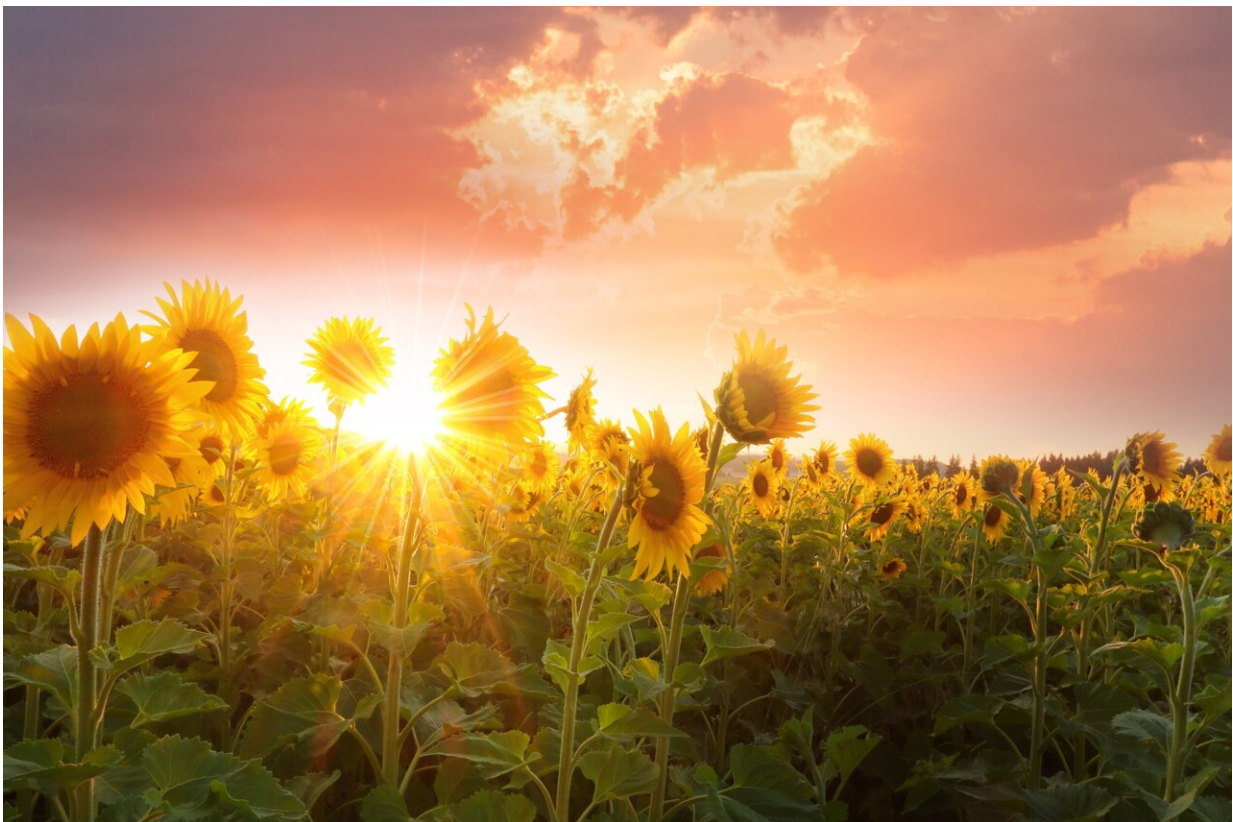


Under the weather? A season-by-season look at how the atmosphere affects your body and health

March 24 2024, by Anthony R. Wood, The Philadelphia Inquirer



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If you're feeling "under the weather" these days, you're probably human.

We all are feeling it, whether we're aware of it or not. Our health remains tethered to the air and light around us, despite all the progress that has given us a certain insularity.

The study of the atmosphere's effects on our bodies is known as biometeorology, a science that has gone in and out of favor through the centuries.

Hippocrates believed that weather and climate strongly influenced human health. Collecting weather data for health reasons was a major impetus for creation of what became the National Weather Service.

Interest faded by the end of the 19th century with the broad acceptance of germ theory, but it has been making a comeback with concerns about the health impact of a warming planet.

The discipline has suffered from unsupported claims and research limits: The body and the atmosphere meet at one of the most complex intersections of the known universe.

But we can say with high confidence that weather and environment have powerful effects on our health and well-being. Here is a season-by-season look at some of the ways.

Spring

Ah-choooo!

The pollen-allergy trilogy has begun with the trees, whose pollen will peak in April and May, and then be joined by the grasses and ragweeds. The traffic is heaviest when it's warm and dry, with breezes on which the pollen can commute to the nostrils of the victims, setting off bursts of sneezing. Hope for rain, says University of Tulsa pollen expert Estelle

Levitin, as pollen can't fly when it's wet.

Experts' advice: On heavy pollen days, the allergic should stay indoors if possible and keep the windows closed. If spending time outdoors, take a shower afterward and change clothes.

Spring fever

The warmth and light incite a certain exuberance that is often called "spring fever." And while it isn't in the Physicians Desk Reference, and it's not a fever per se, it's real. "Spring fever aptly describes a feeling that seizes you with its urgency and impulses," says psychiatrist Norman Rosenthal, based in Bethesda, Maryland, who pioneered research on seasonal affective disorder. It is characterized by bursts of energy, evidently touched off by light-induced hormonal changes in our bodies.

Experts' advice: For a small number, it can be a distraction that can lead to low productivity and can lead to exacerbating certain forms of depression. For the overwhelming majority, enjoy the hay out of it while it lasts.

Disrupted sleep

Sleep specialists warn that daylight saving time and later sunsets can be disruptive to our body rhythms.

Experts' advice: Try to keep sleeping hours as regular as possible, even on weekends.

Arthritis

Volatile spring weather and barometric pressure can aggravate symptoms

for some arthritis patients.

Experts' advice: Keep joints moving with gentle stretches. Both hot and cold compresses can ease pain.

Summer

Heat, one of the deadliest of all weather hazards, can be a tremendous physical challenge as blood flows to the skin and commands up to four million [sweat glands](#) to produce the salty fluid we call "sweat." When sweat evaporates, it gives off a cooling effect, but if the air is too moist, the sweat coats the skin, a source of discomfort for most, but dangerous for people who are older or medically vulnerable.

Experts' advice: Acclimate yourself to the heat. Hydrate, with water, and non-alcoholic and caffeine-free drinks. Says Main Line Health internal medicine physician William Surkis, don't be afraid to say, "Maybe this is not the best day to work out."

Sunburn

Summer is the peak season for natural Vitamin D, courtesy of the sun—and for the ultraviolet radiation that [medical research](#) has tied to assorted long-term problems, including [skin cancer](#), and damage to the eyes. In the shorter term, doctors say, UV rays can burn the skin—even through clouds—resulting in painful sunburn that goes away but may have lasting effects.

Experts' advice: Limit exposure to sun between 10 a.m. and 4 p.m., keep body parts covered as much as possible, wear sunglasses, and use an SPF 30 sunscreen or stronger.

Fall: Seasonal blues

The days get shorter rapidly in September and October, and it is natural to feel enervated, melancholy, and even a bit hungrier than usual. "It affects our entire physiology," says Phyllis Zee, with the Northwestern University Medical Center. "We don't think of ourselves as being seasonal creatures, but we are." An estimated 5% of people experience seasonal affective disorder, a form of depression, and 10% to 20% have mild versions of SAD.

Experts' advice: Zee and others recommend getting outside into the light as early as possible. Seek professional help if symptoms become worrisome.

Headaches

Autumn is a prime season for headaches, as the retreating summer and approaching winter wage battles along "fronts" that set off rapid weather changes. That can trigger pain for some people with headache disorders. A headache can serve a purpose, says Paul Mathew, assistant professor of neurology at the Harvard Medical School. "Headache is like a car alarm that warns people something is wrong, like an infection or a tumor." Fortunately, most headaches have no underlying cause.

Experts' advice: Over-the-counter remedies, such as ibuprofen, usually are effective. For migraines, hot or cold compresses can provide relief.

Asthma

In asthmatics, tubular airways that lead to the lungs become inflamed and narrower, making breathing difficult. Weather changes, fall allergens, and colds can set off symptoms.

Experts' advice: Know the triggers and try to avoid them. Prescribed inhalers can provide both quick and long-term relief.

Colds

"Common colds" earn their names: Just about everyone gets them. They come in maybe 200 varieties, and there is no cure, except time.

Experts' advice: Wash your hands frequently and avoid touching the face. If you get a cold, rest, hydrate. Sip warm liquids; they can soothe a sore throat.

Winter

As with the heat, we have remarkable natural mechanisms to deal with the cold, including shivering, our body's effort to warm itself. Exercising in the cold can be invigorating, but over-exposure can lead to frostbite and hypothermia. Doctors also warn that cold can constrict blood vessels, endangering those with heart conditions.

Experts' advice: Wear layers and protect your hands and feet, which are most vulnerable to frostbite. Stay hydrated.

Dry skin

That cold air, which has a limited capacity for moisture, can dry out the skin, as can dry indoor heating. The skin is above all a protective organ, says former University of Pennsylvania professor Seanna Covello, now with Bryn Mawr Dermatology, and irritating, itchy dryness can lead to fissures.

Experts' advice: Use moisturizer daily, avoid hot showers, and keep skin

covered when you are outside.

Vitamin D

Research affirms that vitamin D is essential to our health, but its best natural source—the sun—can be in short supply in winter.

Experts' advice: Try to spend some time in the sun, even on cold days. Eat vitamin D-rich foods, such as fatty fish and some yogurts. Consider supplements.

The atmosphere is our life-support system, and while isolating its varied effects on ailments has long been a source of frustration for researchers, the evidence affirms that weather can have a profound impact on human health. Medical professionals agree that with accelerating rates of climate change, understanding the connections is becoming ever more important.

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Citation: Under the weather? A season-by-season look at how the atmosphere affects your body and health (2024, March 24) retrieved 27 April 2024 from <https://medicalxpress.com/news/2024-03-weather-season-atmosphere-affects-body.html>

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