

## HEALTH

# Feeling SAD? Light therapy lamps can ease seasonal depression.

The devices are designed to mimic the light 'that comes from the sky at sunrise on a clear day'

Allyson Chiu and Lizzy Raben *Washington Post*

For some people, the beginning of winter signals more than a change in weather. The shorter, darker days trigger a noticeable shift in their mood and behavior, causing what's known as seasonal affective disorder, or SAD. And this winter, the onset of SAD may be exacerbated by the coronavirus pandemic.

"Folks are noticing (seasonal depression) a lot more because of trying to maintain their social distancing and quarantine and follow the rules related to stay-at-home," said Dorothy Sit, an associate professor of psychiatry and behavioral sciences at Northwestern University's Feinberg School of Medicine.

Seasonal affective disorder, which recurs annually, is a form of clinical depression and has the same symptoms. These can include feelings of sadness, loss of interest in activities you once enjoyed, difficulty concentrating, fatigue and, in extreme cases, thoughts of suicide or death. But experts say there is a simple and effective treatment: light therapy, delivered via specially designed lamps.

"It can be transformational," said Norman Rosenthal, who led the team of researchers that first described SAD in the 1980s and helped develop light therapy as a treatment option. "When it really works, it can make you feel so much better. It's amazing. Your energy comes back, your mood improves, your view of life improves."

Here's what you need to know about light therapy and the lamps used to deliver it.

## WHAT ARE SAD LAMPS?

Bright light boxes, also called SAD lamps, are designed to produce light that mimics the "light intensity that comes from the sky at sunrise on a clear day," said Kelly Rohan, a professor of psychological science at the University of Vermont. "What we're trying to do is simulate an early dawn."

The artificial light, usually from fluorescent bulbs, is UV filtered to protect people's eyes and skin from light-related damage.

## WHY DOES LIGHT HELP WITH SAD?

While there is no definitive understanding of what causes SAD, Rohan said there is consensus about what triggers the symptoms: a change in photoperiod, which is the number of daylight hours.

Photoperiod, she added, is believed to have more of an influence on mood and behavior changes than weather-related variables such as temperature, cloud cover, precipitation and the brightness of the available light during the day.

This change in photoperiod is thought to affect the circadian clocks of people with SAD, leaving them out of sync with the light-dark cycle. Light therapy delivered first thing in the morning is believed to "jump-start those circadian rhythms back into the normal phase like they would be in the summertime when the individual with seasonal affective disorder is typically feeling at their best," Rohan said.

"There is a special class of cells in the retina that detect the brightness of environmental light," said Paul Desan, director of the Winter Depression Research Clinic at the Yale School of Medicine. "And those cells are connected directly to the hypothalamus and other parts of the brain that affect the body's clock."

Though experts may not know exactly why SAD lamps are effective, "there is very solid research that exposure to bright light first thing in the morning is a very powerful treatment for the majority of people with seasonal affective disorder," Desan said.

A 2005 meta-analysis published in the *American Journal of Psychiatry* found that bright light therapy significantly reduced the severity of depression symptoms among people with SAD and nonseasonal depression, comparable to the effects found in many antidepressant pharmacotherapy trials.

And if used properly and with guidance from a clinician, research has shown that the devices can help people with other mental health conditions, such as prenatal depression and bipolar depression.

"It's a very, very valuable addition to our therapeutic arsenal," said Rosenthal, a clinical professor of psychiatry at Georgetown University School of Medicine.



Experts say there is a simple and effective treatment for seasonal affective disorder: light therapy, delivered via specially designed lamps. Shutterstock

## HOW DO I KNOW IF I SHOULD GET A SAD LAMP?

Light boxes can help people with the "winter blues" as well as those diagnosed with SAD. But regardless of how severe your seasonal depression is, experts recommend talking to a clinician before starting light therapy.

"There's no one size fits all" when it comes to light therapy treatment, Rohan said. "How many minutes today, what time or times of day does this person need to use it to maximize benefit, minimize side effects? It's a bit of a trial-error process even for those of us that know what we're doing. To try to do that on your own is, I think, a daunting task."

Desan cautioned that unsupervised use of light therapy by people with complex mental health issues could worsen their condition.

"The point is that you really don't want to treat yourself for depression," he said.

## WHAT SHOULD I LOOK FOR WHEN BUYING A SAD LAMP?

The FDA doesn't regulate light therapy devices, so picking a light box requires diligence.

"If someone with SAD goes online to buy a light box, the vast majority of stuff that they're going to find online is not appropriate, and a few of them are even unsafe," Desan said.

Experts recommend looking for a box that emits light at 10,000 lux, the standard for effective treatment. Ideally, a SAD lamp should be fairly large, measuring about 12 by 14 inches, Sit said — "pretty much the size of a desktop monitor."

Be wary of small light boxes boasting 10,000 lux, Desan said, as they may require you to position them very close to your face to get the intended effect. "The manufacturer should also tell you explicitly at what distance from the device it makes 10,000 lux because not all manufacturers do that," he said. There are apps that you can download on your phone that measure lux, "so you can actually check and see how far away from your device you have to be to get 10,000 lux," he added.

Prices for light boxes can range widely. Among the devices that Desan recommends, the least expensive is about \$100. You can find a quality device "that will last forever" for about \$300, he said.

## HOW DO I USE MY LAMP?

SAD lamps should be used daily at the

same time to be effective. For those who suffer from seasonal depression, experts generally recommend sitting roughly a foot away from a light box for about 30 minutes shortly after waking up each morning.

Make sure that the light is shining on your face and your eyes are open — it's key that the light from the lamp reaches your eyes, so the retina cells can send the right signals — but do not stare directly into the light.

Experts suggest using the time for other activities that are part of your morning routine, such as reading the paper or eating breakfast.

"We find a way to weave it into their daily system and by doing so, they can sort of improve their daily use and they're likely to get some good benefit from it," Sit said.

## WHEN WILL I START FEELING THE EFFECTS?

"To get a full effect of treatment, it may take two to four weeks," Desan said. "But usually people start getting an effect within days, which is much quicker than with a pharmacological antidepressant."

He recommended that someone trying light therapy "do the treatment before 8 a.m. for a solid month before you decide it doesn't work for you."

Sit added that it is critical to stick to a light therapy regimen to maintain its positive effects. "If people skip treatment, they can quickly experience the symptoms coming back," she said.

## ARE THERE ANY SIDE EFFECTS?

While light therapy is widely regarded as a safe treatment, "anything can be overdone," Rosenthal said. Too much exposure to the light may cause headaches or eyestrain, he said. And some people have reported feeling overstimulated — "revved up like you've been drinking a little bit too much coffee."

If you are experiencing such problems, "dial it back," Rosenthal said.

You can move the box slightly farther away or try adjusting the light intensity if your device comes with that option.

Experts emphasized that the specifics of your treatment plan should be discussed with a clinician, who can help ensure you're receiving the right dosage and not potentially harming yourself. People with retinal problems, for instance, should exercise caution, Rosenthal said. "Absolutely consult your eye doctor."

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