



UBC HOSPITAL MOOD DISORDERS CENTRE
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Frequently Asked Questions about Seasonal Affective Disorder (SAD)

What is SAD? How is it different from the winter blues?

Many people feel mildly “depressed” during the winter, but some people have more severe bouts of feeling down all the time, low energy, problems with sleep and appetite, loss of interest, and reduced concentration to the point where they have difficulty functioning at work or in the home. We say that these people have a clinical depression, to distinguish it from everyday ups and downs. Seasonal affective disorder (‘affective’ is a psychiatric term for mood), or SAD, describes people who have these clinical depressions only during the autumn and winter seasons. During the spring and summer, they feel well and “normal”.

Other common symptoms of SAD include oversleeping, extreme fatigue, increased appetite with carbohydrate craving, overeating, and weight gain. With more severe episodes, people may have suicidal thoughts.

How common is SAD?

Researchers believe that SAD results from the shorter daylength in winter. Recent studies estimate that SAD is more common in northern countries because the winter day gets shorter as you go farther north. Studies in Ontario suggest that 1% to 3% of the general population have SAD. This means that up to 120,000 people in British Columbia (1.2 million in Canada!) may have difficulties in the winter due to significant clinical depression. Another 15% of people have the “winter blues” or “winter blahs” – winter symptoms similar to SAD, but not to the point of having a clinical depression.

What treatments are available for SAD?

Research has shown that many patients with SAD improve with exposure to bright, artificial light, called light therapy, or phototherapy. As little as 30 minutes per day of sitting under a special fluorescent light box results in significant improvement in 60% to 70% of SAD patients.

How do you use light therapy?

A fluorescent light box is the best-studied light therapy treatment. Patients usually purchase a light box and use it in their own homes. The usual “dose” of light is 10,000 lux, where lux is a measurement of light intensity. Indoor light is usually less than 400 lux; a cloudy day about 3,000 lux; and a sunny day is 50,000 lux or more. Using the 10,000 lux light box for about 30 minutes a day is usually enough for

a beneficial response. A light box with a lower lux rating usually requires more time for a response. For example, 5,000 lux light boxes usually require 45-60 minutes of daily exposure, while 2,500 lux light boxes require 1-2 hours of exposure.

Other light devices are also commercially available. Light visors and other head-mounted units can offer more portability than light boxes. Dawn simulators are devices that gradually increase the lights in the bedroom to “simulate” a summer dawn in the winter. While these devices can be beneficial for some people, there is less evidence to show that they are effective for SAD compared to light boxes.

People are cautioned NOT to use tanning studios to treat SAD because there is NO evidence that they are helpful. The effect of light therapy is through the eyes, not through skin exposure, and people should not open their eyes in tanning booths because of the harmful effects of ultraviolet exposure. Fluorescent light boxes have filters to block the harmful ultraviolet rays.

How do I get a light box?

Safe and portable light boxes are now commercially available. Ask your doctor, or contact our clinic for more information (or check our web site at www.psychiatry.ubc.ca/mood/sad). The cost of a light box is usually between \$250 and \$500 (Cdn). We do not recommend building your own light box, because of the safety hazards, and the difficulty in getting the correct dose of light.

Are there side effects to light therapy?

Side effects of light therapy are usually mild. Some people may experience mild nausea, headaches, eyestrain, or feeling “edgy” when they first start using light therapy. These effects usually get better with time or reducing the light exposure. People who have bipolar disorder (manic-depressive illness) should also consult their doctor before using light therapy.

There are no known long-term harmful effects of light therapy. However, people with certain medical conditions (such as retinal disease or diabetes) or taking certain medications should have special eye examinations before considering light therapy.

Are there other treatments for SAD?

Other treatments for depression, including the newer antidepressant medications (e.g., selective serotonin reuptake inhibitors, or SSRIs, bupropion-SR, moclobemide, and others) are also effective for patients with SAD. Counselling and exercise may also help. People with milder symptoms of the “winter blahs” may be helped by simply spending more time outdoors and exercising regularly in the winter (e.g., a daily noon hour walk).

Some people with SAD find that they also feel better by increasing the indoor light in their homes and/or offices, painting their walls in light colours, and sitting near windows for natural light. There is no evidence, however, that these activities alone can treat SAD.

What causes SAD and how does light therapy work?

We don't know, exactly, but research shows that light has a biological effect on brain chemical (neurotransmitters) and function. One theory is that people with SAD have a disturbance in the "biological clock" in the brain that regulates hormones, sleep and mood, so that this clock "runs slow" in the winter. The bright light may help to "reset the clock" and restore normal function. Other theories are that neurotransmitter functions, particularly serotonin and dopamine, are disturbed in SAD, and that these neurotransmitter imbalances are corrected by light therapy and/or antidepressant medications. Still other scientists believe that patients with SAD have reduced retinal light sensitivity or immune function in the winter that is corrected by light therapy. There is also research showing a genetic basis for SAD.

What should I do if I think I have SAD?

Everyone who is significantly depressed should be assessed by their family doctor because some physical problems (e.g., thyroid disease) can show up as depression. People with SAD can be treated by their family doctor, referred to a psychiatrist who is aware of SAD, or (in Vancouver) referred to the Seasonal Mood Disorders Clinic at the UBC Hospital (telephone: 604-822-7321), for further assessment. To find a SAD specialist, check with the nearest university medical school department of Psychiatry. People should not treat themselves with light exposure until after assessment by a qualified health professional.

Can I read more about SAD?

We recommend these books for further reading, available at most bookstores or the public library.

1. *Winter Blues: Seasonal Affective Disorder - What it is and How to Overcome It*, by Dr. Norman Rosenthal (one of the pioneer researchers in SAD and light therapy). Guilford Press, revised 1998, about \$18.00 (Cdn).
2. *Fight the Winter Blues: Don't be SAD: Your Guide to Conquering Seasonal Affective Disorder*, by Celeste A. Peters. Script Publishing, 1994, about \$19.00 (Cdn).
3. *Clinical Guidelines for the Treatment of Seasonal Affective Disorder*, by Drs. Raymond W. Lam and Anthony J. Levitt. Clinical & Academic Publishing, 2000, about \$20.00 (Cdn). Although primarily directed to family physicians, the Question-and-Answer format of these clinical guidelines are accessible to informed general readers. To purchase, check www.amazon.com.
4. Also, check out the UBC SAD Information Page on the Internet at www.psychiatry.ubc.ca/mood/sad or the web site for the Society for Light Treatment and Biological Rhythms at www.sltbr.org.