

## 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 1 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 specially-designed light device results in significant improvement in 60% to 70% of patients with SAD.

---

### How do you use light therapy?

---

A fluorescent light box is the best-studied light therapy treatment. People 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. Some devices use light-emitting diodes (LEDs) which are longer-lasting and are much smaller and portable than light boxes. 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.

Most light devices use white light. Currently, narrow-band blue-light devices are NOT recommend because they have not been extensively tested, there is no indication that blue light is better than white light for SAD, and there is no information on long term safety (unlike white light devices). There are some theoretical reasons why blue light may be harmful to the eyes.

---

### **What about sun tanning studios?**

---

People are cautioned NOT to use sun 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 and LED lights do not emit ultraviolet wavelengths.

---

### **How do I get a light box?**

---

Safe and portable light devices are now commercially available. Ask your doctor, or contact our clinic for more information (or check our web site at [www.UBCsad.ca](http://www.UBCsad.ca)). The cost of a light box is usually between \$150 and \$300 (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 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, macular degeneration or diabetes) or taking certain medications (such as thioridazine, lithium or melatonin) 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 such as fluoxetine [Prozac]; bupropion-XL [Wellbutrin]; moclobemide [Manerix]; and others) are also effective for patients with SAD and can be used to prevent episodes. Counselling or cognitive-behaviour therapy 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 chemicals (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 evidence for a genetic contribution to 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 UBC Hospital (telephone: 604-822-7512), 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?**

---

Check our web site at [www.UBCsad.ca](http://www.UBCsad.ca) , or this book:

*Winter Blues: Everything you Need to Know to Beat Seasonal Affective Disorder*, by Dr. Norman Rosenthal (one of the pioneer researchers in SAD and light therapy). Guilford Press, revised 2005, about \$18.00 (Cdn).