



## Factsheet: Seasonal Affective Disorder (SAD)

Some people suffer from symptoms of depression during the winter months, with symptoms subsiding during the spring and summer months. These symptoms may be a sign of seasonal affective disorder (SAD). SAD is a mood disorder associated with depression and related to seasonal variations of light. SAD affects half a million people every winter between September and April, peaking in December, January, and February. The “Winter Blues,” a milder form of SAD, may affect even more people.

### Prevalence

- Three out of four SAD sufferers are women.
- The main age of onset of SAD is between 18 and 30 years of age.
- SAD occurs in both the northern and southern hemispheres, but is extremely rare in those living within 30 degrees latitude of the equator.
- The severity of SAD depends both on a person’s vulnerability to the disorder and his or her geographical location.

### Symptoms

- A diagnosis of SAD can be made after three consecutive winters of the following symptoms if they are also followed by complete remission of symptoms in the spring and summer months:
- Depression: misery, guilt, loss of self-esteem, hopelessness, despair, and apathy
- Anxiety: tension and inability to tolerate stress
- Mood changes: extremes of mood and, in some, periods of mania in spring and summer
- Sleep problems: desire to oversleep and difficulty staying awake or, sometimes, disturbed sleep and early morning waking
- Lethargy: feeling of fatigue and inability to carry out normal routine
- Overeating: craving for starchy and sweet foods resulting in weight gain
- Social problems: irritability and desire to avoid social contact
- Sexual problems: loss of libido and decreased interest in physical contact

### Causes

- As sunlight has affected the seasonal activities of animals (i.e., reproductive cycles and hibernation), SAD may be an effect of this seasonal light variation in humans. As seasons change, there is a shift in our “biological internal clocks” or circadian rhythm, due partly to these changes in sunlight patterns. This can cause our biological clocks to be out of “step” with our daily schedules.
- Melatonin, a sleep-related hormone secreted by the pineal gland in the brain, has been linked to SAD. This hormone, which may cause symptoms of depression, is produced at increased levels in the dark. Therefore, when the days are shorter and darker the production of this hormone increases.

## Treatments for Seasonal Affective Disorder

- Phototherapy or bright light therapy has been shown to suppress the brain's secretion of melatonin. Although, there have been no research findings to definitely link this therapy with an antidepressant effect, light therapy has been shown to be effective in up to 85 percent of diagnosed cases. Patients remain in light up to ten times the intensity of normal domestic lighting up to four hours a day, but may carry on normal activities such as eating or reading while undergoing treatment. The device most often used today is a bank of white fluorescent lights on a metal reflector and shield with a plastic screen.
- For mild symptoms, spending time outdoors during the day or arranging homes and workplaces to receive more sunlight may be helpful. One study found that an hour's walk in winter sunlight was as effective as two and a half hours under bright artificial light.
- If phototherapy does not work, an antidepressant drug may prove effective in reducing or eliminating SAD symptoms, but there may be unwanted side effects to consider. Discuss your symptoms thoroughly with your family doctor and/or mental health professional.

## Other Resources

Society for Light Treatment and Biological Rhythm  
P.O. Box 591687  
174 Cook Street  
San Francisco, CA 94159-1687  
[www.websciences.org/sltbr](http://www.websciences.org/sltbr)

## Sources:

- The Harvard Mental Health Letter - February 1993.
- The SAD Association Homepage. Accessed February 2002. Netscape:  
<http://www.sada.org.uk/symptoms.htm>.

## Mental Health America

(formerly known as the National Mental Health Association)  
2000 N. Beauregard Street, 6th Floor  
Alexandria, VA 22311  
Phone (703) 684-7722  
Toll free (800) 969-6642  
Fax (703) 684-5968  
Website: <http://www.mentalhealthamerica.net/>

## For More Information:

For help finding treatment, support groups, medication information, help paying for your medications, your local Mental Health America affiliate, and other mental health-related services in your community, please click here to access our Frequently Asked Questions and Answers. If you or someone you know is in crisis now, seek help immediately. Call 1-800-273-TALK (8255) to reach a 24 hour crisis center or dial 911 for immediate assistance.

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