Seasonal Affective Disorder is a pattern of mood changes, occurring at the same time each year. Researchers have identified two types of S.A.D. The most common type, “winter depression” or “winter blues,” usually begins in the late fall to early winter months and ends in spring. The prevalence of S.A.D. appears to vary with latitude, age, and sex. Prevalence increases with higher latitudes. Younger persons are at higher risk and women comprise 60-90% of individuals with seasonal patterns.

Because of its seasonal pattern and the fact that S.A.D. occurs more frequently in northern latitudes, it is thought to be caused by the body’s reaction to lack of natural light. This mechanism is responsible for production or uptake of serotonin in the brain. Other causes might be delayed circadian rhythms, or abnormal patterns of melatonin secretions.

**SYMPTOMS OF S.A.D.:**
- Increased sadness
- Higher irritability
- Increased anxiety
- Increased appetite including craving of carbohydrates
- Increased weight
- Increased sleep, lower quality of rest
- Lack of energy
- Problems concentrating
- Social and interpersonal strain
- Menstrual difficulties

**HOW IS S.A.D. DIAGNOSED?**
Physicians, nurse practitioners and mental health providers can diagnose S.A.D. based on criteria developed by the American Psychiatric Association.

**HOW CAN S.A.D. BE TREATED?**
Research shows that light therapy or exposure to full spectrum light is an effective treatment and is usually administered using a light box. Light boxes are made of a set of fluorescent bulbs or tubes that are covered with a plastic screen that helps block out potentially harmful ultraviolet (UV) rays that can cause cataracts and skin problems.

Depending on how severely a person is affected, other treatments are helpful in combination with light therapy including psychotherapy, dietary changes, regular exercise, and the use of antidepressant medications.

Health Services has light therapy devices for student use. If you think you might have Seasonal Affective Disorder you may want to make an appointment to see a medical provider at Health Services (862-2856) or a counselor at the Counseling Center (862-2090) for diagnosis and recommendation for treatment. You do not need a referral to use the light boxes.

**HOW DO YOU USE LIGHT THERAPY?**

**Intensity:** You need to use a light with the right intensity. These lights produce between 2,500 and 10,000 lux (lumens per square meter) of light you receive at a specific distance from a light source. Typical therapy is at 10,000 lux. Interesting fact: the light in the average living room is less than 100 lux, while a bright sunny day may register 100,000 lux. You sit right in front of the light box (about 23 inches is optimal) with your eyes open. The light box sits at eye level on an angle to provide the most comfort and decrease glare. Reading at a desk with a light box or just sitting in a chair facing the light is all that is needed.

**Duration:** Therapy usually involves daily session ranging from 15 minutes to 2 hours, most sessions last 20-30 minutes. Usually when treatment starts, it is for a smaller block of time and exposure is built up over time.

**Timing:** For most people, light therapy is best used in the morning, after first waking up. The most effective combination of intensity, duration and timing varies from person to person, your medical or mental health provider can assist in guiding making appropriate adjustments.

**WHAT ARE THE SIDE EFFECTS OF LIGHT THERAPY?**
Side effects are uncommon and generally mild. Light therapy users sometimes experience irritability, eyestrain, headaches, skin irritation (some medication can cause light sensitivity), dry eyes or insomnia. Reducing the length of daily treatment or sitting further away from the light usually eliminates such effects. There is no research that shows exposure to light boxes can harm the retina or cause or accelerate eye disease.

**HOW EFFECTIVE IS LIGHT THERAPY FOR S.A.D.?**
Most studies show that about 75% of individuals who experience S.A.D. experience improvement when using light therapy. Most individuals see improvement in a couple days to a few weeks. If a person doesn’t see improvement within a few weeks, antidepressant or psychotherapy may help. Ways to increase chances of success include these self-care ideas:
- Take daily walks outside
- Increase aerobic exercise particularly under bright lights
- Manage your stress
- Eat healthy
- Avoid exposure to bright light in the late evening, since this might shift timing of your sleep period.

**FOR MORE INFORMATION ON S.A.D. AND LIGHT THERAPY**
CALL (603) 862-3823
WWW.UNH.EDU/HEALTH-SERVICES